BANASTHALI VIDYAPITH



Curriculum Structure and Syllabus Foundation and Vocational Courses

BANASTHALI VIDYAPITH

P.O. BANASTHALI VIDYAPITH (Rajasthan)-304022



No. F. 9-6/81-U.3

Government of India Ministry of Education and Culture (Department of Education)

New Delhi, the 25th October, 1983

NOTIFICATION

In exercise of the powers conferred by Section 3 of the University Grants Commission Act, 1956 (3 of 1956) the Central Government, on the advice of the Commission, hereby declare that Banasthali Vidyapith, P. O. Banasthali Vidyapith, (Rajasthan) shall be deemed to be a University for the purpose of the aforesaid Act.

Sd/(M. R. Kolhatkar)
Joint Secretary of the Government of India

NOTICE

Changes in Bye-laws/Syllabi and Books may from time to time be made by amendment or remaking, and a Candidate shall, except in so far as the Vidyapith determines otherwise, comply with any change that applies to years she has not completed at the time of change.

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Curriculum Structure

Foundation and Vocational Courses

Se	me	eta	er_	I

Course	Code	Course Name	L	T	P	C*
BVF	011/	General English / सामान्य हिन्दी	2	0	0	2
BVF	014					
		Core Foundation Course - I	2	0	0	2
Semeste	er- II					
Course	Code	Course Name	L	T	P	C*
BVF	014/	सामान्य हिन्दी / General English	2	0	0	2
BVF	011					
		Core Foundation Course - II	2	0	0	2
Semeste	er- III					
		Course Name	L	T	P	C*
		Course Name Core Foundation Course - III	L 2	T	P	C *
	Code	Core Foundation Course - III	2	0	0	2
Course	Code	Core Foundation Course - III	2	0	0	2
Course	Code	Core Foundation Course - III Elective Foundation Course - I	2 2	0	0	2 2
Course	Code	Core Foundation Course - III Elective Foundation Course - I Course Name	2 2 L	0 0 T	0 0 P	2 2 C*
Course	Code er- IV Code	Core Foundation Course - III Elective Foundation Course - I Course Name Core Foundation Course - IV	2 2 L 2	0 0 T	0 0 P	2 2 C*
Semeste Course Semeste	er- IV Code	Core Foundation Course - III Elective Foundation Course - I Course Name Core Foundation Course - IV	2 2 L 2	0 0 T	0 0 P	2 2 C*

Core Foundation	Course	-	V/Elective	2	Λ	Λ	2
Foundation Course	e - III			2	U	U	2

Semest	er- VI					
Course	Code	e Course Name	L	T	P	C *
		Vocational Course - II	2	0	0	2
		Elective Foundation Course - III/Core	2	0	0	2
		Foundation Course - V				
		tion Courses				
Course	Code	e Course Name	L	T	P	C,
BVF	002	Environment Studies	2	0	0	2
BVF	013	Indian Cultural Heritage	2	0	0	2
BVF	017	Selected Writings of Great Authors - I	2	0	0	2
BVF	020	Women in Indian Society	2	0	0	2
BVF	015	Parenthood and Family Relation	2	0	0	2
El 4:	Б	1.6				
		ndation Courses		T 7	гг	
		Course Name			Γ P	
	016	Science of Happiness			0 0	
	012	Human Body and Health		_	0 0	_
	010	Design Thinking			0 0	_
	019	Universal Human Values			0 0	
BVF	018	Selected Writings of Great Authors - II		2 (0 0	2
Vocatio						
		Course Name			T P	
		Basic Dress Making			0 4	
	005L	Dress Designing			0 4	
	014	Entrepreneurship - I		_	0 0	
	015 020	Entrepreneurship - II Radio Production - I			$\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$	
	020	Radio Production - I			$0 \ 0 \ 0$	
	021	Web Designing and Internet Technology-I			$0 \ 0$	
	022 022L	Web Designing and Internet Technology-I L	ah	_	$0 \ 0 \ 0 \ 2$	
	0221	Web Designing and Internet Technology-II	ao		$0 \ 0 \ 0$	
	023L	Web Designing and Internet Technology-II	Lab	-	$0 \ 0 \ 2$	
	009	Library Science - I			$0 \ 0$	
	009L	Library Science – I Lab		0	0 2	1

VOC	010	Library Science – II	1	0	0	1
VOC	010L	Library Science – II Lab	0	0	2	1
VOC	018	Photography - I	0	0	4	2
VOC	019	Photography - II	0	0	4	2
VOC	016	Introduction to Artificial Intelligence - I	2	0	0	2
VOC	023	Introduction to Artificial Intelligence - II	2	0	0	2
VOC	012	Computer Assisted Learning and Teaching	1	0	0	1
VOC	012L	Computer Assisted Learning and Teaching Lab	0	0	2	1
VOC	013	Emerging Technologies for Learning and	2	0	0	2
		Teaching				

^{*} L - Lecture hrs/week; T - Tutorial hrs/week;

P- Project/Practical/Lab/All other non-classroom academic activities, etc. hrs/week; C- Credit Points of the Course

Student can opt for at most 2 additional Open (Generic) audit/credit Elective from other disciplines opting at most 1 per semester from Semesters III onwards with prior permission of respective heads and time table Permitting.

Every Student shall also opt for:

Five Fold Education: Physical Education I, Physical Education II, Five Fold Education: Aesthetic Education I, Aesthetic Education II, Five Fold Education: Practical Education I, Practical Education II one each semester

Five Fold Activities

Fine Arts	Physical Education and	Sports
BVFF 101 Classical Dance (Bharatnatyam	BVFF 201 Aerobics	
BVFF 102 Classical Dance (Kathak)	BVFF 202 Archery	
BVFF 103 Classical Dance (Manipuri)	BVFF 203 Athletics	
BVFF 104 Creative Art	BVFF 204 Badminton	
BVFF 105 Folk Dance	BVFF 205 Basketball	
BVFF 106 Music-Instrumental (Guitar)	BVFF 206 Cricket	
BVFF 107 Music-Instrumental (Orchestra)	BVFF 207 Equestrian	
BVFF 108 Music-Instrumental (Sarod)	BVFF 208 Flying - Telephone (Restricted)	Operator's Licence
BVFF 109 Music-Instrumental (Sitar)	BVFF 209 Flying - Stu	dent Pilot's Licence
BVFF 110 Music-Instrumental (Tabla)	BVFF 229 Aeromodell	ing
BVFF 111 Music-Instrumental (Violin)	BVFF 210 Football	
BVFF 112 Music-Vocal	BVFF 211 Gymnastics	
BVFF 113 Theatre	BVFF 212 Handball	
	BVFF 213 Hockey	
Social Service and Extension Activities	BVFF 214 Judo	
BVFF 301 Banasthali Sewa Dal	BVFF 215 Kabaddi	
BVFF 302 Extension Programs for Wome Empowerment	n BVFF 216 Karate – Do	ı
BVFF 303 FM Radio	BVFF 217 Kho-Kho	
BVFF 304 Informal Education	BVFF 218 Net Ball	
BVFF 305 National Service Scheme	BVFF 219 Rope Malla	khamb
BVFF 306 National Cadet Corps	BVFF 220 Shooting	
	BVFF 221 Soft Ball	
	BVFF 222 Swimming	
	BVFF 223 Table Tenni	s
	BVFF 224 Tennis	
	BVFF 225 Throwball	
	BVFF 226 Volleyball	
	BVFF 227 Weight Trai	ning
	BVFF 228 Yoga	

BVF 011 General English

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

After the completion of the course, learners will be able to:

- develop their communicative competence; Listening, Speaking, Reading, and writing (LSRW).
- hone their understanding of nature, function and structure of English language.
- enrich their vocabulary.
- improve their comprehension through prescribed texts..

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Content:

• Received Pronunciation (RP):

- Sound Symbols, Transcription
- Syllable, Word Stress and Tone:
- Mono and Bi-syllabic words (for stress marking)
- Word Formation:
- Some Greek and Latin Roots, Compounding, Conversion, and Affixation

Identification of Word Classes

- Elements of Clause (SVOCA)
- Sentence Patterns SV, SVC, SVO, SVA, SVOC, SVOO, SVOA;
- Subject Verb Agreement
- Letter Writing (Formal and Informal)

Language Use at various situations;

- 1. At the reception of an/a office/hotel/airport (through role play)
- **2.** Talking to a stranger/doctor (through role play)
- **3.** Meeting with a Principal/Teacher (through role play)
- **4.** Debate on a current topic

- 5. Discussion on a current topic
- Communication
 - Non-verbal communication
- Comprehension of passages from the following literary writings:
 - Goodbye Party for Miss Pushpa TS by Nissim Ezekiel
 - Chocolate by Manju Kapoor
 - *Toasted English* by R K Narayan

Recommended Reading:

- Allen, W. Stannard. (2000). *Living English Prose*. New Delhi: Orient Longman.
- O'Conner, J.D. (1998). *Better English Pronunciation*. Cambridge: Cambridge University Press.
- Greenbaum, Sidney. (1999). *English Grammar*. New Delhi: Oxford University Press.
- Balasubramanian, T. (1980). A Textbook of English Phonetics for Indian Students. New Delhi: MacMillan.

Suggested E-learning Material:

- Vowels and Consonants egyankosh.ac.in/handle/123456789/21629
- word stress and intonation egyankosh.ac.in/handle/123456789/25662
- Word Classes
 - https://www.fluentu.com/blog/english/learn-english-grammar-online/
- Communication skills, types, letter writing https://www.illumine.co.uk/resources/communication-skills-resources/
- Sentence Types and Structures
 https://elt.oup.com/student/oxfordenglishgrammar/?cc=global&selLanguage=en
- Subject Verb Agreement: https://www.grammarbook.com/grammar/subjectVerbAgree.asp https://www.flocabulary.com/unit/subject-verb-agreement/

BVF 014 सामान्य हिन्दी

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

अपेक्षित परिणाम

- 1. भाषा के व्याकरणिक रूप, शुद्ध उच्चारण और मानक रूप के ज्ञान से संप्रेषण क्षमता विकसित हो सकेगी।
- 2. वस्तुनिष्ट मौलिक चिंतन और लेखन की प्रवृत्ति विकसित हो सकेगी।
- 3. प्रयोजनमूलक हिन्दी विषयक ज्ञान में अभिवृद्धि होगी।
- 4. पारिभाषिक शब्दावली एवं अनुवाद प्रक्रिया का ज्ञान हो सकेगा।
- 5. चयनित निबंधों के लेखन से छात्राओं में अध्ययन प्रवृत्ति का विकास और मौलिक चिंतन की अभिवृद्धि हो सकेगी।
- निर्धारित पाठ के द्वारा पठन—पाठन प्रवृति का विकास होगा।

निर्देश : इस प्रश्न-पत्र में आठ प्रश्न पूछे जायेंगे। परीक्षार्थी को किन्ही पाँच प्रश्नों के उत्तर देने होंगे।

सामान्य हिन्दी

- शब्द विचार शब्द के स्रोत, (उत्पत्ति, व्युत्पत्ति, प्रयोग व अर्थ के आधार पर)
- वाक्य के अंग, वाक्य के भेद (रचना और अर्थ के आधार पर)
- शब्द –शुद्धि, विराम चिह्न, वर्तनी प्रयोग।
- पर्यायवाची, विलोम, एकार्थक और अनेकार्थक शब्द।
- मुहावरे और लोकोक्तियाँ।
- प्रयोजनमूलक हिन्दी और व्यावहारिक हिन्दी

प्रयोजनमूलक हिन्दी के प्रकार

- प्रयोजनमूलक हिन्दी की शब्दावली
 पारिभाषिक शब्दावली, अनुवाद प्रक्रिया, वैज्ञानिक एवं तकनीकी शब्द निर्माण।
- पत्र लेखन : कार्यालयी पत्र, वाणिज्यिक पत्र, शिकायती पत्र, प्रार्थना पत्र, बधाई पत्र।

- निबंध लेखन चयनित निबंध
 वनस्थली की शिक्षा प्रणाली, आपाजी के जीवन मूल्य और नैतिक शिक्षा, धर्म
 और मानव जीवन, भागवत् गीता का जीवन में महत्व, आधुनिक जीवन में
 तकनीक का प्रभाव
- निर्धारित पाठ इतिहास से शिक्षा पत्र साहित्य (जवाहर लाल नेहरू), राजेन्द्र प्रसाद – संस्मरण (महादेवी वर्मा)
- निर्धारित कविताएँ –

 नीड़ का निर्माण फिर—फिर हिरवंश राय 'बच्चन', कलम आज उनकी

 जय बोल रामधारी सिंह 'दिनकर', हे ग्राम देवता नमस्कार रामकुमार
 वर्मा

सहायक पुस्तकें -

- श्रीवास्तव, रिवन्द्र, (2005), हिन्दी भाषा संरचना और प्रयोग, नई दिल्ली, राजकमल प्रकाशन।
- नन्दन, डॉ. वासुदेव, (2015), *आधुनिक हिन्दी व्याकरण और रचना,* रॉंची, भारती भण्डार।
- बाहरी, हरदेव, (1972), हिन्दी का व्यवहारिक व्याकरण, इलाहाबाद, लोकभारती प्रकाशन।
- सिंह, डॉ. विजयपाल, (2017), कार्यालयी हिन्दी, वाराणसी, विश्वविद्यालय प्रकाशन।
- सिंह, रवीन्द्र प्रसाद, (2014), शुद्ध हिन्दी कैसे लिखें, राँची, भारती भवन।
- नन्दन, डॉ. वासुदेव, (2015), हिन्दी व्याकरण और रचना, रॉंची, भारती भण्डार।
- झाल्टे, दंगल, (2002), *प्रयोजनमूलक हिन्दी,* दिल्ली, वाणी प्रकाशन।
- नारायण, शिव, (2016), प्रालेखन प्रारूप, कोलकत्ता, आवाज प्रकाशन।
- प्रशासनिक शब्दावली, केन्द्रीय हिन्दी निदेशालय।
- बैकिंग शब्दावली, आगरा, केन्द्रीय हिन्दी संस्थान।

Core Foundation Course

BVF 002 Environment Studies

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

After the completion of this course, students will be able to:

- Describe the interaction of organisms with their environment.
- Describe concepts and methods from ecological and environmental sciences and their application in understanding the environmental issues.
- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Content:

- 1. Introduction to Environmental Science and Ecosystem: Definition, scope and importance Concept of Ecosystem, Structure of Ecosystem (Biotic and Abiotic factors).
- Dynamics of Ecosystem: Food Chain, Food web and Ecological Pyramids. Brief idea of energy flow. Salient features of forest, grassland, Desert and Aquatic ecosystem.
- Natural Resources and their conservation: Renewable and nonrenewable resources. Uses and over utilization/exploitation of Natural resources: Forest, Water, Mineral, Food, Energy and Land.
- Water conservation and management: Rain water harvesting. Elementary idea of solid waste management.
- Biodiversity and its conservation: Definition, Types and Importance of Biodiversity. Endangered and Endemic Species of India. Bio-

- geographical classification. Hot spots and India as a Mega diversity nation. Threats to Biodiversity: Habitat loss, poaching of wild life.
- Conservation of Biodiversity: Brief idea of *in-situ* and *ex-situ* conservation of Biodiversity.
- Environmental Pollution: Definition, Causes, Effects of air, water, soil, noise, thermal and nuclear pollution. Control and preventive measures of air, water, soil, noise, thermal and nuclear pollution.
- Global problems: Climate change, global warming, Ozone layer depletion, Acid Rain and Photochemical Smog. Elementary knowledge of Natural Disaster Management.
- Human Population, Social Issues and Environment: Population growth, Variation, Explosion and Sex ratio. Environment and Public Health (HIV/AIDS). Environmental Ethics (Issues and Possible Solution).
- Environmental legislation and Environmental Protection Acts: Air, Water, Wildlife Forest acts. Role of information technology in Environment and Human Health.

Recommended Books:

- 1. Basu, M. & Xavier Savarimuthu, S. J. (2017). *Fundamentals of Environmental Studies*.(1st ed.). Delhi, India: Cambridge University Press.
- 2. Bharucha, E. (2005). *Textbook of Environmental Studies for Undergraduate Courses* Hyderabad, India: Universities Press
- 3. Rajagopalan, R. (2015), *Environmental Studies from Crisis to Cure*, (3rd ed.). Delhi, India: Oxford University Press.
- 4. Rana, S.V.S. (2004). Environmental Studies. Meerut, India: Rastogi.
- 5. Sharma, J.P. (2017). *Environmental Studies* (4th Ed.). Delhi, India: University Science Press.

Suggested e-learning materials:

Environmental Studies:

https://swayam.gov.in/course/141-enviromental-studies-ihttps://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf

BVF 013 Indian Cultural Heritage

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

After the completion of the course, students will be able to:

- 1. Comprehend the importance of Culture as a specific field of heritage studies.
- **2.** Differentiate between the 'material' and 'non-material' aspects of cultural heritage.
- **3.** Recognize heritage as a 'process' as well as a 'product' of human activities.
- **4.** Appreciate the expansion and sustenance of Indian cultural heritage.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Content:

- 1. Cultural Heritage: Its Constituents and Significance
- Plurality of Cultures: Unity in Diversity
- Influence of Bhagvad Gita and Ramayan on Indian culture: Formation of Self and Social Values
- Contribution of Buddhism & Jainism: Ethics in Human Life
- Indigenous Knowledge System: Contributions to Education and Science
- Development of Composite Culture: Indo-Islamic Art, Bhakti and Sufism
- 3. Interaction between Indian and Western Cultures: Education and Society
- 4 Gandhi's views on Non-violence and Social Issues
- 5. The Popular Culture: Food, Sports and Festivals
- 6. The Making of Greater India: Expansion of Culture beyond Boundaries
- 7. Constitutional Provisions for Sustenance of Cultural Values
- 8. Conservation of Heritage: Issues and Measures

Recommended Books:

- Basham, A.L. (2004). *The Wonder that was India*. England: Picador.
- Bhattacharya, H. (Ed.). Cultural Heritage of India (in 5 Vol.). Calcutta: Sri Ram Krishna Mission.
- Dinkar, Ramdhari Singh (1956). Sanskriti ke Char Adhyay, Allahabad: Lok Bharti Prakashan.
- Kabir, Humayun (1947). *Our Heritage*, Bombay.
- Nehru, J.L. (1981). *The Discovery of India*, J.L. Nehru Memorial Fund, Oxford University Press.
- Nehru, J.L. (2001). *Hindustan ki kahani*, Sasta Sahitya Mandal Prakashan. (Hindi)
- Pande, Susmita (1989). *Medieval Bhakti Movement: its History and philosophy*, Kusumawali Prakashan, Meerut.
- Raza, M. (1961). *Introducing India*. Aligarh: Aligarh Muslim University.

Suggested E-Resources:

- Sri Aurobindo. (1953). Foundations of Indian Culture. New York, NY: The Sri Aurobindo Library. Retrieved from https://archive.org/details/FoundationsOfIndianCultureAurobindo/pag e/n5
- ➤ World Heritage Sites, Culture and Heritage, in 'Know India', An Initiative under india.gov.in,

http://knowindia.gov.in/culture-and-heritage/

BVF 017 Selected Writings of Great Authors - I

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Objectives: The objectives of the course of study are:

 To fulfill one of the objectives of Five Fold Education (Panch Mukhi Shiksha) of Banasthali University that is to educate girls in cultural traditions and preserving and inculcating the essential values and ideas of Indian Culture.

- 2. To develop an acquaintance with Indian Epics.
- 3. To develop analytical faculty and habit of self study and reading good books among the students.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

- 1. गांधी की कहानी (हिन्दी/अंग्रेजी) लुई फिशर
- 2. दशरथनन्दन राम (हिन्दी / अंग्रेजी) चक्रवर्ती राजगोपालाचार्य

BVF 020 Women in Indian Society

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

After the completion of the course, the students will be able to:

- 1. Understand the basic concept of equality in mythological narratives.
- Develop an understanding of how identity formation of women in socio cultural and professional settings takes place and sustains in our social setting.
- 3. Learn about life changing experiences and accomplishments of women role models in different fields and be inspired.
- 4. Critically evaluate the contributions of women's universities in making of women leaders.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Content:

- Women in Indian society: Concept of equality from mythological narratives to present perspectives.
- Identity formation of women: Socio-Cultural Identity, Professional Identity and impact of socialization in identity formation.
- Women's participation in Indian freedom struggle: Rani Laxmi Bai, Sarojini Naidu, ArunaAsaf Ali, Usha Mehta.
- Changing status of women in post independence India with context to social, education, political, economic, and health.

- Women role models in various fields such as (not limited to): Savitri Bai Phule (Education), Indira Gandhi (Politics), Mahashweta Devi (Literature), Kalpana Chawla (Science), Binny Yanga (Social Sector), P.T. Usha (Sports), Indira Nooyi (Corporate).
- Contribution of Women's Universities in nurturing women leaders in India.

Recommended Books

- 1. Ahuja, M. L. (2011). *Women in Indian Mythology*. Delhi: Rupa Publications.
- Altekar, A. S. (1956). Position of Women in Hindu Civilization. Delhi: Motilal Banarsidas.
- 3. Desai, Neera. (2001). *Women in Modem India*. Delhi: National Book Trust.
- 4. Desai, Neera & Maitreyi. (1986) *Women and Society*. Delhi: Ajanta Publications.
- 5. Kumar, Radha. (1993). The History of Doing; An Illustrated Account of Movements For Women's Rights And Feminism in India, 1800-1990, Zubaan, New Delhi.
- 6. Bhalla, K. S. (2006). *Great Women of India*. Delhi: Kalpaz Publications.
- 7. Forbes, Geraldine. (2008). *Women in Independent India*. New York: Cambridge University Press.\

Suggested E-Resources

- Women in Ancient India, Mythology
 - http://www.legalservicesindia.com/article/1867/The-Socio-Economic-Status-of-Women-in-India-Ancient-to-Modern-Era.html
 - https://timesofindia.indiatimes.com/life-style/books/photo-stories/fascinating-women-from-mythology/photostory/58495315.cms
- Gender, Identity and Socialization
 - https://blogs.unicef.org/evidence-for-action/what-is-gender-socialization-and-why-does-it-matter/
 - https://www.jstor.org/stable/27520847?seq=1#metadata_info_tab_contents

- Women & Freedom Movement
 https://www.academia.edu/6399139/Role_of_Women_in_India_s_Struggle for Freedom
- Women and Socio-economic, Political, Health Status
 http://shodhganga.inflibnet.ac.in/bitstream/10603/8562/7/07_chapter%202.pdf
- Inspiring Women of India

https://www.indiatoday.in/entertainment/photo/indias-25-most-influential-women-369340-2013-03-13/14

https://owlcation.com/humanities/Greatest-Indian-Women-From-History

BVF 015 Parenthood and Family Relation

Max. Marks: 100	L	T	P	C
(CA: 40 + ESA: 60)	2	0	0	2

Learning Outcomes:

Upon completion of the course students will be able to:

- Observe children at different age levels in different situations and record them
- Prepare age related teaching aids
- Evaluate ,modify and compose age related printed materials / songs /and stories
- Plan and organize play activities / games, role plays, parties/ get together for children of different age groups

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Content

- 1. Preparing for parenthood:
 - Personal readiness and understanding the responsibilities of becoming a parent
 - Pre and post parenthood health issues and concerns -Management of reproductive health issues
- Antenatal, natal and postnatal care: Health, nutritional and emotional

- ➤ Infant care practices: feeding, weaning, toilet training, hygiene, sleep and rest
- Milestones of developments and role of parents as facilitators
- > Effective parenting skills:
 - Disciplinary techniques and their impact
 - > Strategies for positive parenting
 - Handling behavioural problems such as sibling rivalry and aggression
- Significance of family harmony in changing society:
 - fostering positive inter personal relationships family conflict and resolution

Learning Experiences:

- Observing children at different age levels in different situations through field visit
- Recording observations, including Anecdotal records on Individual differences in difference aspects of behaviour
- Preparing age related teaching aid
- Viewing educational films followed by group discussion
- Case Studies
- Evaluating printed materials (Magazines, news papers, articles from the books)
- Collecting, composing and modifying age related songs and stories
- Introspecting one's own past childhood experiences, with parents, siblings, friends neighbours etc.
- Planning and organizing play activities and games for children of different age groups
- Group discussions/Buzz sessions
- Role playing
- Planning for celebrating festivals, parties, get together.

References:

• Kulkarni, S. & Kulkarni, S. (1995). *Responsible Parenthood and Harmonious Families*. Jaipur: Classis Pub. House.

- Minett, P.M. (2001). *Child Care and Development* (4th ed.). London, United Kingdom, UK: John Murray.
- Santrock, J.W. (2008). *Life Span Development*. New York, NY: Tata McGraw Hill Companies, Inc.
- Sharma, K. (1993). *Bal Vikas*. Agra: Star Publications.
- Sharma, K. & Sharma, L. (1993). *Matrkala Evam Bal Vikas* (pancham sanskarn). Agra: Star Publications.
- Sharma, N. (1999). *Understanding Adolescence*. New Delhi: National Book Trust.
- Singh, V. (2012). *Matrkala Evam Shishu Kalyan* (5th ed.). Jaipur: Panchsheel Prakashan.
- Hurlock, E.B. (1988). *Child Development* (6th ed.). New York, NY: Tata McGraw Hill Publishing Co. Ltd.

Suggested E-Learning materials

- Childhood and Growing Up 1MB https://drive.google.com/open?id=0Bwk5FIsI0ctxTUNrazYzRFp Sdms
- Guidance and Counseling 14MB https://drive.google.com/open?id=Bwk5FIsI0ctxSm5ERUNtTG1 KalU

Elective Foundation Courses BVF 016 Science of Happiness

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

After completion of the course the students will be able to:

- Develop ability to cope up with stressful situation positively.
- Consciously try to remain happy more often.
- Spread happiness

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Content:

- Happiness: Positive emotions, pleasure, satisfaction and meaning of life.
- Indicators and measurement of happiness
- Importance, development and application of :
 - Helping others
 - Gratitude and forgiveness
 - Resilience
 - Optimism
 - Hope
 - Mindfulness
 - Interpersonal Relationships
 - Sense of humor
- 1. Barriers of happiness: Habits, life style, life preferences, their practices and behavior.
- 2. Happiness, well-being and quality of life.

Pedagogy:

The course would be more in a workshop mode wherein teachers will act as facilitators and mentors. Moreover, this course will make the students internalize all the curriculum contents followed by activities as per requirement – Role play, Gratitude journal, Happy to help projects, Laughter therapy, etc.

Recommended Books:

- Seligman, M. E. (2004). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment. Simon and Schuster.
- Lama, D. (2009). *The Art of Happiness: The Handbook of Living*. Riverhead Books, USA.

Suggested E-Learning Material:

Authentic Happiness by Martin Seligman
 https://positivepsychologyprogram.com/authentic-happiness/

Authentic Happiness

https://s3.amazonaws.com/media.wakinguptheworkplace.com/Authentic-Happiness.pdf

• The Art of Happiness

http://www.e4thai.com/e4e/images/pdf/The%20Art%20of%20Happiness.pdf

BVF 012 Human Body and Health

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

Upon completion of the course, the student shall be able to know:

- 1. Structure, functions and diseases of skeletal, muscular, cardiovascular system of the human body
- 2. Composition of blood various homeostatic mechanisms and their imbalances
- 3. Structure, functions and diseases of gastrointestinal and urinary system of the human body
- 4. Various hormones and associated physiology
- 5. Structure and functions of special senses and PNS
- Significance of antioxidant, vitamins and minerals, balance diet, BMI, Neutraceuticals

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Structure, functions and related diseases of the following body parts:

- Bones and Muscles
 - Different types of bones, joints and muscles in human body
- Ear, Nose, Throat
 - Structure and function of special senses
- Stomach, Liver, Pancreas, Gall Bladder, Small and Large Intestine Gross morphology, structure and functions of gastrointestinal system
- Lungs and Associated organs
 - Gross morphology, structure and functions of respiratory system
- Blood, RBC's, WBC's and Platelets
 Different components of blood and their functions

Heart, Blood Vessels

Structure, function and anatomy of heart and blood circulation

• Kidney, Urinary Bladder

Structure, functions, anatomy of Kidney, urinary bladder and associated conditions of excretory organ

Hormones

Regulation of hormone production and different stimuli that control hormone levels in the body

Skin

Understanding of structure and function of major components of the skin and factor affecting skin integrity

Health

Balanced Diet

Various components of a balanced diet and uses of the main food groups in the body

Nutrition Deficiency Diseases

Different symptoms, causes and conceptual knowledge of nutritional deficiency diseases

Ill effects of junk foods

Awareness about consequences of junk food consumption on health and associated diseases

• BMR, BMI, Fat Mass, Lean Mass

Different calculation for basal metabolic rate and estimation of body mass from skeletal dimensions

Antioxidants, Vitamins and Minerals

Definitions, fat-soluble and water soluble vitamins, antioxidants effects on body and advantages and disadvantages of supplementation

Dietary Supplements, Role of Neutraceuticals, functional Foods
 Health benefits, role in prevention of different diseases and their regulation

Recommended Books (Latest Edition):

1. Kathleen, J.W. (1992). *Anatomy and Physiology in Health and Illness*, 7th Ed., New York: Churchill Livingstone.

- 2. Tandon, O.P. Tripathi, Y. (2011). *Physiological basis of Medical Practice*. Best and Tailor, Williams & Wilkins Co.
- 3. Guyton, A.C. Hall, J.E. (2006). *Text book of Medical Physiology*, 11th Ed., Miamisburg.
- 4. Tortora, G.J. (2003). Grabowski SR, *Principles of Anatomy and Physiology*, Palmetto, GA
- 5. Singh, I. (2011). *Textbook of Human Histology*, 6th Ed., New Delhi: Jaypee brother's medical publishers.
- 6. Ghai, C.L. (2013). *Textbook of Practical Physiology*, 8th Ed., New Delhi: Jaypee brother's medical publishers.
- 7. Chatterrje, C.C. (2005). *Human Physiology*, vol 1-2. Kolkatta: Academic Publishers.

Suggested e-material

- > www.cvpharmacology.com
- > www.treatment4addiction.com
- www.medicalnewtoday.com
- > www.edvivas.com
- > www.pharmafactz.com

BVF 010 Design Thinking

Max. Marks: 100	L	T	P	\mathbf{C}
(CA: 40 + ESA: 60)	2	0	0	2

Learning Outcome:

The student will be able to:

• Understand how Design thinking can ensure professional success and better quality of life

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Objectives:

- 1. To understand Design thinking, Design process and basic approach
- 2. To understand how Design thinking can ensure professional success and better quality of life

Theory:

- Introduction to Design thinking, Understanding key words in Design thinking.
- Design and sustainability.
- Design Policy of India and the role of Design Thinking in promoting innovation and economic development of of the country.
- Evolution of Design Thinking as a discipline and its application in various walks of life politics, education, research etc.
- Importance of perception in Design thinking.
- Design thinking methods: De Bono's Cort tools; Six thinking hats, parallel thinking.
- Leteral thinking methods: Provocation, Movement, Random Entry.
- The Role of Yoga and Meditation in Design Thinking.
- Design Thinking methods for Designing your emotions, managing stress and getting read of fear.
- Studying case studies to understand the application of Design thinking in solving sticky problems in personal and professional life.
- Connecting Design thinking with "Sa Vidya ya Vimuktaye"

Suggested Readings:

- Bono De Edward, (2008), *The Free Mind by Edward* De Bono, Jaico Publishing House, Mumbai.
- Bono De Edward, (2010), Six Thinking Hat, Penguin, UK.
- Bono De Edward, (2010), Lateral Thinking, Penguin, UK.
- Biyani Kishore, (2007), It Happened in India, Rupa, New Delhi.
- www.edwarddebonofoundation.com
- https://en.wikipedia.org/wiki/Design_management

BVF 019 Universal Human Values

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

By the end of the course the learners will be able to:

1. Know about universal human values and understand the importance of

- values in individual, social, career, and national life. .
- 2. Become conscious practitioners of values.
- 3. Realize their potential as good human beings and conduct themselves in the ways of the world.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Contents:

- **Truth-** Universal truth, truth as value, truth as fact (veracity, sincerity, honesty amongst others); narratives and anecdotes from history and literature/ folklores about practicing truth, advantages of practicing truth.
- **Love-** Forms of love: for self, parents, friend, spouse, community, nation, humanity and other beings (living and non living), gratitude and forgiveness; narratives and anecdotes from history and literature/ folklores about practicing love, advantages of practicing love.
- **Compassion-** Concept and meaning, empathy, sympathy and non violence; role models in history for practicing compassion including Mahatma Gandhi; narratives and anecdotes from history and literature/ folklores about practicing compassion, advantages of practicing compassion.
- **Service** Concept of service (*sewa*) as a value, forms of service: for self, parents, family, elderly and debilitated, friend, spouse, community, persons in distress or affected by disaster, nation and humanity; narratives and anecdotes from history and literature/ folklores about practicing service, advantages of serving the needy.
- **Renunciation** (Sacrifice)- Concept of renunciation and sacrifice, self restraint, ways of overcoming greed; narratives and anecdotes from history and literature/ folklores about practicing renunciation, advantages of practicing renunciation.
- Well being- Concept and importance; kinds of well being: physical (endurance, strength), emotional (ability to respond to emotions and control them), aesthetic (ability to see and appreciate beauty in all beings), intellectual (rationality and logic), relational (obligation to self, parents, family, society, nation, humanity, living with others and their acceptance), moral (difference between good and evil, practicing goodness, righteousness), spiritual (thinking beyond self and journey from senses to spiritual level).

Integral human well being- Inter relatedness of different kinds of well being; integration of mind, body and soul; importance of yoga and pranayama in attaining integral well being.

Pedagogy

In teaching and learning pedagogy of universal human values, there should be a shift from domain or conclusions based approach to the experiential or process/es based approach. The faculty should promote learning of values on a proportionate scale of 20:30:50 principle, where lectures constitute 20 percent of the delivery (Hear); visuals 30 percent of the learning methods (See); and experience 50 percent (Do). This ratio is subject to change as per the needs. Simulated situations, role plays and case studies have to be integrated.

Note: Each student will keep record of his/her daily learning after each module/session in a self made journal.

References:

- Radha, Kumud Mookerji (2016). *Ancient Indian Education*, Eighth edition, Motilal Banarasidass
- Swami Satyananda, Saraswati (1969). *Asana Pranayama Mudra Bandha*, Bihar School of Yoga.
- ➤ Kireet, Joshi (1997). *Education for Character Development*, Dharma Hinduja Center of Indic Studies.
- Sri Aurobindo Ghosh (1998). *The Foundations of Indian Culture*. Pondicherry: Sri Aurobindo Ashram.
- Avinash, Patra (2012). *The Spiritual Life and Culture of India*, Oxford University Press.
- Shanti, kumar, Ghosh (2004). *Universal Values*. The Ramakrishna Mission, Kolkata.

(Keeping in view the needs and interest of learners, books, audios, videos, and e-resources may be added by the faculty)

BVF 018 Selected Writings of Great Authors - II

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Objectives: The objectives of the course of study are:

- To fulfill one of the objectives of Five Fold Education (Panch Mukhi Shiksha) of Banasthali University that is to educate girls in cultural traditions and preserving and inculcating the essential values and ideas of Indian Culture.
- 2. To develop an acquaintance with Indian Epics.
- 3. To develop analytical faculty and habit of self study and reading good books among the students.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Students are required to select any one of the following books:
 छात्रा को निम्नलिखित में से किसी भी एक पुस्तक का चुनाव करना है: 'Fundamental Unity of India' - राधा कुमुद मुखर्जी- भारत की मूलभूत एकता- (हिन्दी (अनुवाद) - विपिन कुमार)

अथवा

Jawahar Lal Nehru - India Rediscovered (Abridged from the Discovery of India by C.D. Narasimhaiah. Professor of English, Maharaja's College, Mysore)Geography Cumberlege Oxford University Press.

अथवा

जवाहरलाल नेहरु, संपादक रामचन्द्र टंडन हिन्दुस्तान की कहानी (संक्षिप्त संस्करण) 1995 सस्ता साहित्य मंडल, नई दिल्ली

Students are required to select any one of the following books:
 छात्रा को निम्नलिखित में से किसी भी एक पुस्तक का चुनाव करना है:—
 प्रो. दिवाकर शास्त्री — गीता का नीति शास्त्र (हिन्दी / अंग्रेजी)

अथवा

डॉ. राधा कृष्णन् – श्रीमद्भगवत गीता (हिन्दी / अंग्रेजी)

अथवा

महादेव देसाई The gospel of Self Action or The Geeta (Hindi/English) अथवा विनोबा भावे- गीता प्रवचन

अथवा

गांधी – अनासक्ति योग

अथवा

विनोबा भावे – कुरआन सार (हिन्दी / अंग्रेजी)

अथव

बाइबिल न्यू टेस्टामेंट – (हिन्दी / अंग्रेजी)

VOC 011L Basic Dress Making

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 0 0 4 2

Learning Outcomes:

Upon completion of the course students will be able to:

- 1. Understand basic essentials of clothing construction and process of garment making
- 2. Use acquired garment construction skills for different age groups and figure types

Course Content:

- Equipment and supplies used in Clothing construction, their use and care, common defects in sewing and their remedies.
- Body measurements for different garments.
- Preparation of Fabric: Layout of paper pattern & cutting material, calculation of material required for different garments.
- Elements & Principles of design & their application on apparel.
- Selection of fabric: Suitability of different fabrics for various articles.
- Types of stitches- running, basting, back, hemming, overcasting, buttonhole, Types of seams- plain and its finishing, French, run and fell, lapped, types of decorative seams.
- Tucks, Pleats, Gathers, Smocking.
- Plackets: even hem, continuous wrap, kurta, placket, wrap and projection.

- Types of Yokes, Necklines and its finishing.
- Collars- Peterpan, Sailors, Shirt, Mandarian band, Sleeves- basic, puff, flared, Cape, Pockets- patch, bound, Well
- Embroidery stitches- running, chain, stem, satin, herringbone, buttonhole, mirror attachment and patch work.

VOC 005L Dress Designing

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 0 0 4 2

Learning Outcomes:

Upon completion of the course students will be able to:

- Select fabrics and other materials for different age groups
- Intelligently design and construct garments and accessories

Course Content:

- Drafting of basic blocks of children.
- Stitching of Baby layette.
- Drafting of Romper,
- Drafting of Shirt and Short.
- Drafting and stitching of Salwar Kameej, Blouse, Petticoat.
- Project work-Designing of a garment accessories and its construction.

VOC 014 Entrepreneurship - I

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

Upon Completion of the course the student will be able to:

- 1. Understand the basic elements related to entrepreneurship.
- 2. Understand the skills and competencies necessary to engage in entrepreneurship.
- 3. Understand the systematic process to select and screen a business idea.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Objective:

- To contribute towards developing an entrepreneurial attitude amongst students.
- To develop the ability of analysing and understanding business situations in which entrepreneurs act and to master the knowledge necessary to plan entrepreneurial activities

Course Content:

- Introduction: Concept of entrepreneurship; Classification and types of entrepreneurship. Creativity and Innovation; Grass root innovation.
- Traits and competencies of an entrepreneur; wealth building and creating an impact; Myths about entrepreneurship; Entrepreneurship as a career option; Life as an entrepreneur.
- Design Thinking; Problem identification; Idea Generation; Identifying Customer Segments; Value Proposition; Lean Canvas.

Suggested Reading:

- 1. Desai, V. (2012). The Dynamics of Entrepreneurial Development & Management (5 ed.). Mumbai: Himalaya Publishing House.
- 2. Drucker, P. F. (1985). *Innovation and Entrepreneurship* (1ed.). Uttar Pradesh: Harper Collins.
- 3. Gupta, A.K. (2016). *Grassroots Innovations (Minds On the Margin Are Not Marginal Minds)* (1ed.). New Delhi: Random House India.
- 4. Hisrich, R. D., Manimala, M. J., Peters, M, P. & Shepherd, D. A. (2014). *Entrepreneurship* (9ed.). New Delhi: McGraw Hill.
- 5. Jain, P. C. (1999). *Hand Book for New Entrepreneurs* (1ed.). New Delhi: Oxford University Press.
- 6. Roy, R. (2011). *Entrepreneurship* (2ed.). New Delhi: Oxford University Press.

Suggested E Learning Materials:

- 1. Majumdar, P. S. (2018, December). Entrepneur, Entrepreneurship and Startup. Retrieved from You Tube: http://www.youtube.com/watch?v=dNEyiSCfnos
- 2. Pareek, A. (2018, December). Promoting Spirit of Entrepreneurship and Startup Among the Students. Retrieved from You tube: http://www.youtube.com/watch?v=MoxH9ze-nig

Experiential Learning:

- 1. Competencies Testing & Development.
- 2. ASSIGNMENT : Online course on Entrepreneurship/Start ups.
- 3. Activities: Through these activities the fundamentals covered during lectures shall assist to:
 - Develop creativity
 - Identify sources of innovation
 - Employ entrepreneurial strategies

VOC 015 Entrepreneurship - II

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

Upon Completion of the course the student will be able to

- 1. Get insights related to dynamics of entrepreneurship ecosystem so that they can assume leadership roles through team building for generating economic and social value.
- 2. Get the knowledge of customer development, customer validation, and competitive analysis while utilizing design thinking.
- 3. Create a business plan that articulate and apply financial, operational, organizational, market, and sales knowledge.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Objective:

- To facilitate students to recognize, create and shape opportunities, so that they can provide the leadership and build team generating economic and social value
- To understand the basic concepts of venture creation

Course Contents:

- Idea validation and creating Business Model : Developing solutions; Sizing the opportunity; Building MVP.
- Financial and Non financial support : Revenue streams; Pricing and Costs; Sources of funds; Importance of project management.
- Marketing and Sales: Positioning; Channels and Strategy; Sales Planning.

- Team: Importance of teambuilding; Complementary skill sets.
- Legal issues: brief overview of-intellectual property rights, patents, trademarks, copy rights, trade secrets, licensing.
- Business Plan Writing

Suggested Reading:

- 1. Desai, V. (2012). The Dynamics of Entrepreneurial Development & Management (5ed.). Mumbai: Himalaya Publishing House.
- 2. Drucker, P. F. (1985). *Innovation and Entrepreneurship* (1ed.). Uttar Pradesh: Harper Collins.
- 3. Gupta, A.K. (2016). *Grassroots Innovations (Minds On the Margin Are Not Marginal Minds)* (1ed.). New Delhi: Random House India.
- 4. Hisrich, R. D., Manimala, M. J., Peters, M, P. & Shepherd, D. A. (2014). *Entrepreneurship* (9ed.). New Delhi: McGraw Hill.
- 5. Jain, P. C. (1999). *Hand Book for New Entrepreneurs* (1ed.). New Delhi: Oxford University Press.
- 6. Roy, R. (2011). *Entrepreneurship* (2ed.). New Delhi: Oxford University Press.

Suggested E Learning Material:

- Majumdar, P. S. (2018, December). Support and Eco System for Startups. Retrieved from You tube: http://www.youtube.com/watch?v=TVDYWdiKWgU
- Meyer, J. (2012, December). The art of Entrepreneurship. Retrieved from You Tube: http://www.youtube.com/watch?v=ATLUouxwykM

VOC 020 Radio Production - I

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

Students will be able to:

- 1. Understand the history of radio and the role of production, and programming in a community evolving industry by listening to audio samples and completing the assignments.
- 2. Learn and practice the skills of a professional on air personality.
- 3. Create recorded programs in the form of "promos" and news stories.
- 4. Understand the rules and regulations, of the governing and broadcasting industry.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

1. Introduction to Media

- 1) What is media?
- 2) Print media
- 3) Electronic media
- 4) Difference between print and electronic media.

2. What is Radio?

- 1) Introduction to radio
- 2) Technicalities of radio
- 3) Community radio station
- 4) Commercial radio
- 5) Difference between Community and Commercial radio

3. Researching & writing for radio

- 1) Research for the program
- 2) What is script?
- 3) Script sense

4. Radio text and content

- 1) Various types of scripts
- 2) Effective script writing
- 3) Outdoor Broadcast
- 4) Recorded data

5. Radio anchoring

- 1) Basic qualities of an anchor
- 2) Importance of language
- 3) Modulation and punches
- 4) Talking with audience

VOC 021 Radio Production - II

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

1. Live broadcast

- 1) Introduction to live programs
- 2) Handling live show
- 3) Anchoring for live programs
- 4) Difference between live and recorded programs

2. RJing (Radio Jockey)

 Anchoring in live programs with handling other technical operations like handling Audio console, Recording, Editing and play listing.

3. Radio production skills

- 1) Pre production
- 2) Production
- 3) Post Production
- 4) Audio Editing software's i.e. Adobe audition, Wavelab etc......
- 5) Outdoor Recording

4. Final projects (Practical Assignments)

- 1) Anchoring pre-recorded programmes (talks, discussion, interviews)
- 2) Anchoring live phone-in programmes (talks, discussion, interviews)
- 3) Participating in radio plays/feature/dramas/skit
- 4) Scripting for radio programmes
- 5) RJ-ing the programmes
- Practical approach by participating in the programs of Radio Banasthali
- 2. Evaluation-Evaluation will be done on the basis of quality of the final programs produced and mixed by the students.

Suggested readings:

- ❖ Paul Chantler & Peter Stewar (2003). Basic Radio journalism, Oxford.
- ❖ Boyd, Andre (1997). Broadcast Journalism: *Techniques of Radio and TV News (Media Manuals)*, Landon: Focal Press.

- ❖ Thomas, Pradip Ninan (2010). *Political Economy of communication in India: The Good, the bad and the ugly*, Delhi: sage.
- ❖ Bandopadhyay, P.K. (2010). *Radio Communication at close Range*: BR Publishing Corporation.
- ❖ Paravala, Vinod & Malik, Kanchan K. (2007). *Other Voices: The struggles for community Radio in India*, New Delhi : Sage.
- Hendy, David (2000). Radio in the Global Age, Cambridge: Polity Press

E-Learning Material:

- FORMATS OF RADIO PROGRAMMES http://download.nos.org/srsec335new/ch11.pdf
- 2. Writing for Radio The Basics http://bolhyd.commuoh.in/wp-content/uploads/2014/10/writingforradio.pdf

VOC 022 Web Designing and Internet Technology-I

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 1 0 0 1

Learning Outcomes:

At the end of the course, the student will be able to

- a. Use computer and WWW.
- b. Design and develop a static website
- c. Use Internet and its services (Email, Video conferencing).

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Objectives

- To enable students to learn the concept of Internet and its relevance in organizational functioning.
- To Understand the principles of creating an effective web page
- To understand Web Design Process

Syllabus

1. Introduction to computer: Basic components and their functions, hardware, System and Application Software, operating system and functions.

- 2. Computer Networks: LAN, WAN, MAN, IP Address, Networking devices, Wi-Fi.
- 3. Internet and WWW (World Wide Web), Working of Internet, Basic services of Internet (Email, Video Conferencing).
- 4. Model of WWW, Web Browser and its Features, Web server, concept of DNS (Domain Name System), Search Engines, Cyber Security Awareness.
- Basics of Web site design, Characteristics of good website, Introduction to HTML, structure of HTML document, Elements (Headings, Paragraphs, Formatting, Lists, Quotations, Links, Images, Tables, Forms, Audio, Video, Blocks etc.) & Attributes, Introduction of HTML5.

Suggested Books:

- Internet & World Wide: How to program, Paul Deitel, Harvey Deitel & Abbey Deitel, Pearson Education.
- Responsive Web Design with HTML5 and CSS3, Ben Fain, Packt Publishing Limited

Suggested E-Resources:

 Internet Technology https://nptel.ac.in/courses/106105084/13

VOC 022L Web Designing and Internet Technology-I Lab

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 0 0 2 1

Lab Work

- 1. Works on windows operating system
- 2. Connections with Internet & LAN
- 3. Uses of Internet services
- 4. Working with web browser and web server
- 5. Working with Web Search Engine
- 6. Introduction to Email and Video Conferencing
- 7. Create a web page using HTML heading, formatting, Paragraph.
- 8. Create a web page using HTML Lists
- 9. Create a web page using Quotations, and Images.

- 10. Create web page layouts using HTML tables.
- 11. Link web pages using HTML link tag
- 12. Create a HTML Form
- 13. Create pages with HTML Audio, Video, and Blocks tags.
- 14. Create page using HTML5
- 15. Design a static website using HTML.

VOC 023 Web Designing and Internet Technology-II

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 1 0 0 1

Learning Outcomes:

At the end of the course, the student will be able to:

- d. Design and develop a dynamic website
- e. Understand the various latest real time office automation tool through Web.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Objectives

- To understand the principles of creating an responsive web page
- To understand Web Application Development Process
- To make understand to create, edit and update documents and spreadsheets through Web.
- To make understand the create, edit and update database using MySql **Syllabus**
- 6. Web Designing Tools (Adobe Dreamweaver)
- 7. CSS: Introduction, Syntax of CSS rule, Internal, External and Embedded CSS, CSS properties (Text, Fonts, Tables, Border, Box, background), Class Selector, ID Selector, Element Selector
- 8. Introduction to database: Concept of DBMS, Application of DBMS, Introduction to MySql.
- 9. PHP Introduction: Basic syntax, data types, variables, constant, Expression, operator, Control structure, Loops, Database Connectivity (add, delete, update, view).
- 10. Publishing & Registering websites, Google office tools(docs, sheet, form, drive)

Suggested Books:

- 1. Responsive Web Design with HTML5 and CSS3, Ben Fain, Packt Publishing Limited
- 2. Web Enabled Commercial Applications Development Using HTML, DHTML and PHP Ivan Bayross, BPB Publications, 4th Edition

Suggested E-Resources:

 Building Web Applications in PHP https://www.coursera.org/learn/web-applications-php

VOC 023L Web Designing and Internet Technology-II Lab

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 0 0 2 1

Lab Work

- Introduction to Adobe dreamweaver.
- Design a static website using Font, Tables and Link using Adobe dreamweaver.
- Designing a web page using Table, Border, Outline, Margin in CSS and HTML
- Design a web page using Class Selector, ID Selector, Element Selector
- Design a website using External CSS and HTML.
- Design a web page using box model in CSS.
- Works on WAMP server
- Create a table using MySql
- Use of data types, variables, constant, Expression, operator in PHP
- Use of conditional statements
- Use of looping statements in PHP
- Design web page using database Connectivity (add, delete)
- Design web page using database Connectivity (view, update)
- Design a dynamic website.
- Create document using Google doc.

VOC 009 Library Science - I

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 1 0 0 1

Learning Outcomes:

- Students will be able to recognize and apply contribution of library science to other fields.
- Understand the principles for identification, selection, organization, evaluation, retrieval, dissemination, evaluation and preservation of information in all formats.
- Understand the basics of the documentation for the future researchers.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Introduction to Library Science

- Five laws of library Science
- Reading habits (measures for its promotion)
- Types of libraries (Academic, Public and Special)

Sources of Information (Printed)

- Primary and secondary sources of information
- Reference sources (Types and uses)
- Dictionary (Lexicon, Glossary, Thesaurus)
- Objectives of a standard dictionary

Academic/Scientific Communication: Print form

1 Books vs. Journals/Periodicals

Basic tenets of a books

Contents: text books and research books)

Authorship: (single, joint and multiple authors, editor)

Year: Edition, reprint

Publisher and Place of Publication

2 Measure of a standard book

Journals

- Basic tenets of a journal
- Editors(s), Publisher, Periodicity, Volume, Issues no. Page.

- Types of Journals (based on the contents) Journal, Abstracting, Indexing
- Article vs. Research paper (Abstract, Index, Reference, Bibliography)

Academic writing

Research paper, Dissertation, Thesis, Project, Assignment

- Research paper (how to write a research paper)

Academic writing

Research paper, Dissertation, Thesis, Project, Assignment

- Research paper (how to write a research paper)

Nature of Research Paper: Considerations

- Limiting of subject,
- Selecting and organizing, (giving a title)
- Paraphrasing and Plagiarizing
- Revising and polishing
- Proof reading
- Supporting and documenting,
- Reference/ Footnotes,
- Bibliography

Academic documentation (Example: Reference/Research Paper)

- Objectives of Academic Documentation
- Steps:
- Finding materials : the card catalogue, standard bibliographical sources,
- Evaluating material : The audience, length and documentation, primary and secondary sources, publisher, author, value
- Taking notes : sample to be shown and made
- Making of a reference/Footnotes
- Making of a bibliography
- Making of a proof
- Making of a reference
- Making of common abbreviation used in notes

VOC 009L Library Science – I Lab

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 0 0 2 1

- Cataloguing of books according to AACR-II of the following
- Single and joint authors
- Authors with collaborators (translator, editor, reviser, Commentator etc.)
- Edited books (Title as heading)

Semester Assessment

- 1. Reference Paper & Note taking
- 2. Proof Reading

Scheme of Examination

Theory

Practical: Cataloguing

Q. Catalogue 2 out of 3 titles

Note: The external examiner will conduct the viva-voce and the reference paper will be placed before the examiner. In the viva the question will be asked from the entire syllabus.

Suggested Books:

- 1. Rangnathan, S. R. (1957). *Five laws of library science*. Madras: Madras Library Association.
- 2. Swain, Nirmal K. (2000). Talking of Book Culture. In S. D.Vyas, Usha Pawan and Nirmal K. Swain (Eds). *Readings in Library Science* (pp.257-262)). Jaipur: Raj Publishing House.
- 3. Millward, Celia(1980). *Handbook for Writers*. Winston: Holt, Rinehart.
- 4. Irmscher, Willium F. (1981). *The Holt Guide to English*(3rd ed). Winston: Holt, Rinehart.
- 5. Girija Kumar & Krishan Kumar, (1990) .*Bibliography(*3rd rev. ed). New Delhi: Vikash Publishing House.
- 6. Sood, S. P. & M.R. Rawatni. Kriyatmak (1991). *Dewey Dasamlab Bargikaran*, Jaipur: R.B.S.A. Publishers.
- 7. Sood, S.P. (1996). Kriyatmak AACR II. Jaipur: R.B.S.A. Publishers.

8. Modern Language Association (1990). *MLA Handbook for Writers of Research Papers*, Joseph Gibaldi Ed. (4th ed.) Washington, DC.

Suggested E-Resources:

Five Law of Library science

- https://babel.hathitrust.org/cgi/pt?id=uc1.\$b99721&view=1up&seq
 =20
- https://www.nios.ac.in/media/documents/SrSecLibrary/LCh-004.pdf
- https://www.librarianshipstudies.com/2017/09/five-laws-of-library-science.html
- http://egyankosh.ac.in/bitstream/123456789/35226/5/Unit-4.pdf

Reading habits (measures for its promotion)

- 1. https://www.indiastudychannel.com/resources/145813-How-To-Promote-Reading-Habits-and-Skills-In-Children.aspx
- http://www.iosrjournals.org/iosr-jhss/papers/Vol14issue6/C01461317.pdf?id=6916
- 3. https://unesdoc.unesco.org/ark:/48223/pf0000013412
- 4. https://www.oxfordlearning.com/encourage-good-reading-habits/

Types of libraries (Academic, Public and Special)

http://www.kuk.ac.in/userfiles/file/distance_education/Year-2011-2012/B_Lib%20lecture%201.pdf
 http://egyankosh.ac.in/bitstream/123456789/34898/1/Unit-2.pdf

VOC 010 Library Science – II

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 1 0 0 1

Learning Outcomes:

After completion of the course, students will be able to:

- 1. Recognize and apply contribution of library science to other fields.
- Understand the principles for identification, selection, organization, evaluation, retrieval, dissemination, evaluation and preservation of information in all formats.
- Analyse and prepare solution to respond the needs of users.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Syllabus

Source of Information

- Encyclopedia Types, Special Features and Evaluation
- Directory, Year book
- University Handbook, India: a reference annual
- Demonstration: New Encyclopedia Britannica

Academic/Scientific Communication: Non-print form

- Assemblage of Academicians
 - Seminar, Conference, Workshops, Symposium (National, Regional and local)
 - The functional aspect of the assemblage (detail discussion)
- How to make effective an oral presentation
 - Preparation:- achieving Focus, Determining the goal and objective, Summery, developing a title
 - Organizing the presentation: Selecting and arranging the mail points, Arrangement patterns of an informative presentation.
 - Outlining the body of the presentation:-
 - Preparing introductions, conclusions and connectives, attention step orientation step, concluding step and making connections
 - Using languages effectively:- Attributes of information conversational style
 - Achieving speaking excellence:-
 - Visual aids:- choosing means of displaying information
 - Conclusion

VOC 010L Library Science – II Lab

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 0 0 2 1

Classification of books according to DDC-19th ED (Only T-1and T-2)

- Compilation of Bibliography with catalogue cards (50 documents: 30 books + 20 journals)
- Seminar Presentation

Scheme of Examination

Theory

Practical:

Practical paper will be in following two parts

Classification

- Q.1 Classify 2 titles out of 3 based on index and schedule
- Q.2 Classify 4 titles out of 6 based on T-1 and T-2

Note: The external examiner will conduct the viva-voce. In the viva the questions will be asked from the entire syllabus.

Suggested Books:

- Rangnathan, S. R. (1957). *Five laws of library science*. Madras: Madras Library Association.
- Swain, Nirmal K.(2000). Talking of Book Culture. In S. D.Vyas, Usha Pawan and Nirmal K. Swain (Eds). *Readings in Library Science* (pp.257-262)). Jaipur: Raj Publishing House.
- Millward, Celia (1980). *Handbook for Writers*. Winston: Holt, Rinehart.
- Irmscher, Willium F. (1981). *The Holt Guide to English (* 3rd ed). Winston: Holt, Rinehart.
- Girija Kumar & Krishan Kumar, (1990). *Bibliography (*3rd rev. ed). New Delhi: Vikash Publishing House.
- Sood, S. P. & M.R. Rawatni, Kriyatmak (1991). *Dewey Dasamlab Bargikaran*, Jaipur: R.B.S.A. Publishers.
- Sood, S.P. (1996). Kriyatmak AACR_II. Jaipur:R.B.S.A. Publishers.
- Modern Language Association (19950). *MLA Handbook for Writers of Research Papers*, Joseph Gibaldi Ed. (4th ed.) Washington, DC.

Suggested E-Resources:

1. Sources of information

http://www.lisbdnet.com/sources-of-information/

2. Encyclopedia

https://en.wikipedia.org/wiki/Encyclopedia

3. Seminar

https://foodsci.rutgers.edu/gsa/SeminarGaudelines.pdf

4. Encyclopedia Briannnica

https://en.wikipedia.org/wiki/Encyclop%C3%A6dia_Britannica

5. Conference

https://evenues.com/event-planning-guide/what-is-a-conference

6. Organizing the Presentation

http://successfully-speaking.com/blog/2016/9/3/organize-your-presentation

VOC 018 Photography - I

Max. Marks: 100	L	T	P	\mathbf{C}
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes:

After completion of the course, students will be able to:

- Apply the principles of technical photography. Ability of the exposure settings and lens to shoot photographs.
- Apply the principles of lighting and colour theory to a variety of photographic scenarios by measuring, evaluating, and adjusting light and colour to create quality images.
- Developed the habit of looking closely at the visible world around you
 in order to represent it in terms of aesthetics, beauty and truth. To
 look at what you are seeing and to see what you are looking at.

Concept of:

Camera Anatomy & Functions

- Functions of DSLR camera.
- White balance
- Color Temperature
- Image Sensors & Sizes (CCD and CMOS)

- Aperture and Its Function
- Shutter and Motion
- Concept of Depth-Of-Field
- Co-Relation between Aperture, Shutter Speed & ISO
- Full Frame Vs Crop Censor
- Different Exercise based on the aperture, shutter speed and ISO.

Camera Lenses

- Camera Lenses and Photography
- Types of Lenses and usage
- (Wide, Normal, Telephoto, Zoom and Prime Lenses)
- Focal Length
- Lens speed
- Filters usage for photography: All Types, Functions & Applications
 - Lenses based photography exercises.
 - Aesthetical based different photography exercise.

History of Photography

- Photography: Meaning and Definition
- History and Photography techniques
- Film vs Digital
- "Photography" as a Medium of Mass Communication
- Requirement and Utility of Photographs
- Types of Photography (Based On Usage & Area)

Visual Composition in Photography

- Grammar of Photography
- ➤ Photographic Composition: Rule of Thirds, Line-shape etc.
- Framing
- Principles of Composition
- Balancing in Photography
- Camera Angles
- > Technical and Creative Aspects of Photography
 - Familiarization With Photography Equipment
 - Practice on Various Cameras

- Practice with DSLR Camera and Lenses
- Study and Practice of Composition
- Review and Analysis of Photographs
- Collection of photographs based on lensing, composition and angles.

Note: Every student must have their own DSLR camera.

Recommended Books:

- ➤ Bate, David (2016). *Photography-The Key concepts*, UK: Berg Publishers,
- Langford, Michael, *Langford's Basic Photography*, Waltham, Massachusetts: Focal Press Book
- Lou, Jacobs (Jr.) (2013). *Point and shoot*, US: Amphoto.
- Freeman, John (2002). Practical Photography, How to Get the Best Picture Every time, US: Ultimate Editions
- Arena, Syl (2012). Lighting for Digital Photography: From Snapshots to Great Shots, San Francisco: Peachpit Press

VOC 019 Photography - II

Max. Marks : 100	L	T	P	C
(CA: 40 + ESA: 60)	0	0	4	2

Learning Outcomes:

After completion of the course, students will be able to:

- Ability to work in experimental and manipulative techniques, candid and contrived imagery, documentary photography, archival processing, and interpretive studies.
- Becoming proficient at the technical aspect of photographing with a digital camera. Students will be working with those images in post processing including digital editing, saving, sizing, and posting of those images.
- ➤ Becoming proficient at the technical aspect of visual grammar of photography.
- > Developed the habit of photojournalism and it ethics.

Concept of:

Introduction of Lighting Techniques

- Painting, Lighting and Photography
- Understanding Lighting: Artificial & Natural
- Photographic Lighting Equipment & Sources
- One, Two and Three Point Lighting: Key, Fill and Back Light
- Flash Lighting
- Diffuser and Reflectors
- Usage of Filters
 - Different Lighting based exercises.
 - > Specific photography shoots and exercises for the students.

Photography Shoot

- Portrait
- Landscape
- Candid
- Product Photography
- Other theme base
- (3-5 photo collection)
 - Shooting Exercises in Natural and Artificial Light
 - Photo editing exercises.
 - Different theme based photography and presentation. (8 to 10 image)

Photojournalism

- Analysis of famous Photo Journalist's work.
- Photojournalism Ethics
- Case studies
- Apply Photojournalism to tell stories
 - Different exercises based on photojournalism.
 (Photojournalism will help the student to create story through the photographs.
 - Photojournalism

Basics of Photoshop

• Introduction to Photoshop Software

- Basic image Editing
- Various tools for editing a photograph
- Color Correction & Exposure setting
 - Photographs editing on Photoshop software.

Note: Every student must have their own DSLR camera.

Recommended Books:

- Bate, David (2016). *Photography-The Key concepts*, UK: Berg Publishers,
- Langford, Michael, Langford's Basic Photography, Waltham, Massachusetts: Focal Press Book
- Lou, Jacobs (Jr.) (2013). *Point and Shoot*, US: Amphoto.
- Freeman, John (2002). *Practical Photography, How to Get the Best Picture Every time*, US: Ultimate Editions
- Arena, Syl (2012). Lighting for Digital Photography: From Snapshots to Great Shots, San Francisco: Peachpit Press
- Long, Ben. (2001). *Complete Digital Photography*. United States US. Cengage Learning, Inc.
- Kelby, Scott. (2007). *The Digital Photography Book Volume 1 & 2*. United States US. Peachpit Press.

VOC 016 Introduction to Artificial Intelligence - I

Max. Marks : 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

On completion of the course students will be able to

- 1. Understand the basic concepts of Artificial intelligence.
- 2. Understand different domain of Artificial intelligence
- 3. Understand the various searching techniques.
- 4. Apply searching techniques in applications which involve perception, reasoning and learning.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Content:

- Introduction to Artificial Intelligence, definition, history, Artificial Intelligence timeline
- Domains of Artificial Intelligence: expert systems, neural networks, robotics, fuzzy logic, natural language processing, computer vision
- Applications of Artificial Intelligence, advantages and disadvantages of Artificial Intelligence, scope of Artificial Intelligence.
- Artificial Intelligence Project Cycle: Problem solving, Data Acquisition: identify data requirements and finding sources to obtain relevant data, Data Exploration: data visualization, Modeling, Evaluation.
- Introduction to searching techniques: Blind search and Heuristic search, fundamentals of knowledge representation and uncertainty reasoning.

Suggested Books

- Russell, S. J. & Norvig, P. (2013). *Artificial Intelligence: A Modern Approach* (3rd ed.). PHI Learning
- Nilsson, N.J. (1991). *Principles of Artificial Intelligence*. Narosa Publishing.
- Chopra Rajiv. Artificial Intelligence: A Practical Approach, S. Chand

Suggested E-Resources:

- Artificial Intelligence by IIT Kharagpur https://nptel.ac.in/courses/106105077/
- 2. Artificial Intelligence: Principles and Techniques by Stanford University

https://web.stanford.edu/class/cs221/

VOC 023 Introduction to Artificial Intelligence - II

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcomes:

On completion of the course students will be able to

- 5. Understand basics of neural networks.
- 6. Understand to represent the real world Knowledge.
- 7. Analyze and design a real world problem for implementation and understand the dynamic behavior of a system.

8. Understand basics of machine learning.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Neural Networks: Introduction to neural network, Relation between the neural network and nervous system in human body, working of neural network, applications of neural networks.

Content:

- Types of learning: supervised, unsupervised and reinforcement.
- Concept of Machine Learning, nature inspired algorithms, genetic algorithms, steps of simple genetic algorithm- selection, crossover, mutation.
- Case Study- applications of AI in education, agriculture, healthcare, transportation and other discipline.

Suggested Books

- 1. Russell, S. J. & Norvig, P. (2013). *Artificial Intelligence: A Modern Approach* (3rd ed.). PHI Learning
- 2. Nilsson, N.J. (1991). *Principles of Artificial Intelligence*. Narosa Publishing.
- 3. Chopra Rajiv. Artificial Intelligence: A Practical Approach, S. Chand

Suggested E-Resources:

- Artificial Intelligence by IIT Kharagpur https://nptel.ac.in/courses/106105077/
- Artificial Intelligence: Principles and Techniques by Stanford University

https://web.stanford.edu/class/cs221/

VOC 012 Computer Assisted Learning and Teaching

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 1 0 0 1

Learning Outcomes:

Student will be able to-

- Identify the role of the components of the computer system.
- Conceptualize the relevance of the hardware and software

 Reflect their skills in creating documents related to teaching and learning.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Outline:

- Understanding the working of Computer system
 - CPU, Memory, Input, Output Devices, Secondary memory devices
 - Hardware
 - Software Operating System, Application Software MS office, Online Softwares
 - Types of Soft Content –main extensions and uses.

References:

- Adomi, E.E. (2011): Framework for ICT Policy: Government, Social and Legal Issues, Information. New York: Science Reference.
- CD ROM (2005): Intel Teach to the Future Programme (I.T.F.P.)
- Choubey, S. (2005). *Computer Ekparicha*, Bhopal: Madhya Pradesh Hindi Granth Acadmy.
- Gupta, M.K. (2005). Computer Anuprayog. Jaipur: Mangaldeep Publication.
- Intel Innovations in Education (2002): *Pre-Service Curriculum Intel Teach to the Future*. New Delhi: Intel Corporation, CA. (**English** Binder).
- Intel Innovations in Education (2004): *Pre-Service Curriculum. Intel Teach to the Future*, New Delhi: Intel Corporation, CA. (Edition 2.0 **Hindi** Binder).
- Khirwadkar, A. & Pushpandhan, K. (2005). *Information and Communication Technology in Education- Interactive multimedia instructional strategies in Teaching Learning Process*. New Delhi: Sarup and Sons.
- Kumar, B. & Ansari, A.S. (2005). *Sanganak avam Suchana Proudhogiki*. Jaipur: Avishkar Publishers.
- Shastri A. et.al. (2005). Computer Anuprayog avam Programming. Jaipur: Jaipur Publishing House.

- Singh, N. & Upadhyaya, A. (2001). Computer Shiksha. Agra: Vinod Pushtak Mandir.
- Sinha, P.K. & Sinha, P. (2005): Computer Fundamentals-Concept; System and Applications. New Delhi: BPB Publication.
- Tomei, L.A. (2013): Learning Tools and Teaching Approached through ICT Advancements, Information. USA: Science References.
- Vithal, M.U. (2015): *Role of ICT in Educational Training*. Solapur: Laxmi Book Publication.

e-Resources:

- > CPU, Memory, Input, Output Devices, Secondary memory devices
 - https://homepage.cs.uri.edu/faculty/wolfe/book/Readings/Reading04.htm
 - https://www.slideshare.net/HadiyaAriba/input-output-andmemory-devices
 - http://www.math.uaa.alaska.edu/~afkjm/cs101/handouts/ch03.pdf
- Hardware
 - https://searchnetworking.techtarget.com/definition/hardware
 - https://www.computerhope.com/jargon/h/hardware.htm
 - https://study.com/academy/lesson/what-is-computer-hardware-components-definition-examples.html
- ➤ Software Operating System, Application Software MS office, Online Software
 - https://en.wikibooks.org/wiki/Introduction_to_Computer_Information_Systems/Application_Software
 - https://docs.microsoft.com/enus/office365/servicedescriptions/office-applications-servicedescription/office-applications

VOC 012L Computer Assisted Learning and Teaching Lab

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 0 0 2 1

Learning Outcomes:

Student will be able to-

• Apply various properties of document processing software.

- Reflect their skills in creating documents related to teaching and learning.
- Maintain different records and present graphically.
- Analyses the school-related data.

Course Outline:

• Documents Processing Software

Creating the following using word processor

- Notice
- Brochure
- Letters
- Poster
- Question Paper

• Data Processing Software

Creating the following using spreadsheet Software

- Time Table Construction
- Result Preparation
- Graphical Representation
- Attendance Record
- Fee record and school statistics.

References:

- Adomi, E.E. (2011): Framework for ICT Policy: Government, Social and Legal Issues, Information. New York: Science Reference.
- CD ROM (2005): Intel Teach to the Future Programme (I.T.F.P.)
- Choubey, S. (2005). *Computer Ek paricha*., Bhopal: Madhya Pradesh Hindi Granth Acadmy.
- Gupta, M.K. (2005). *Computer Anuprayog*. Jaipur: Mangaldeep Publication.
- Intel Innovations in Education (2002): *Pre-Service Curriculum Intel Teach to the Future*. New Delhi: Intel Corporation, CA. (**English** Binder).

- Intel Innovations in Education (2004): *Pre-Service Curriculum. Intel Teach to the Future*, New Delhi: Intel Corporation, CA. (Edition 2.0 **Hindi** Binder).
- Khirwadkar, A. & Pushpandhan, K.(2005). Information and Communication Technology in Education- Interactive multimedia instructional strategies in Teaching Learning Process. New Delhi: Sarup and Sons.
- Kumar, B. & Ansari, A.S. (2005). *Sanganak avam Suchana Proudhogiki*. Jaipur: Avishkar Publishers.
- Shastri A. et.al. (2005). *Computer Anuprayog avam Programming*. Jaipur: Jaipur Publishing House.
- Singh, N. & Upadhyaya, A. (2001). *Computer Shiksha*. Agra: Vinod Pushtak Mandir.
- Sinha, P.K. & Sinha, P. (2005): *Computer Fundamentals-Concept; System and Applications.* New Delhi: BPB Publication.
- Tomei, L.A. (2013): Learning Tools and Teaching Approached through ICT Advancements, Information. USA: Science References.
- Vithal, M.U. (2015): Role of ICT in Educational Training. Solapur: Laxmi Book Publication.

e-Resources:

- Software Operating System, Application Software MS office, Online Software
 - https://en.wikibooks.org/wiki/Introduction_to_Computer_Information Systems/Application Software
 - https://docs.microsoft.com/enus/office365/servicedescriptions/office-applications-servicedescription/office-applications
- Creating the following using word processor
 - https://www.pitt.edu/~edindex/OfficeTutorials/Lesson1.pdf
 - http://ncert.nic.in/textbook/pdf/kect103.pdf
 - https://wh011.k12.sd.us/creating_a_class_schedule_using_excel. htm

 https://ms-office.wonderhowto.com/how-to/create-basicattendance-sheet-excel-303341/

VOC 013 Emerging Technologies for Learning and Teaching

Max. Marks: 100 L T P C (CA: 40 + ESA: 60) 2 0 0 2

Learning Outcome:

Students will be able to-

- percept AI as an emerging technology for Education.
- use a Learning Management System(LMS) in the class.
- apply emerging media in the teaching-learning process.
- create multimedia presentation using animation and video.
- use web resources for educational purpose.
- access Open Educational Resources for teaching-learning purpose.

Note: The paper will contain Eight questions in all. Candidates are required to attempt any five.

Course Outline:

Artificial Intelligence in Education

- Concept and usages of Artificial Intelligence (AI), Machine-Assisted Learning and Deep Learning
- ➤ Scope of AI in adaptive learning programs, games and software
- ➤ Limitation of AI

Presentation Hardware and Software:

Creating a multimedia presentation using:

- Image processing
- Animation
- Hyperlinking
- Creating Slides and Videos

Using hardware for presentation (types and uses):

- Digital Podium
- ➤ Interactive Boards

➤ Wireless Display and Controllers

• Using ICT for Education:

- TPCK, Blended Learning, Flip class
- Learning Management System
- Hands-on Google Classroom / Moodle
 - Social Media for education
 - OER (Open Educational Resources)
- Hands-on NROER

References:

- Adomi, E.E. (2011). Framework for ICT Policy: Government, Social and Legal Issues, Information. New York: Science Reference.
- CD ROM (2005). *Intel Teach to the Future Programme* (I.T.F.P.).
- Choubey, S. (2005). *Computer Ek parichay*. Bhopal: Madhya Pradesh Hindi Granth Acadmy.
- Gupta, M.K. (2005). *Computer anuprayog*. Jaipur: Mangaldeep Publication.
- Intel Innovations in Education (2002). *Pre-Service Curriculum Intel Teach to the Future*. New Delhi: Intel Corporation, CA (English Binder).
- Intel Innovations in Education (2004). *Pre-Service Curriculum. Intel Teach to the Future*. New Delhi: Intel Corporation, CA (Edition 2.0 Hindi Binder)
- Khirwadkar, A. & Pushpandhan, K. (2005). *Information and Communication Technology in Education Interactive multimedia instructional strategies in Teaching Learning Process*. New Delhi: Sarup and Sons.
- Kumar, B. & Ansari, A.S. (2005). *Sanganak avam Suchana Proudhogiki*. Jaipur: Avishkar publishers.
- Shastri A. & et.al. (2005). *Computer anuprayog avam programming*. Jaipur: Jaipur Publishing House.
- Singh, N. & Upadhyaya, A. (2001). Computer Shiksha. Agra: Vinod Pushtak Mandir.
- Sinha, P.K. and Sinha, P. (2005). *Computer Fundamentals-Concept; System and Applications*. BPB Publication, New Delhi.

- Tomei, L.A. (2013). Learning Tools and Teaching Approached through ICT Advancements, Information. USA: Science References.
- Vitthal, M.U. (2015). Role of ICT in Educational Training. Solapur: Laxmi Book Publication.

e-Resources:

- Concept and usages of Artificial Intelligence (AI), Machine-Assisted Learning and Deep Learning
 - https://www.hives.co/blog/artifical-intelligence-machine-learning-and-deep-learning-whats-the-difference
 - https://www.datascience.com/blog/machine-learning-and-deep-learning-what-is-the-difference
- Scope of AI in adaptive learning programs, games and software
 - file:///C:/Documents%20and%20Settings/admin1/My%20Documents/Downloads/2-6-152-213.pdf
 - https://www.primafelicitas.com/artificial-intelligence-in-education-and-learning/
 - https://www.forbes.com/sites/barbarakurshan/2016/03/10/the-future-of-artificial-intelligence-in-education/#4ccab6d82e4d
 - https://en.wikipedia.org/wiki/Artificial_intelligence_in_video_g ames

Limitation of AI

- https://nptel.ac.in/courses/109101003/downloads/Lecture-notes/Lecture-22-23.pdf
- https://www.researchgate.net/publication/307928959_Advantag es and Limitations of Artificial Intelligence
- Creating a multimedia presentation
 - http://shodhganga.inflibnet.ac.in/bitstream/10603/12961/11/11_c hapter%203.pdf
 - http://shodhganga.inflibnet.ac.in/bitstream/10603/169231/22/9% 20chapter%203.pdf
 - https://photography.tutsplus.com/articles/creating-awesome-multimedia-presentation-with-soundslides--photo-7077
 - https://www.economicsnetwork.ac.uk/advice/powerpoint.pdf
 - https://study.com/academy/lesson/how-to-link-to-external-media-in-powerpoint.html

- https://www.slideshare.net/eaplclicker/digital-podium
- https://www.vantageav.in/digital-podium.html
- https://www.mersive.com/blog/product-education/the-wireless-display-an-introduction-to-wireless-display-technology/

TPCK, Blended Learning, Flip class

- https://postdocs.stanford.edu/sites/g/files/sbiybj10161/f/events/2
 018.05_the_flipped_classroom_and_blended_learning_-_what_you_need_to_know.pdf
- https://www.unb.ca/fredericton/cetl/tls/resources/teaching_tips/tt instructional methods/blended flipped classrooms.html

- Learning Management System

- https://www.mindflash.com/learning-managementsystems/what-is-an-lms
- https://searchcio.techtarget.com/definition/learningmanagement-system

Google Classroom

- https://www.bookwidgets.com/blog/2017/05/the-beginners-guide-to-google-classroom

Moodle

- https://moodle.org/
- Social Media for education
 - https://www.opencolleges.edu.au/informed/features/socialmedia-tools-for-education/

NROER

- http://edtechreview.in/news/561-national-repository-of-open-educational-resources-by-mhrd
- https://nroer.gov.in/welcome
- https://nroer.gov.in/home/e-library/

SYLLABUS OF OTHER VALUE ADDED COURSES

Creative Work and Study

Sketches (Indoor and outdoor), studies from nature and Exploration of possibilities and limitations of various media.

Each student is supposed to submit:

- (a) 4 Studies from nature 25 Marks
- (b) 2 Art work in any medium 15 Marks

Medium : (Pencil, Pen & ink, Crayon, Tempera, water colour and Acrylic colour.)

Size: Half imperial

(c) 50 Sketches on ¼ Imperial size - 10 Marks (d) Practical competency (Internal) - 10 Marks

Acting and Speech

Unit 1 Detailed study of PARSI RANGMUNCH

- History and Development
- · Drama Yahudi ki Ladaki
- Actors
- Wrighter
- Unit 2 Study of important Acting theories
 - Bharat
 - Stynislavasky
 - Brecht

Unit 3 Study of Indian Folk Drama

- Ram leela
- Rasleela
- Kudiyattam
- Yatra

Unit 4 Detailed study of speech

- Dramatic Speech & Normal Speech
- Vocal organs & Articulalor organs
- Resperetory sistyem
- Urdu diction

Unit 5 General Principal of Play analysis

- · Yahudi ki ladaki Aaga hashra kashmiri
- Aashad ka ek din Mohan Rakesh
- · Andher nagari Bhartendu Harish Chandra
- Ghasiram Kotwal Vijay Tendulkar

Book Recommended:

- 1. History and Development of parasi Theatre-Ranveer Singh
- 2. Natya Shastra of Bharat muni (Relevant Chapters) Chaukhmaba, Varanasi.
- 3. An actor Prepares stynislavsky, methoen-London
- 4. Paramparik Bhartiya Rang much Anant Dharaen by Vatsayan National Book Trust, Delhi.
- Related Drama Book.

Acting and Speech Lab

- 1. Improvisation
 - Exercises and games for the development of improvisation skill.
- 2. Co-ordination
 - Exercises and games for the development of Co-ordination skill.
- 3. Projection of Voice
 - Vocal Exercise
- 4. Speech Work
 - Peach, Power, Diction & Posses.
- 5. 5 Drama Reading (Eakankis)
 - · By famous drama writers
- 6. Enactment of Scans
 - · Process of Scan Making
- 7. Physical Exercise
- 8 File Work

Childhood and Growing Up

Objectives: To enable the student teacher

- 1. to understand development as a continuous process.
- 2. to understand childhood development in various aspects.
- 3. to understand the adolescent stage in reference to characteristics & problems with dealing of them.
- 4. to identify adolescent learner's uniqueness and enshape them.
- 5. to understand the growing child in their social context.

Course Outline:

Unit-I: Learner's Development: A Continuous Process

- Concepts of Growth, Development and Maturity
- Difference between Growth and Development
- Different Stages of Development
- Genetic and Non-Genetic factors affecting Learner's Development

Activity: Identification of cases in which Development is affected by Genetic/Non Genetic Factors

Unit-II: Childhood: As a Foundation Stage

- Late Childhood: An Elementary School age with its unique name
- Major Developmental Characteristics in different aspects: Physical, Cognitive, Emotional, Social and Moral.
- Interest and Hazards
- Dealing of late Childhood in reference to Characteristics and Hazards

Activity: School Visit to observe developmental features and hazards among Children.

Unit-III : Adolescent Stage: Transition to Maturity

- A Period of Secondary Schooling
- Development of Adolescent: Physical, Cognitive, Emotional, Social and Moral
- Problems Facing by Adolescents- (concept, features and providing help for solutions)
- Identity Crisis

- Physical Abuse (Bullies and Violence)
- Depression

Activity: Presentation and Discussion on Adolescent's Problems

Unit-IV: Adolescents: A Unique Learner

- Adolescent as Unique Learner: Inter and Intra individual Differences
- Differences in Intelligence, Aptitude, Interest and Personality. (Concept, Features, Identification and dealing of above traits among Adolescents)

Activity: Observation of Adolescent in reference to Uniqueness

Unit-V: Growing Child in Social Context

- Child in the Family:
 - Child-Family Relationship
 - Blended Family
 - Expectation of Parents
- Child in the School:
 - Influence of Peer Relationship and Peer Culture
 - Relationship with Teachers
- Child in the Society:
 - Impact of Rural/Urban Community
 - · Influence of Media

Activity: Study of an Adolescent in relation to Family/School /Society.

Practicum: Any Two of the following

- 1. To observe a class and describe the developmental characteristics of student in various aspects.
- 2. Identification of Adolescent's traits through a Psychological test.
- 3. Presentation of a problem-facing by Adolescent with supports of data and provide for help suggestions.
- 4. To prepare a term paper on the role of social context and growing child.
- 5. On the classroom teaching experiences present children problems.

References:

1. Barnard H. W.: Psychology of Learning Teaching, Mc.Graw Hill, New York, 1965.

Critical Understanding of ICT

Course Objectives:

- 1. To enable the student-teachers to understand the meaning and potential of ICT.
- 2. To enable the student-teachers to critically utilise the ICT for teaching-learning and other teacher related work.
- 3. To develop the skills in student teacher to plan and apply appropriate ICT.

Course Outline:

Note-The Unit I and II are for theoretical orientation and Unit III, IV and V are Practice oriented.

Unit-I: The ICT: Meaning and Potential

- a) Computer system, Hardware, Software
- b) The meaning of IT and ICT
- c) Potential and need of ICT for Teacher

Unit-II: Integrating The ICT

- a) ICT for Formal Teaching
- b) ICT for Collaborative Learning
- c) ICT for constructivist Classrooms
- d) Ethics and copyright issues in using ICT

Unit-III: ICT for administrative support

- a) Formatting of Documents- Notices/ Brochure / Letters / Address label
- b) Formatting of table School time table, Exam Time table
- c) Maintaining Fee record, Attendance record, formative evaluation record

Unit-IV: ICTs for Teaching-Learning

- a) Developing multimedia presentation
- b) Image Processing
- c) Using Video and Hyperlink with presentation
- d) Creating Animation for teaching

Unit-V: ICT for Evaluation

a) Formating a Question Paper

- b) Preparing result sheet: Class wise, student wise
- c) Graphical representation of Results

Practicum:

Developing a Plan and sample digital content to teach a Unit in pedagogy subject for secondary classes with the support of ICT.

Disaster Management Education

Objectives:

Student teacher will be able to-

- Stampede

- Understand the meaning of Disaster relative terms
- Understand the need of Disaster Management
- Analyse the Governmental and Non-Governmental efforts of Disaster Management
- Understand man made and natural disasters and their effects.
- Acquaint skills of First-Aid and Disaster Management.

Course Outline:

Unit-I	: D	isaster Managemei	nt:	An Overview
	$\Box N$	feaning of Disaster,	На	zard and Risk
	$\Box C$	oncept of Disaster N	1ar	nagement
	\square N	leed of Disaster Man	ag	ement
	\Box E	fforts for Disaster M	Ian	agement by government authorities
Unit-II	: N	atural and Man-M	ad	e Disaster
	((Cause, Effect, Preven	ntic	on and Individual responsibilities)
		Natural Disaster		
	-	Earth Quake	-	Volcano
	-	Flood	-	Thunder
	-	Famine	-	Tsunami
	\Box N	Ian Made Disaster		
	-	Terrorist Activity	-	Electrical Fault
	-	Fire	-	Blast
	_	Gas Leakage	_	Radiation

Unit-III : Practical Activity (Any One)
☐ Short Term Training in Disaster Management
☐ Training of First Aid
☐ Display on a Disaster and its effect.
Unit-IV: Practical Activity (Any One)
☐ Presentation and Discussion on any Natural Disaster
☐ Poster Presentation on Natural Disaster
Unit- V: Practical Activity (Any One)
☐ Presentation and Discussion on any Man Made Disaster
☐ Poster Presentation on Disaster Management

References:

- 1. Ariyabandu, Madhavi Malagoda, Gender Dimensions in disaster management: a guide for South Asia, Zubaan, New Delhi. 2005.
- 2. Asthana, N.C.(and) Priyanka Asthana, Disaster Management, Aavishkar Pub., Jaipur. 2014.
- 3. Coppola P. Damon, Introduction to international disaster management, Elsevier, Amsterdam. 2011.
- Dhunna, Mukesh Disaster Management, Vayu Education of India, New Delhi. 2009.
- 5. Ghosh G.K., Disaster Management, APH Pub., New Delhi.2015
- 6. Gupta, Harsh K., Disaster Management, University Press, Hydrabad. 2003.
- 7. Sundar and T. Sezhiyan, Disaster Management, Sarup & Sons, New Delhi.2007.
- 8. Rajib. Shaw (and) Krishnamurthy, Disaster Management: Global challenges and local Solutions, University Press, Hyderabad. 2009.
- 9. Taori, Kamal, Disaster Management through Panchayati Raj, Concept Publishing company, New Delhi. 2005.

Educational Guidance and Counselling

Objectives:

- 1. To develop the conceptual understanding of Guidance and Counselling for school children.
- 2. To familiarize the pupil teacher with the process and procedures being used in Guidance and Counselling.
- 3. To develop competence of providing Guidance and Counselling to school children.
- 4. To provide the pupil teacher with a theoretical background for Vocational Guidance.
- 5. To enable the pupil teacher with the knowledge and skills of collecting, compiling and disseminating career information,

Course Outline:

Unit-I : Nature of Guidance and Counselling

- Concept, Types and Principles of Guidance and Counselling
- Importance of Educational and Vocational Guidance in school programme
- Guidance services available in school

Unit-II: Career and Vocational Guidance

- Career and Vocation Concept
- Process of Vocational Development, Career Choice and Vocational Guidance
- Job Analysis Meaning and Purpose

Unit-III: Practice Components (Any ONE)

- Administration of one standardized test, analysis of responses and its interpretation to understand an individual.
- Identifying and dealing with student's needs and problems (Thematic project)

Unit-IV: Practice Components (Any ONE)

- Prepare a Cumulative Record Card and fill it up with the student's information.
- Presentation of Job Description / Job Analysis of any one job

Unit-V: Practice Components (Any ONE)

- Organizing Guidance activities for school children (Group Work)
 - a. Updating bulletin board

- b. Career Exhibition
- c. Career day celebration
- d. Maintaining information corner

References:

- Osipow, S. H. & Fitzgerald, L. F. (1996). Theories of Career Development. (4th ed.). Boston: Ally and Bacon.
- Arthuer, J.Jones, Principles of Guidance, Tokyo: Mc Graw, New Delhi: Vikas Pub. House Pvt. Ltd. Inc., 1963.
- Chauhan S.S., Principles and Techniques of Guidance, New Delhi: Vikas Pub. House Pvt. Ltd., 1982.
- Dosajh, N. L. Guidance Services in India, New Delhi: Euraria Pub. House, 1962.
- Jayswal, S.R. Shiksha Mein Nirdeshan Aur Paramarsha, Agra: Vinod Pustak Mandir, 1987.
- Labh Singh & D. Prasad, Nirdeshan ke Mool Adhar, Agra, Shri Ram Mehra and Co., 1973.
- Sharma, S.R., ed: Research in Educational and Vocational Guidance: Anmol Publications, 1994.
- Vashist, S.R.: Vocational eduction and training, Mittal Publications; New Delhi, 1994.
- Verma & Upadhayay, Shikshak Evam Vyavasayik Nirdeshan, Agra: Vinod Pustak Mandir, 1967.
- Madhukar, Indira, Guidance of Counselling, Delhi, Authors Press-2000.
- S.Narayan, Counselling & Guidance, New Delhi, Mc Graw Hill Publishing Company Ltd., 2000.
- Chibber, S.K.: Guidance & Educational Counselling, New Delhi, Commonwealth Publication-1999.
- Rao, V.K.: Vocational & Technological Education, New Delhi, Commonwealth Publication-1999.
- Sharma & Chaturvedi Shikha,

Educational Technology

Objectives:

- 1. To develop in students the basic concepts related to Educational Technology.
- To familiarize the students with Communication & its relation to Instruction.
- 3. To enable the students to understand the role of Instructional Material, & its development.

Course Outline:

Unit-I : Nature of ET

- (a) Meaning & Nature of ET
- (b) Concept of ET
- (c) System Approach in ET

Unit-II: Communicative Process

- (a) Communicative Process (educational) within & outside school.
- (b) Role of Instructional Material & its development based on
 - Target audience
 - Instructional Objective
 - Available Resources

Practicum:

Skill based activities:

- 1. Preparing any two of the following material for Teaching-Learning purpose
 - Chart
 - Map
 - Model
 - Transparency
 - Photographic Slide
- 2. Preparing a print-media based thematic instructional programme.
- Operating Hardware Technology (Any two)
 OHP, Slide Projecter, Tape Recorder, Epidiascope, VCR

References:

- 1. Levine, J.M., Secondary instruction: A manual for classroom Teaching, boston: Allyn & Becon, 1989.
- 2. Percival, F. and Ellington, H., A Handbook of Educational Technology, London: Kogen Page, 1984.
- 3. Rao, Usha, Educational Technology, Bombay : Himalaya Publishing House, 1991.
- Sampath, K. Panneerselvam, A. And santhanam S., 1984, Introduction to Educational Technology, New Delhi : Sterling Publishers.
- 5. Sharma, Mittal, System Approach: Its Application in Education, Bombay, Himalaya Publishing House, 1985.
- 6. Sharma, R.A., Shiksha Takniki, Meerut: Loyal book Depot., 1987.
- Woolfolk, A.E., Educational Psychology, New Jersey: Prentice Hall, 1990.

Environmental Education

Objectives: Pupil Teachers will be able to-

- Understand the Concept, Aim, Objectives and Need of Environment Education.
- Understand the Importance of environment education in School Curriculum.
- Appreciate the Role of Various media in environment education.
- Understand Environment crisis.
- Develop ISM for teaching environment education.
- Organize different Activities related to Environment Education
- Perform activities for awareness of Environment Education.

Course Outline:

Unit-I: Environment Education-An Introduction

- Meaning and need of environment education.
- Importance of environment education for teachers and students.
- Purpose of environment education.

Unit-II: Issues and Efforts in Environment Education

- Role of Individual and media in environment education.
- Environmental related issues:
- Acid rain

- Global warming
- Ozone deplition
- Tower Radiation
- Efforts for preservation of environment

Unit-III : Practical Activity (Any two)

- Preparation of any one ISM based on theme "environment conservation"
- Project on environment conservation programme
- Preparation of one ISM based on theme "Natural Resource Conservation".

Unit-IV: Practical Activity (Any two)

- Organization of activities related to save our environment
- Debate
- Ouiz
- Essay Writing
- Poster Presentation

Unit-V: Practical Activity (Any two)

- Drama performance for awareness of environment
- Plantation programme
- Organization of exhibition based on environment efforts

References:

- 1. Gupta, K. R.(2010). "Environmental education in India", Atlantic Publishers and Distributors, New Delhi.
- 2. Bhalla, G. S. and Heema Khanna (2007), "Environmental Education", Regal Publishers, New Delhi.
- 3. Srivastava, Pankaj and S. P. Singh (2002). "Environmental Education", Anmol Publication, New Delhi.
- 4. Vashist Himanshu (2002), "Environmental Education: Problems and Solutions", Book Enclave, Jaipur.
- 5. Pandey, V. C. (2006), "Environmental Education", Isha Books, New Delhi.

Women Education

Objectives:

To enable students:

- 1 To develop an understanding of Concept and meaning of Women Education.
- 2 To critically analyse the issues related to women education.
- 3 To understand the status of women in Indian Society.

	analyse the problem of working women.
se O	utline :
I :	Women and Edcuation
	Meaning and Concept of Women Education.
	Concept, Issues and Problem of Girls education.
	- at primary level
	- at secondary and senior secondary level
	- at Higher level of education.
	Status of Women in Indian Society.
ity	: Group Discussion on Status of women in present Indian society
II:	Women at work
	Job stress and working women
	Problems of working women at work place.
	Role of NGO's in upliftment of rural women.
ity	: Identification and reporting of issues and problems of Girl education across of various levels of education
Ш	: Practical Activity (any one)
	Identify and Report the issues and problems of Girl Child education across the various levels of education.
	Prepare a scrap book on contribution of Great Indian Womens.
	Critical analysis of status of women in Indian Society.
ity	: Group discussion on problems of working women's and prepares a report.
IV:	Practical Activity (any one)
	Prepare a profile of any 10 Renound Womens of India.
] j	ity

		Radio-talk on topic concern with women education.
		Survey report on role and support of any NGO in upliftment women.
Activi	ity	: Group discussion on ways and means of Women Empowerment
Unit-	V :	Practical Activity (any one)
		Action research on any topic related to women education.
		Report the functions of women study centres.
		Survey report on problems of womens as professionals.
Activi	ity	: Poster presentation on domestic violence
Pract	icum	: Any two of following
1.	Prep	pare a scrap book on great Indian Women's.
2.	Act	ion research on attitude of society towards girl's education.
3.	Rep	ort on Uniform Civil Code as Women's right.
4.	-	ect on Women empowerment present through Power Point sentation.
5.		ervation and reporting on issues on problems of Girls education chool level.
6.	Rep	ort on major Constitutional provisions for Women's.
Refer	ence	s:
	http	://www.educationforallinindia.com

Understanding the Self and Yoga

- 1. To facilitate student to understand the self.
- 2. To develop capacity to identify the values for a good teacher.
- 3. To facilitate student to perform self reflected activities.

http//www.collegeeducation.rajasthan.gov.in

- 4. To acquaint students with the meaning and importance of yoga.
- 5. To develop essential skills to perform various asansa.

Course Outline:

Unit I: Understanding the self

- a. Self and self development Concept and Importance
- b. Concept and types of values
 - Individual
 - Social
- c. Importance of Values

Unit II: Yoga and self development

- a. Concept of yoga
- b. Importance of yoga for self development
- c. Pranayam-types and importance
- d. Three milestones of woman's life and yoga
- e. Do's and Don'ts of Asanas

Understanding the Self and Yoga Lab

Practical Units: (Activities based):

Unit III: Self reflection and personal integration

- a. Expression of Aspiration & Expectations.
- b. Self observation exercise to understand one's own strength and
- c. Self expression through creative activities.

Unit IV: Enhancing self development

- a. Community participation through Radio Banasthali or Group work.
- b. Self reflecting report, based on one's own experience or reading
- c. Identification of the values for a good teacher

Unit V: Yoga for healthy mind and body

- a. Practice of various asanas.
- b. Practice of various skills of Pranayam.

Redferences:

- 1. Dale Carnegie, Leader in you; you to win friends, infuence people and succeed in a changing world.
- Das Gupta & Surendranath: "Yoga: its philosophy & Religion", 1987
- 3. Sinha, Phulgenda, : Yogic Cure for Common Diseases", Allied Publishers Pvt. Ltd., 2003.

- 4. Joshi, K.S. "Yogic Pranayam", Allied Publishers Pvt. Ltd., 2003.
- Ananda, Sri, "The Complete Book of Yoga Harmony of Body and Mind", Orient Paperbacks, Madarasa Road, Kashmere Gate, Delhi, 1999.
- 6. Niranjanananda, Paramahamsa, "Yoga Darshan, Vision on Yoga upnishads", Sri Pachadashnam Paranahamsa Alakh Bara, Deoghar, Bihar, India, 1993.
- 7. Sharma, P.D., "Yoga Yogasana and Pranayama for Health", Navneet Publications (I) Limited Ahmedabad, 1984.
- 8. Saraswati, Swami Satyanada, "Asana and Pyanayama Mudra, Bnadha", bihar School of Ygoa.
- 9. M. Vanaja, M. and Charathi Vijaya, Value Oriented Education Neelkamal Publication Pvt. Ltd. New Delhi.
- 10. Kumar Praveen, Value Education, KSK Publishers, New Delhi.

English Grammar and Communication Skills

- **Objective:** The objective of this paper is to facilitate the students in enhancing their reading, writing and comprehension skills. The course also helps the students in having a sound grasp over language and to clearly effectively communicate using written language.
- **Note:** The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking one question from each unit.
- Unit 1 Communication Skills: Communication, Effectives Communication, Type of Communication, Models of Communication and Barriers to Communication.
- Unit 2 Transformation of Sentences: Degrees of adjectives, Active and Passive Voice (statement, negative, interrogative and imperatives), Direct and Indirect narration (statement, negative interrogative and imperatives).

- Unit 3 Correct usage of Language: Tenses (Present and Past and), Ways of future expression, Modals (can, could, will, would, shall, should, may, might, must, ought to, need) Phrasal verbs, Determiners (a, an, the, little, a little, few, a few, much, more, most).
- **Uunit 4 Report Writing :** Elements and features of Report, Types of Report Styles of Report Data Collection and use of illustrations, Visual Aids
- Unit 5 Formal Writing Skills: Job Applications, Resume Writing and Precis Writing.

Text Books:-

- 1. Wren and Martin, English Grammar and Composition, Delhi: S. Chand and Company, 2010
- 2. Hornby, A.S, A Guide to patterns and Usage, Delhi: Oxford University Press, 1954
- 3. Murphy and Reynold, Essentials of English Grammar, Cambridge University Press, 2008

Reference Books:-

- 1. Quirk and Greenbaum, University English Grammar, Longman Publications, 1976
- Sharma, R.C. and Mohan, Krishna, Business Correspondence and Report Writing. New Delhi: Tata McGraw Hill, 2002

English Language-I

Learning Outcomes:

After the completion of the course, the students will be able to:

- show an understanding of RP sounds
- speak with proper stress, rhythm and intonation.
- apply the knowledge of weak forms, tonal functions and connected speech to general and work-related communication
- speak in an accent or dialect that can be understood
- demonstrate an understanding of native speakers' nuances of connected speech

UNIT I Introduction to Basic RP sounds
Phonetic Transcription of Mono, Bi and Tri-syllabic
words

UNIT II Word Stress

UNIT III Weak Forms

UNIT IV Aspects of Connected speech: Elision and Assimilation

UNIT V Intonation: Basic Patterns- Rise, Fall, Fall Rise, Rise Fall

Recommended Reading

Roach, Peter.(2010) *English Phonetics and Phonology Fourth Edition:* A Practical Course. Cambridge University Press.

Connor, J.D.O. (1980) *Better English Pronunciation*. Cambridge University Press

Dhamija and Sethi.(1999) *A Course in Phonetics and Spoken English*. PHI Learning Pvt. Ltd,

Balasubramanian, T.(2012) English Phonetics for Indian Students. Trinity Press Pvt. Ltd.

Suggested E-learning materials

Phonetics

https://scholar.harvard.edu/files/adam/files/phonetics.ppt.pdf

https://www.dvusd.org/cms/lib/AZ01901092/Centricity/Domain/3795/Sound_Spelling_Chart.pdf

http://egyankosh.ac.in/bitstream/123456789/14174/1/Unit-5.pdf

Word Stress

http://www.medecine.ups-tlse.fr/anglais/docs/Pronunciation-stress.pdf

http://ocw.metu.edu.tr/mod/resource/view.php?id=4789

 $\frac{https://static1.squarespace.com/static/55a6e8e8e4b055a1ea2ecd5b/t/58d1f6}{c71e5b6c1243a7349e/1490155219247/Stress.pdf}$

Weak forms in English

https://www.perfect-english-grammar.com/support-files/weak-forms-list.pdf

http://www.serwis.wsjo.pl/lektor/276/13_weak%2520forms%2520in%2520 BrE.pdf http://www.siff.us.es/fil/publicaciones/apuntes/teresals/apartado%2010-0.pdf

http://smart2.ums.edu.my/mod/resource/view.php?id=5855pects of connected speech

Intonation

https://www.uts.edu.au/sites/default/files/Pronunciation%204%20-%20Intonation%20%26%20Connected%20Speech%20(MaryAnn).pdf http://www.ling.cam.ac.uk/francis/FN inton prepub.pdf

English Language-I Lab

Practice of Basic Sounds: Vowels, Consonants, Connected Speech, Weak Forms, Stress Rhythm Patterns and Intonation through the language lab.

English Language-II

Learning Outcomes:

After the completion of the course, the students will be able to:

- 1. have a basic understanding of the targeted grammatical structures
- show consistent and appropriate language use in extended conversation and discussion
- 3. demonstrate understanding of tense and mood of a message containing specific modal auxiliaries
- 4. recognize basic constructions as Subject-Verb agreement
- 5. transfer the knowledge of grammatical structures and vocabulary to communicate effectively
- 6. use the knowledge of idioms and phrases in their day-to-day conversation

UNIT I • Word Class and Functional Elements of a Clause

 Basic Sentence Patterns: SVC, SVOC, SVO, SVA, SVOA, SVOO

UNIT II • Tense, Aspect, Number, Person, Voice, Mood

UNIT III • Subject- Verb Agreement

UNIT IV • Modality

UNIT V • Phrasal Verbs And Idioms

Recommended Reading:

- Corder, Pitt. (2009). An Intermediate English Practice Book. London: Orient Longman.
- Greenbaum, Sidney. (2005). English Grammar. OUP.
- Hornby, A.S, (1954). A Guide to Patterns and Usage in English. Delhi: Oxford University Press.
- Leech, Geoffery N and Jan Svartvik. (2016). *A Communicative Grammar of English.* London: Routledge.
- Leech, Geoffery N. (1982). *English Grammar for Today*. London: Palgrave Macmillan.
- Murphy and Reynold. (2008). *Essentials of English Grammar*. Cambridge University Press.
- Quirk, Randolph and Sydney Greenbaum. (1976) *University Grammar of English.* Longman Publications.
- Swain, Michael. (2016) Practical English Usage. London: OUP.
- Wren and Martin. (2010). *English Grammar and Composition*, Delhi: S. Chand and Company.

Suggested E-learning Materials

Word-Class:

- 1. https://en.oxforddictionaries.com/grammar/word-classes-or-parts-of-speech
- 2. https://prowritingaid.com/art/385/What-are-Word-Classes.aspx Clauses:

- 3. https://writingexplained.org/grammar-dictionary/clauses
 Basic Sentence Patterns:
- $\begin{array}{ll} \text{4.} & \underline{\text{http://www.grammarinenglish.com/sentencepattern/?lesson=exam} \\ & \underline{\text{ples}} \end{array}$

Tense:

- 5. https://grammar.collinsdictionary.com/easy-learning/tense_1
 Subject Verb Agreement:
- 6. https://www.grammarbook.com/grammar/subjectVerbAgree.asp
- 7. https://www.flocabulary.com/unit/subject-verb-agreement/
 Modality:
- 8. http://www.thelogician.net/FUTURE-LOGIC/Modality-Categories-and-Types-11.htm
- https://dictionary.cambridge.org/grammar/britishgrammar/modals-and-modality/modality-introduction Phrasal Verbs/Idioms:
- 10. https://www.espressoenglish.net/collocations-idioms-and-phrasal-verbs-with-set/

English Language-II Lab

Practice of listening and speaking basic sentence patterns special usages of concepts and phrases, Comprehension, vocabulary and syntax related to aviation situations in the language lab.

Statistical Techniques and Data Representation Lab

Learning Outcomes:

After the completion of this course, students should be able to:

1. Describe statistical sampling and represent frequency distribution in several forms

- 1. Represent statistical data through diagrams- multiple bar diagram, simple pyramid diagram, rectangular diagram, wheel or pie diagram, and spherical diagram.
- 2. Measure mean, median mode & standard deviation.
- 3. Represent Statistical data through graphs-poly linear graph, climograph and triangular graph.

Course Content:

- Meaning and definition of statistics, data and sampling.
- Statistical series and their types.
- Frequency distribution and its presentation.
- Measures of Central tendency : Arithmetic Mean Mode & Median. (Direct Method)
- Measure of Dispersion: Standard Deviation.
- Representation of statistical data though diagrams: Multiple Bar diagram, Simple Pyramid diagram, Rectangular diagram (Simple and Divided), Wheel or pie diagram, Spherical diagram
- Representation of statistical data through graphs: Poly Linear graph, Climograph, Triangular graph.

Scientific calculators are allowed during the examination.

Recommended Books:

- Alvi, Z. (2005). Statistical Geography Methods and Applications (2nd ed.). New Delhi, India: Rawat.
- Dadson, S. J. (2017). Statistical Analysis of Geographical Data an Introduction. Oxford, UK: John Wiley & Sons.
- Gupta, S. P. (2012). *Statistical methods* (4th ed.). New Delhi, India: Sultan Chand and Sons.
- Mahmood, A. (2017). Statistical Methods in Geographical Studies (6th ed.). New Delhi, India: Rajesh.
- Saha, P. & Basu, P. (2011). Advanced Practical Geography (7th ed.). Kolkatta, India: Books & Allied.
- Singh, R. L. (2011). *Elements of Practical Geography* (8th ed.). New Delhi, India: Kalyani.
- खुल्लर, डी. आर. (2015). *प्रयोगात्मक भूगोल.* लुधियाना, भारतः कल्याणी.

- नागर, के. एन. (2013). सांख्यिकीय के मूलतत्व (चतुर्थ सं.). मेरठ, भारतः मीनाक्षी.
- शर्मा, जे. पी. (2011). *प्रायोगिक भूगोल* (पंचम् सं.). मेरट, भारतः रस्तोगी.

Suggested e-learning materials:

1. Sampling

https://epgp.inflibnet.ac.in/ahl.php?csrno=17 P01,M-12

2. Frequency distribution

https://epgp.inflibnet.ac.in/ahl.php?csrno=17 P01,M-12

3. Histogram

https://www.liverpool.ac.uk/~cll/lskills/WN/NumeracyDiagrms.html#histo

4. Measures of central tendency

https://www.mathsisfun.com/data/central-measures.html

5. Standard deviation method

https://www.learner.org/courses/againstallodds/pdfs/AgainstAllOdds_StudentGuide_Unit06.pdf

6. Diagrams

http://egyankosh.ac.in/bitstream/123456789/20422/1/Unit-14.pdf

Basics of Home Science and Resource Management

Objectives:

- To familiarize the students with the discipline of Home Science.
- 2. To develop fundamentals of Resoursce Management.

Unit 1: Fundamentals of Home Science

- 1. Definition, Philosophy and objectives of Home Science.
- 2. Historical development of the field of Home Science in India (in brief)
- 3. Scope of Home Science Educational and Vacational

Unit 2 : Resource Management

- 1. Definition and concept of Resource Management
- 2. Systems Approach to Management

3. Family Resource Management as a system.

Unit 3: Decision Making and Work Study

- Decision making-Concept, Steps and Classification of decisions.
- 2. Work Simplificaion-Work Study techniques, Classes of change
- 3. Management Process.

Unit 4: Resources

- 1. Importance, types and characteristics
- 2. Obstacles to the improvement of resource management-lack of awareness of resource and management, failure to evaluate results, seeking readymade answers, lack of information etc.
- 3. Resources constraints continuum.
- 4. Guidelines to increase satisfaction from resources.

Unit 5: Factors Motivating Management

- 1. Values sources, classification
- 2. Goals types, characteristics
- 3. Standards types, characteristics

References:

- 1. Stoner, J.: Freeman R., Gilbert D. (1995): Management, Sixth Edition Prentice Hall of India Pvt. Ltd., New Delhi.
- 2. Tripathi P.C., Reddy P.N. (2001): Principles of Management Tata McGraw Hill Publishing Co. Ltd., New Delhi.
- 3. Koontz, H. Weihrich H. Essential of Management Tata McGraw Hill Publishing Co. Ltd., New Delhi.
- Gorss I.H. & Crandall, E.W. (1980): Management for modern families - III Edition Prenticd Hall Inc. Engle Wood Cliffs, New Jersey.
- 5. Daecon R.E., Firebaugh F.M. (1975): Contest and concepts of Management Houghtion Miffin Company, USA.
- 6. Wangundy, A.B. (1981): Techniques of structured problem solving Van Nostrand Reinhold Company.

Communication Process

Learning Outcomes:

Upon completion of the course students will be able to:

• Explain concept and different types of communication

- Distinguish different approaches of communication
- Create effective messages to relevant audiences
- Use appropriate media in different approaches of communication

Syllabus:

Unit-I Concept of communication

Meaning and importance of communication, key elements of communication with special reference of Leagan's model, The purpose of communication, Factors affecting / helping communication

Unit-II Communication process

Types of communication - One way, two way or interactive communication, verbal and non verbal, intrapersonal and inter personal, formal and informal

Importance of two way communication

Gaps in Communication and their causes,

Unit-III Approaches of communication

Selection and effective use of following methods and materials

Individual – Home / farm visits, telephone calls, personal letters

Group - lecture, group discussions, meetings, role plays, demonstrations, work- shops, camps

Mass approach- electronic and print media

Unit-IV Basic concepts related to information dissemination, education and propaganda

Modern technology: Basics and effective use

Satellite communication, Videoconferencing, Teleconferencing, Fax, Internet, E-mail, E-page, Cyber Café, Cellular phone

Unit-V Media for communication

Folk Media - songs, stories, street theater, puppet play, phad, kavad

Importance of Folk Media

Print media- posters, charts, leaflets, books, articles/stories, cartoons

Audio- Visual aids- meaning, classification, merits and limitations

References:

- 1. Chauhan, J. (1996). *Prasar Shiksha Aur Soochana Tantra*. Agra, Isha Publication.
- Dahama, O.P., & Bhatnagar, O.P. (2010). Education and Communication for Development. New Delhi,Oxford and I BH Publishing Co., Pvt. Ltd.
- 3. Harpalani, B.D. (1994). *Grih Vigyan Mein Prasar Shiksha*, Agra, Star Publication.
- 4. Joseph, M.K. (1996). *Modern Media and communication, Sociology and Communication Revolution*. (Vol.- 1),New Delhi, Anmol Publication Pvt. Ltd.
- 5. Joshi, U.J. (2000). *Textbook of Mass Communication*. New Delhi, Anmol Publishers.
- 6. Kalla, P. N., & Gakkhar, A. (2010). *New Dimension of Extension and Communication*. Jaipur, University Book House.
- 7. Malhan, P.N. (1992). Communication Media Yesterday, Today and Tomorrow. New Delhi, Ministry of Information and Broadcasting.
- 8. Mody, B. (1991). *Designing messages for Developmental Communication*, New Delhi, SAGE Publications.
- 9. Raines, C., & Williamson, L. (1995). *Using Visual Aids- the effective use of type, colour and graphics*. New Delhi, Viva books private Ltd.
- 10. Rajsingh, A., & Saxena, A. (2008). *Prasar Siksha me Sampreshan va Nirdesh Takneek*. Jaipur, University Book House.
- 11. Ray, G.L. (1991). Extension Communication & Management. Calcutta, Naya Prakash.
- 12. Raydu, C.S. (1993). *Media and Communication Management*. Bombay, Himalaya Publishing House.

- 13. Sandhu, A. S. (1993). *Textbook on agricultural communication, Process and Methods*. Culcutta, Oxford and IBH Pub. Co. Pvt. Ltd.
- Singh, R.P., & Rana, G. (2005). Communication. New Delhi, Ravi Books

Family Clothing

Learning Outcomes:

Upon completion of the course students will be able to:

- Select fabrics and clothes for different age groups.
- Intelligently buy and care garments and house hold textile materials.
- Understand the consumer problems and their rights

Syllabus:

Unit I Selection of fabric for different garments

Garment type and their selection- outer garments and under garments

Readymade and home made garments

Unit II Family clothing decisions

Steps and factors. Family wardrobe principles- community, budget, occasion, climate, occupation, interest, size, composition of the family, fashion, quality and accessories

Unit III Children's clothes

Selection of fabrics, design, colour for children garments according to age

Clothing for adolescence, middle age and old age

Factors influencing consumption of textiles

Unit IV Sociological, physical and psychological aspect of clothing

Definition and intelligent buying & care of table linen, towels and bathroom ensemble

Buying guidelines for bed sheet, pillow slips, blanket. Selection of upholstery, carpet and cushion materials

Unit V Problems of textile consumer, market practices that exploit

consumer

Causes of exploitation

Concept and significance of consumer education

Labelling to help consumer in intelligent selection and care

Precautions to be observed during purchase of textile

Consumer redressal - consumer protection act, procedure for filing complaints

References:

- Chahar(2007). *Consumer protection movement in India : problems and prospects*. New Delhi : Kanishka Publishers.
- Lewis, D.S. & Bowers, M.G.(1960). *Clothing construction and wardrobe planning*. New York: Macmillan Book Company.
- Tate, M.T., and Glisson, O. (1967). *Family clothing*. New York: John Wiley and Sons.
- Wingate, Isabel B. (1965). *Textile Fabrics and Their Selection*. London: Prentice-Hall, INC.

Family Clothing Lab

Syllabus:

Drafting, cutting and stitching of clothing for:

- Infant- Baby layette, Romper
- Children- Frock, Shirt/Bushirt, Shorts (Designing and construction with emphasis on growth, comfort, self help features)

• Adult- Blouse, Kalidar / Simple Kurta, Salwar / Churidar pyjama, Gent's pyjama

Family Dynamics

Learning Outcomes:

Upon completion of the course students will be able to:

- 1. Analyze different aspects of marriage and family in the context of changing socio-economic scenario in the country
- Intelligently deal with economic and social issues
- Solve family disharmony issues and have positive attitude towards marital and family counseling

Syllabus:

Unit I Institution of marriage

Definition and change in concept of marriage in India- past and present

Mate selection- theories and factors influencing.

Dating, courtship and engagement- definition, meaning and objectives

Marital adjustment- definition, factors affecting marital adjustment, areas of marital adjustment

Unit II Family in India

Definition, meaning and objectives

Types of families, their merits and demerits

Implications of family changes- female headed houses, single parent families. Families with working women

Unit III Problems and needs of family in specific situation

Families with chronically ill patients like cancer, AIDS and TB.

Families in extreme poverty conditions e.g. families in urban slums

Unit IV Causes and effect of family disharmony

Factor leading to family disorganization

Desertion and separation by the spouse, divorce and its consequences, laws related to divorce and separation.

Unit V Conflicts

Meaning and sources of conflict

Conflict resolution

Marriage counseling - need, importance and content of marital and premarital counseling

References:

- Augustine, J.S. (1982). *The Indian Family in Transition*, New Delhi: Vikas Publishing House.
- Bhatia, H. S. (1983). Aging and society: A sociological study of retired public servants. Udaipur Arya's Book Centre.
- Chaudhary, J.N. (1988). *Divorce in Indian Society*. Jaipur: Printwell Publishers.
- Desai, N. & Krishnaraj, M. (1987). Women and society in India. New Delhi: Ajanta Publications.
- Devdas, T.S. (1979). *Hindu Family and marriage*, Madras: University of Botany.
- Jain, B. S. (1984). *Indian society*. Jaipur: College Book Center.
- Kapadia, K.M. (1990). *Marriage and family* (3rd Ed). Calcutta: Oxford University Press
- MacIver & Page Charles H. (1952). Society -An introduction analysis. London: Macmillan Co. Ltd.
- Mukherjee, R. (1979). *Indian Society*. Jaipur: College Book Center.
- Rice F. Philips (1983). *Marriage and Family*.: N.J.: Prentice Hall
- TISS. (1991). Research in families with problems in India Mumbai: BookPublisher T.I.S.S. 991Description: xvi,587 p..

 Vidya, B. & Sachdeva, D.R. (1984). Introduction to sociology. New Delhi: Kitab Mahal.

Food and Nutrition Lab

Learning Outcomes: After the completion of the course, students will be able to:

- Plan and prepare different types and specific nutrient rich diets using different cooking methods
- Plan and prepare diets for various disease conditions
- Prepare food products using various preservation methods

Syllabus:

- * Planning and Preparation of -
 - Energy dense recipe
 - Protein rich recipe
 - Balanced diet
 - Full fluid diet
 - Soft diet
 - Diet in acute and chronic fever
 - Diet in diarrhoea
 - Diet in constipation
 - Low energy diet for obesity
 - Diet in diabetes mellitus
 - Diet in hypertension

* Preparation of recipes involving -

- Pressure cooking
- Steaming
- Roasting
- * Food Preservation -
 - Jam/Jelly
 - Squash
 - Oil free pickle

Human Nutrition and Meal Planning

Learning Outcomes:

Upon completion of the course students will be able to:

- 1. To describe the functions and sources of nutrients
- Assess the dietary requirement of various nutrients and effects of deficiencies and excesses.
- Apply the knowledge in planning and preparation of meals of improved nutritional quality for different groups
- Evaluate acceptability and serving of food.

Syllabus:

Unit I: Nutrition Health relationship. Energy- (unit of energy,) measurement of energy in foods, energy requirement of individuals, factors affecting the energy requirement Basal Metabolic Rate (BMR), factors affecting the Respiratory Quotient, Specific Dynamic Action of food

Water- Introduction, Source, functions, requirement and electrolyte balance

Unit II: Carbohydrate – classification, sources, functions, digestion, absorption and utilization, role of dietary fiber in diet, effect of carbohydrate deficiency

Lipid – classification, sources, functions, digestion absorption and utilization, essential fatty acids and their functions, effect of lipid deficiency

- Unit III Proteins- nutritional classification of food proteins, functions, sources, digestion, absorption and utilization, classification of amino acids and quality of protein , protein requirements and factors affecting the needs
 - PEM classification, etiology, signs and symptoms, prevention and treatment
- **Unit IV** Vitamins- history, definition, Sources, requirements, functions and deficiency

Fat soluble vitamin (A,D,E and K), Water soluble vitamins (Thiamine, Riboflavin ,Niacin, Folic acid, Biotin, vitamin B12 and vitamin C)

Minerals – source, requirement, function and deficiency of Calcium, Phosphorous Sodium, Potassium, Magnesium, Copper, Iodine, Fluoride and Iron

Unit V Objectives and importance of meal planning, important considerations for meal planning, balance diet, five basic food groups, recommended dietary allowances (RDA), factors affecting the RDA

Methods of securing meal – traditional and western

Fundamental of sensory evaluation

References:

- O Khanna, K, Gupta S, Mahna R, Puri S,Seth R. and Passi S.J.(1997). *Text book of Nutrition & Dietetics*. New Delhi: Phoenix Publishing House Pvt. Ltd.
- o Mudambi, S.R. (2007). Fundamental of foods, Nutrition and Diet Therapy. Delhi: New age international (P) Ltd..
- o Robinson, C.H. (1986). *Normal and Therapeutic Nutrition(17th ed.)*. New York: McMillan Publishing Company.
- O Sharma, S. (2000). *Human Nutrition and Meal Planning*. New Delhi: Jnanda Publishers.
- o Srilakshmi , B. (2004). *Nutrition Science*. New Delhi : New Age, International (P) Limited.

E-Resources:

- Classification of food, balanced diet
 https://www.slideshare.net/JasminaSangani/meal-planning
- Types of food services and their advantage

https://www.slideshare.net/iamrealmelissa/food-service-67652942

• Dietary requirement for various age groups

https://www.slideshare.net/aneeshajaiswal/dietary-guidelines 11405034

Electronic Commerce

Learning Outcomes:

On successful completion of the course students will be able to

- Recognize the business impact and potential of e-Commerce.
- Explain the technologies required to make e-Commerce viable.
- Discuss the current drivers and inhibitors facing the business world in adopting and using e-Commerce.
- Explain the economic consequences of e-Commerce.
- Discuss the trends in e-Commerce and the use of the Internet.
- Create and refine ecommerce website and application designs based on industry's usability standards.
- Assess the suitability of various design principles for ecommerce websites and applications apply the technologies required to design and prototype Web-based information systems.
- Discuss e-commerce from an enterprise point of view evaluate key aspects of B2B e-commerce.
- Discuss emerging e-commerce topics.

Section-A

Whats and hows of Internet: Development and growth, DNS, Commercialisation of internet. Introduction to e-commerce: e-commerce, Opportunities, Framework, Recent Developments. Planning for Network Infrastructure & Web Architecture, Recent trends.

Section-B

Introduction to Internet Protocols: Layers and Networking, Internet Protocol suite, Desk topTCP/IP, Mobile TCP/IP based Networking, Multicast IP

Principles of Web Site Hosting and Promotion: Decision on Website Design, Legal issues, Domain Name Registration, Site Hosting, Web Site Registration, Offline & online web site promotion.

Section-C

E-commerce Business Models: Brokerage, Advertising, Infomediary, Merchant, Manufacturer, Affiliate, Community, Subscription, Utility, Tried and True models. Auctions as a price setting mechanism, Pricing Information, Versioning Information. Cyberlaws, Electronic payment systems: Digital cash.

Suggested Books:

- 1. Turban, E., King, D., Lee, J., & Viehland, D. (2002). *Electronic Commerce: A Managerial Perspective*. PHI Learning.
- 2. Kalakota, R., & Whinston, A. B. *Frontiers of E-Commerce*. Pearson Education.
- 3. Chan, H., Lee, R., Dillon, T., & Chang, E. (2007). *E-Commerce: Fundamentals and Applications*. John Wiley & Sons.

Enterprise Resource Planning

Learning Outcomes:

On successful completion of the course students will be able to

- Make students able to learn fundamental concepts of ERP system and ERP related technologies.
- Provide students knowledge of different ERP modules and manufacturing perspectives of ERP.
- Use ERP system in different business organizations by having knowledge of latest scenario of ERP market in e-business.

Section-A

Introduction to ERP - Predecessors (DSS, MIS, EIS, MRP-I, M'RP-11, MRP-III), Origin, Evolution, and Structure; ERP Overview; Reasons for the growth of ERP market, ERP Benefits - Direct and Indirect; Reasons for failure of ERP Implementations; Reasons Organizations should implement ERP; ERP andrelated Technologies; Business Process Re-Engineering (BPR) - Evolution and different Phases; Data Warehousing - Advantages, Components, Structure, Uses, and Obstacles to successful Data Warehouse Projects: Data Mining Verification v/sDiscovery, Advantages, Technologies used, OLAP- 12 rules, OLAP benefits. Introduction to MOLAP, DOLAP, and ROLAP: Supply Chain Management (SCM) -Objectives, Enabling Technologies; Expert System

Section-B

ERP - A Manufacturing Perspective - CAD/CAM, MRP-II, BOM, Closed Loop MRP, DRP, J1T & Kanban, PDM (Product Data Management) & its benefits, Data Management, MTO v/s MTS, ATO, ETO, CTO; The Best Practices in ERP; ERP Modules - Finance, Plant Maintenance, Quality Management, Materials Management; ERP Market -SAP AG, BaaN, J D Edwards, Oracle, PeopleSoft; ERP in India

ERP Implementation Life Cycle - Different Phases, Approaches; ERP Implementation - Problems in Implementation; Cost of ERP - The Hidden Costs; Implementation Methodology; Organizing the Implementation; Key Players in Implementation - Vendors, Consultants, Users; Contracts with Vendors, Consultants, Employees; Project Management & Monitoring; After ERP Implementation; In-house Implementation - Pros & Cons

Section-C

The ERP Market - Vendor analysis; Turbo Charge the ERP; Enterprise Integration Applications (EIA); Future Directions in ERP - New Channels, New Markets, Faster Implementation methodologies. Business Models & BAPIs, Web Enabling; ERP & the World Wide Web - E-Commerce, Background, Using ERP though ASP; Making ERP a Success; Critical factors guiding Selection and Evaluation; Strategies for successful

Implementation; Impediments & initiatives to achieve success; CSF (Critical Success Factors);

Integrating ERP into Organizational Culture; ERP Case Studies

Using ERP Tool: Either SAP or ORACLE formats for Case Study.

Suggested Books:

- 1. Leon, A. (2014). *Enterprise Resource Planning*. Tata McGraw-Hill.
- 2. Leon A. (2001). ERP Demystified. Tata-McGraw Hill.
- 3. Monk, E., & Wagner, B. (2012). *Concepts in Enterprise Resource Planning*. Cengage Learning.
- 4. Altekar, R. V. (2004). *Enterprisewide Resource Planning: Theory and Practice*. PHI Learning.
- 5. Jacobs, F. R., & Whybark, D. C. (2000). Why ERP? A Primer on SAP Implementation. Tata McGraw-Hill.

Advertising and Commercial Communication

Learning Outcomes:

After the completion of the course, Student will be able to:

- Explore the role and functions of Advertising.
- Conceptualize, Plan and Produce an advertising campaign.
- Explain the importance of Advertising Agencies.
- Recognize the societal impact of advertising and commercial communication and need for ethical practitioners.
- Unit I Role and Functions of Advertising: Definition of Advertising, Objectives, Utility, Concepts and Features; Medium of Advertising: News Papers, Magazines, Radio, Television, and Internet; Outdoor, Indoor and Transit; Types of Advertisements Commercial, Social, Institutional and Financial.
- Unit II Elements of Advertisement: Copy of Advertisements of Various Mediums and their Differences; Appeal; Advertisements Copy Terminology and Principles; Title, Logo, Slogans, Layout etc.;

- Advertising as Communication Tool; Communication Process & Advertising; Models of Advertising Communication; AIDA Model; DAGMAR Model.
- Unit III Advertising Agencies: structure, functions, scope and importance; Advertising boutique.
- Unit IV Advertising Campaign: Importance and Concept; Selection of Medium and Advertising Budget; Advertising Agency: Types, Qualities and Organization, DAVP, ABC, AAA, ASCI, MRUC; Advertising Code of Conduct, Importance and Role of Advertisements in the Society.
- Unit V Advertising Laws and Ethics.

Advertising and Commercial Communication Lab

Print Advertising Preparation – Copy Writing and Designing; Making Posters and Handbills, Newspaper and Magazine Advertisement; Planning and Execution of an Advertising Campaign; Writing Radio Spots and Jingles; Writing TV Commercials - Developing Script and Story Board; Planning and Execution of an Advertising Campaign.

Suggested Readings:

- Aakar, David A. Rajeev Batra and John G. Myers (2016) Advertising Management, New Delhi: Prentice-Hall.
- Sengupta, Subroto (1982) *Brand Positioning*, New Delhi: Tata McGraw Hill Publishing Co.
- Rege, G.M., (1972) Advertising Art and Ideas, Mumbai: Kareer Institute.
- John, Caples (1998) *Tested Advertising Methods*, New York: Harper & Bros.
- Wells, William, John Burnett, Sandra Moriarty (1989) *Advertising: Principles and Practice*: Pearson Prentice Hall.
- Harriosn, Tony Ed. (1989) A Handbook of Advertising Techniques, London: Kogan Page, K. Chandrakandan, Noorjehan A.K. Hanif, N. Balasubramani, C. Karthikeyan.

Suggested E-Learning Material:

ADVERTISING AND SALES PROMOTION

www.pondiuni.edu.in/storage/dde/downloads/markiv_asp.pdf

HubSpot | Free Advertising Ebooks

https://www.hubspot.com/resources/ebook/advertising\

Advertising: Concepts & Principle - NRAI School.

www.nraismc.com/wp.../03/501-advertising_concept____principle.pdf

 $\label{lem:conduction} \textbf{introduction advertising - University} \ archive. \textit{mu.ac.in/myweb_test/sybcom-avtg-eng.pdf}$

Creative Writing

Learning Outcomes:

After the completion of the course, Student will be able to:

- Explore beyond News Writing.
- Conceptualize and develop the skill for Editorial Writing.
- Write the Columns
- Write in different formats
- Unit I Beyond News Writing: Types and Areas Beyond News Writing; Necessity and Importance of Beyond News Writing; New Trends in Beyond News Writing.
- Unit II Article and Essay: Definition and Difference. Writing skill and Important Points. Difference between Article and Feature; Types and Qualities of a Feature.
- Unit III Significance of Editorial Writing: Ideas and Analysis in Editorial Writing; Editorial Writing and Campaigning; Special Occasions Articles: Definition, Necessity; Diary and News Letter.
- Unit IV Column Writing: Definition and Types. Importance of Column Writing and Necessity. Art Reviews; Music, Dance, Drama, Film Review, Book Reviews; Sport Reviews. Economics Reviews.
- Unit V Reportage Travel and Memories: Definition and Difference; Study of Important Travel Reportage; Importance of Reportage in Covering Leisure and Life Style, Social Science Studies; New Emerging Trends in Entertainment.

Creative Writing Lab

Reviewing a TV Programme; Film; Theatre; Critical Appreciation of Poetry; Novel; Play. Writing–Features; Articles; Profiles; Interview Stories. Writing a Script of a Play. Copy Writing for Advertisements.

Suggested Readings:

- रूपक लेखन : मध्य प्रदेश हिन्दी ग्रंथ अकादमी।
- मेरी जीवन यात्रा धूमक्कड की डायरी : राहल सांस्कृत्यायन।
- जोशी, रामशरण, आदमी—बैल और सपने ।
- हरिमोहन, फीचर लेखन एवं संपादन कला : समाचार, तक्षशिला, प्रकाशन।
- शर्मा, राम अवतार, हिन्दी पत्रकारिता और साहित्य : नमन प्रकाशन।
- Kamath, M.V. (2018) *Professional Journalism*.
- Shaffer, (2000) Comprehension: Precise & Paragraph Writing.
- Davison, G (2005) Dictionary of Modern English Usage.
- Narayanaswami (1979) Strengthen Your Writing.
- Birley, R (1971) *Improve Your Word Power*.
- Cutts, M (1995) Plain English Guide
- Puri, G K (2014) Paragraph Writing for All
- Mangal, S K (2011) Developing Writing Skills in English.
- Davidson, G (2000) Dictionary Confusible Words.

Suggested E-Learning Material:

Creative Writing

https://www.uvm.edu/wid/writingcenter/tutortips/WritingCreativePage.pdf

What is creative writing

https://www.acs.edu.au/download/samples/writing.pdf

Importance and objective of editorial

https://www.slideshare.net/Sanabutt21/importance-and-objective-of-editorial

Characteristics of editorial writing

https://www.geneseo.edu/~bennett/EdWrite.htm

News Writing, Editorial Writing, Column Writing and Feature Writing

http://www.masscommunicationtalk.com/news-writing-editorial-writing-column-writing-and-feature-writing.html

Advertising Lab

Learning Outcomes:

After the completion of the course, Student will be able to:

- Identify and discuss a range of creative strategies in advertising
- Discuss the social and ethical problems in advertising.
- Appreciate the ways that communication through advertising influences and persuades consumers.
- Develop an advertising plan for assigned clients.

Exercises/Assignments:

- Two commercial ads
- Two Public Service Announcements

Suggested E-Learning Material:

Create your next video advertising campaign for your business I Moovly

https://www.moovly.com/make/advertising-video

Intro to Print Ad Design: Introduction - YouTube

https://www.youtube.com/watch?v=TFoA3qRgt9c

Tips for Print Advertising - Ideas for Print Ads - YouTube

https://www.youtube.com/watch?v=X9zTkGcpeo8

Print Advertising Techniques and Examples - YouTube

https://www.youtube.com/watch?v=sg0PmFWqmko

YouTube Advertising Campaign Tutorial 2018 - How to Set-up

https://www.youtube.com/watch?v=hZnHI0KgBFs

Development Communication

Learning Outcomes:

After the completion of the course, Student will be able to:

- Analyze the development indicators national and international perspectives
- Critically analyze the selected development initiatives
- Analyze media for development communication
- Design media for development communication
- Unit I Development: Meaning, concept, and approaches to development, Indices of development, Models of Development- Basic Needs Model, Nehruvian model, Gandhian model, Panchayati Raj, Paradigms of development: Dominant paradigm, dependency, alternative paradigm
- Unit II Development Communication: Meaning, Concept, Definition & Philosophy Development Communication approaches: Sustainable Development, Participatory Development, Inclusive Development, Gender and development
- Unit III Issues in Development Communication: millennium development goals, Population Control, Family welfare, Health and Sanitation, Women Empowerment, Poverty, Unemployment, Environment, Literacy, Consumer Awareness, Agriculture,
- Unit IV Developmental programmes of GOI: Critical appraisal of Development Communication programmes and governments current schemes: SITE, Krishi Darshan, MNREGA, Digital India, Swachh Bharat campaign Pradhan Mantri Jan Dhan Yojana, Beti Bachao, Beti Padhao Scheme, millennium development goals, Cyber media and development e-governance, e-chaupal, national knowledge network
- Unit V Media and Development Communication: Roles of Print, Broadcast and New media in Development Communication, Development reporting- roles and responsibilities of a reporter

Suggested Readings:

• Kuppuswamy B. (1976) *Communication and Social Development in India*, Mumbai: Sterling.

- Joshi P.C. (1991) Communication and Nation Building, New Delhi:
 Publication Division.
- Narula, Uma, Pearce, W.B. (2010) *Communication as Development :* Southern Illinois University Press
- Dhama, O.P. & Bhatnagar, O.P (1988) Education and Communication for Development New Delhi: Oxford.
- Mishra S.C. (2014) *Media, Communication and Development,* Jaipur : Rawat publication.
- Sondhi, Krishan (1981) *Problems of Communication in Developing Countries*:: Vision Publication New Delhi
- Sinha, Arbind (1985) *Mass-Media and Rural Development*, New Delhi: Concept publication.
- Tiwari, I.P (2017) Communication Technology and Development, New Delhi: Publication Division.
- Paul Hartmann & Patel B.R. (1989) Mass-Media and Village life in India, New Delhi: Sage.
- Gupta V.S. (1998) *Communication and Development*, New Delhi : Concept Publication.

Suggested E-Learning Material:

Development Communication

download.nos.org/srsec335new/ch4.pdf

 $\begin{tabular}{lll} \textbf{Development} & \textbf{Communication} & \textbf{Sourcebook} & \textbf{-Open Knowledge} \\ \underline{\textbf{https://openknowledge.worldbank.org/.../446360Dev0Comm1ns0handbook}} \\ \underline{\textbf{01PUBLI}}... \end{tabular}$

(PDF) Introduction to Development Communication - ResearchGate

https://www.researchgate.net/Introduction to Development Communication

Development Communication Sourcebook - World Bank Group

siteresources.worldbank.org/.../Resources/DevelopmentCommSourcebook.pdf

Media and Development Communication - International Journal www.ijsrp.org/research paper may2012/ijsrp-may-2012-72.pdf

Event Management Lab

Learning Outcomes:

After the completion of the course, Student will be able to:

- 1. Understand the multi-disciplinary nature of event management
- 2. Coordinate and manage university programmes/functions/events/conferences

Exercises/Assignments:

- 3. Planning the Event
- 4. Organizing & Budgeting
- 5. Managing the Event
- 6. Implementation
- 7. Evaluation

Suggested E-Learning Material:

How to Organize an Event (with Pictures) – wiki How

https://www.wikihow.com/Organise-an-Event

How to organize a successful event with a small budget

https://www.gevme.com/blog/10-tips-for-event-planning-with-a-small-budget/

How to Organize Events - YouTube

https://www.youtube.com/watch?v=e_E9ldhwodM

Five Key Steps for Organizing Your Business Event – YouTube

https://www.youtube.com/watch?v=1oCvDlvnkUc

15 Corporate Event Management Tips: Guide to Planning

https://www.youtube.com/watch?v=tBbAnF04BVY

Mathematics for Business Applications

Objectives:

- This course seeks to introduce the students to the fundamental of mathematics as applicable to management and commerce.
- Build understanding of the basic concepts, definitions and formula of mathematics
- Unit I Progressions; AP, GP, HP (sum of n terms in AP, GP and HP, sum of an infinite series in GP), Binomial theorem for positive integral index (Expand and general term)
- **Unit II** Functions: types of functions, some functions & their graphs (Linear functions, Exponential functions, Logarithmic functions & parabolas).
 - Linear Programming Problems: Formulation and solution by Graphical method (for two variables only).
- Unit III Differentiation (algebraic functions, exponential function and logarithmic function) Application of Differentiation in optimization, partial differentiations (simple algebraic functions). Integration (as a reverse process of differentiation); Integration by substitution and integration by parts; Definite integral of the above functions.
- Unit IV Fundamental principle of counting; Factorial notation.

Permutation: Permutation of n different things; of things not all different; restricted permutations Combination, Concept of Probability, Classical, empirical approach of probability, Probability Rules: Addition and Multiplication theorem of probability (Statement and proof), Definition of Conditional Probabilities.

Unit V Matrices: Types of Matrices, addition, subtraction and products of two matrices, Transpose of a matrix, Determinant of a square matrix, Properties of determinants, Evaluation of determinant (up to third order), Use of determinants and Matrix in solving linear equations.

Text Books:

T1: M. Raghavachari, Mathematics for Management: An Introduction, Tata McGraw Hill, New Delhi, 2003.

Reference Books:

- R1: G.C. Sharma and Madhu Jain, Essential Mathematics, Galgotia Publication Pvt. Ltd., New Delhi, 2001.
- R2: Qazi Zameeruddin, V.K. Khanna and S.K. Bhambri, Business Mathematics, Vikas Publication House Pvt. Ltd., 2009.
- R3: S.C. Gupta and V.K. Kapoor, Fundamental of statistics, S. Chand & Co., 2007.
- R4: R.D. Sharma, Mathematics-Class XII, Vol-1, Dhanpat Rai Publication, 5th ed., 2009.
- R5: R.D. Sharma, Mathematics-Class XII, Vol-2, Dhanpat Rai Publication, 5th ed., 2009
- R6: Business Mathematics, Kavita R. Loghate, Himalaya Publishing House.

Bharatiya Prabandhan

Course Objective: The primary purpose is Self-Realization. Further the course seeks to introduce the students to the basic of Indian Management thought and practice. To generate awareness about the cultural, and spiritual values of Indian society and their implications for modern managers.

- Unit 1 Concept of Indian culture, Rationale for Indian management, Management system in Arthshastra
- Unit 2 Gandhian thought for management of Indian organizations, Trusteeship, Swadeshi, Creative leadership, Vivekananda and his concept of work as worship, Vivekananda's ideas on Vedanta
- Unit 3 Arrival of Best to lead the rest, Management Wisdom: The Common Man's Management Theories
- Unit 4 Towards convergence between Eastern and Western Management, Panchmukhi Vikas, Development Matrix for social management, Wisdom worker, Doctrine of Karma
- Unit 5 Management ideas from Bhagwad Geeta, Motivation-Indian insights, Value system of individual, Stress Management

Text Books:

 Bansal Ipshita: Management Concepts in Ancient Indian Psycho-Philosophic Thought and their Significance for Present Day Organization, WISDOM, Banasthali Vidyapith.

Reference Books:

- 1. Sinha Jai B.P.: The cultural context of leadership and Power, Sage Publications.
- 2. Sharma Subhash: Management in New Age: Western Windows, Eastern Doors, New Age International Pub.
- 3. Sharma Subhash: New Mantras In Corporate Corridors From Ancient Roots To Global Routes, New Age Int. Pvt. Ltd
- 4. Dave Nalini: Vedanta & Management, II edition, Deep & Deep Publications.
- 5. James Mac Gregor Burns: Leaders who changed the world, Penguine Books Publication.
- 6. Chkraborty S.K.: Managerial effectiveness and quality of work life: Indian in sights, Tata Mcgraw Hill
- 7. Dasgupta Ajit K.: A History of Indian Economic Thought

Computational Methods in Engineering

Note: The paper is divided into three sections. The candidates are required to attempt five questions in all selecting not more than two questions from each section.

Section-A

Linear Algebraic Equations: Introduction, Gauss-Elimination, Gauss-Siedel and LU Decomposition methods. Thomas algorithm.

Eigen Values and Eigen Vectors of Matrices: Introduction, Fadeev-Leverrier's method, Power method, Householder's and Givens method.

Nonlinear Algebraic Equations: Single variable and multivariable successive substitution method, Single variable and multivariable Newton-Raphson technique and Polynomial root finding methods: Lin's and Lin-Bairstow's method.

Section-B

Function Approximation: Least square curve fit, Newton's interpolation formulae, Lagrangian interpolation, Pade approximation and Finite difference approximation.

Integration formulae: Trapezoidal rule, Simpson's 1/3 & 3/8 rule. **Ordinary Differential Equations: Initial Value Problems:** Explicit Adams-Bashforth technique, Implicit Adams-Moulton technique and Runge-Kutta methods.

Section-C

Ordinary Differential Equations: Boundary Value Problems: Finite difference technique, Shooting Technique, Orthogonal Collocation Legendre Polynomials.

Partial Differential Equations: Classification of PDE Solution of Heat equation using Finite difference technique (Method of lines).

Text Book:

1. Gupta, S. K., "Numerical Methods for Engineers," New Age International Ltd., New Delhi, 1995.

Reference Books:

- 1. Hanna, O.T. and Sandall, O.C., "Computational Methods in Chemical Engineering," Prentice-Hall, 1975.
- Sastry, S.S. "Introductory Methods of Numberical Analysis: PHI 4th Edition

Human Resource Management

Course Objective: The course intends to provide students with a framework of knowledge relating to the concept and practice of human resource management, and develop their understanding of basic tools used in managing human resources.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

Unit I Human resource management- meaning, definition, scope, organization of human resource department, policies, principles, evolution of human resource management from personnel management.

- Unit II Human resource planning- meaning, definition, importance, objectives and the factors influencing human resource planning, demand forecasting techniques, supply forecasting techniques
- **Unit III** Recruitment-definition, purpose, importance, factors influencing recruitment, process, sources of recruitment, Selection-meaning, role, process. Placement in organization.
- **Unit IV** Training and development- definition, difference between training, education and development, importance, process, learning principles, methods of training.
- **Unit V** Performance appraisal-meaning, definition, process, methods of performance appraisal, performance appraisal errors.

Suggested Readings:

- 1. Flippo Edwin: Personnel management, Tata McGraw Hill
- 2. Dessler Garry, Prentice Hall of India, New Delhi
- 3. A. Decenzo, David Robbins P. Stephen Personnel/ Human Resource Management, Prentice Hall of India, New Delhi
- 4.. Saiyadain Mirza: Human resource management, Tata Mc Graw Hill.
- 5. Dwivedi R.S.: Managing human resources and personnel management, Galgotia Publishing Co.

Personal Finance

Objective: The objective of the course is to expose students to Personal Financial Management and its various components to enable them to improve personal financial management skills.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

Unit I Personal Finance: Introduction, Goals, Need, Personal Financial Statements, Personal financial planning process, Life cycle approach to financial planning, Components of financial plan, developing financial plan. Budgeting: Principles of Successful Budgeting, Spending money wisely, Time value of Money, careers in personal finance advisory.

- **Unit II** Investment Avenues: Principles of successful investing, overview of securities markets, factors controlling investment returns, Types of investment options available to an individual investor, building successful investment portfolio.
- **Unit III** Introduction to Bank and Banking services, Type of accounts, Types of deposits, KYC, Types of loans, deposit, credit and investment services offered by commercial banks, care while using mobile banking, mobile applications, internet banking etc.
- Unit IV Insurance: Importance, need, principles of insurance, Types of life insurance, health insurance, Home & Liability Insurance. Estate Planning: Objectives of will and creating a valid will and power of attorney.
- **Unit V** Retirement Planning: Principles, stages and steps in retirement planning, Tax planning: importance, PAN, Heads of Income, Tax saving under section 80C, Role of RBI, NISM, SEBI and others in promoting financial literacy in India.

Activities:

- 1. Understand the requirements for your Personal Financial Plan.
- 2. Develop and implement a budget.
- 3. Understand the joy of giving back to society.
- 4. How to use retirement Planning calculator.
- 5. Using other financial calculators.
- 6. How to advise someone about financial planning process.
- 7. Proactive and reactive ways to deal with Investment frauds and low quality financial services.

Suggested Readings:

- 1. Swapna Mirashi, I can do Financial Planning (Academic Foundation New Delhi)
- 2. Tax Planning by IMS Proschool, (Mc-Graw Hill)
- 3. Investment Planning by IMS Proschool, (Mc-Graw Hill)
- 4. Gopinath, Banking Principles & Operations, Snow white 2011.
- 5. Retirement Planning & Employer Benefits by IMS Proschool, (McGraw Hill)
- Matai Sanjay, Your guide to Finance & Investments by, Network 18 Publication Pvt Ltd.
- 7. Irani Mehrab, Commandments for Financial Freedom by Vision Books.
- 8. Introduction to Financial Planning by IMS Proschool, (Mc-Graw Hill)
- 9. Pandit Amar, The only Financial Planning book that you ever need, Network 18 Publication Pvt Ltd.

Computer Fundamentals

Learning Outcomes: On successful completion of the course students will be able to:

- 1. Knowledge of component of computer.
- 2. Convert numbers in binary, octal, hexadecimal, and vice versa including binary arithmetic
- 3. Simplify Boolean expression Draw electronic circuits.
- 4. Devise Algorithm and draw flowchart for Searching, sorting, merging through computer

Syllabus

- Unit 1 Introduction to Computer System: Simple model of Computer, CPU, Memory, Storage media and I/O units, Software (System and Application) and Hardware. Introduction of operating system. Booting process and DOS commands (Internal and external).
- Unit 2 Number System: Data representation binary, octal, hexadecimal and their inter conversion, positive and negative numbers, integers and real, characters and codes - BCD, ASCII and EBCDIC coding, Binary arithmetic(addition and subtraction)
- Unit 3 Basic concepts of Boolean algebra and their electronic implementation, Logic gates (AND, OR, NOT, NOR, NAND) and truth table, De-Morgan's theorem, simplification of Boolean expression.
- Unit 4 Algorithms and Flowcharts: Problem analysis, algorithm design, data assignments, flowchart design, stepwise refining, sequencing, alternation and Looping.
- Unit 5 Implementation of Algorithms and Flowcharts : Searching (Linear, binary), Sorting (Bubble and Selection) and merging,
 Programming languages and problem solving computers.

Suggested Books:

- Sinha, P. K. (2003). Computer fundamentals: concepts, systems & applications. BPB publications.
- Wirth, N. (1976). Algorithms+ Data Structures= Programs Prentice-Hall Series in Automatic Computation. Prentice Hall.
- Norton, P. (1989). Peter Norton's DOS guide. Brady.

- Ram, B. (2000). Computer fundamentals: architecture and organization. New Age International.
- Govil R. Computer Anuprayog avam Programmingt, et al, Jaipur publishing house, 2000.
- Dromey, R. G. (1982). How to Solve it by Computer. Prentice-Hall, Inc..
- Saxena M. Disk Operating System, Pitamber publication, 1994

Suggested E-Resources:

1. Sinha, P. K. (2003). Computer fundamentals: concepts, systems & applications. BPB publications.

https://www.edutechlearners.com/computer-fundamentals-p-k-sinha-free-pdf/

Computer Programming

Objectives:

- ☐ This course seeks to introduce the students to the concept of Computer Programming
- □ Coding Logic with the programming language C.
- Introduction to computer programming, , Programming languages Unit-I Compiler, Interpreter.Computer (high level. low level). Programming (in C): Overview of C language- History, Character set, Identifiers, Various Data types (Simple and Structured) and their representation, Constants and Variables, **Operators** (arithmetic, logical, relational), Program structure, assignment, Input-Output statements,
- Unit-II Arithmetic and Logic expressions, Control statements (sequencing, alteration and looping),
- Unit-III Single & Multi-dimensional Arrays, and Searching and Sorting: Linear search and Binary Search, Bubble sort, Selection sort, Insertion sort, merging and matrix manipulation
- **Unit-IV** Functions, parameter passing (call by value, call by reference), recursion, storage classes.
- Unit-V Concept of pointers, pointer expression, pointer v/s arrays, structure, union and enumerated data types, command line arguments, concept of structured programming.

Text Books:

- 1. Sinha P.K., Computer Fundamentals: BPB Publications
- 2. Balagurusamy E., Programming in ANSI C, Tata McGraw-Hill Education
- 3. Venugopal.K.R., Programming with C, Tata Mcgraw-Hill Publishing Company Limited.

Reference Books:

- 1 Kergnighan Brian W., Ritchie Dennis M., The C Programming Language, Pearson Education, 2nd Edition, New Delhi Prentice Hall.
- 2. Kanetkar Yashwant, Let Us C, New Delhi, BPB Publication.
- 3. Byron Gottfried, Schaum's Outline of Programming with C, New York, McGraw Hill.

Art Appreciation

Theory:

Section-A

(Introduction and origin of art)

- Meaning, Definition and classification of Art and Aesthetics.
- Themes and purpose of art.
- Prehistoric introduction of art in India and Europe context.
- Oriental period of art- Indus valley civilization

Section-B

(Ancient, Mediaeval, and Modern period of western art)

- Classical period of Greece and Rome with characteristics, artwork, and artist.
- Early Christian art (Byzantine, Gothic, and Romanesque)
- Renaissance Period (The early and high renaissance in Italy) with the characteristics of art, master artist, and their art work.
- Baroque period characteristics master artist and their art work.
- Rococo period characteristics master artist and their art work.
- Art deco period characteristics master artist and their art work.
- Art Nouveau period characteristics master artist and their art work.
- Neoclassical periodic characteristics master artist and their art work.

- Realism periodic characteristics master artist and their art work.
- Impressionism (neo impressionism, Post impressionism) characteristics master artist and their art work.
- Cubism characteristics master painter and their art work.
- Some master painters of different art period of modern world:- Henry Mattie, Salvador Dali, Kandinsky, Paul Klee, Francis Picabia, Joan Miro, Piet Mondrian, Jackson Pollock, Andy Warhol.

Section-C

Ancient Medieval and Modern period of Indian art

- Cave art:- Ajanta and Baagh cave their style, medium, subjects and characteristics.
- Manuscripts art:- Jain and pal school
- Miniature art:- Mughal, Rajputana Rajasthani and Pahadi origin, subject medium and characteristics and master painters
- Bengal school of art
- Some master painter of Indian art :- Raja Ravi Varma, Amrita shergil,
 D.P. Roy choudhary, Jamini Roy, N.S. Bandre, K.K. Hebbaar,
 M.F.Hussain, F.N.Suza and S.H. Raza and G.R. Santosh.

Learning Outcomes:

Upon Completion of the course, the students will be able to:

- Recognize the visual art forms and their historical cultural contexts
- Appreciate the importance of art and its application in various disciplines of art education.
- Critically interpret and analyze works of art in terms of form and content.
- Utilize fundamental concepts of aesthetics toward the interpretation of art.
- Understand the basic and formal elements of art and key works of art.
- Identify the master artist's work with their style.

Recommended Books:

1. Tomory, Edith (2009). *A history of fine arts in Indian and the west.* Hydrabad (AP), India. Orient Blackswan Private Limited.

2. Morris, Desmond (2013). The Artistic Ape, Three million years of art. UK, Red Lemon Press.

Introduction to Photography Lab

P				

Practical:

Section-A

Understanding of Photography tools: What's The Right Camera; Introduction to Lenses; How Modern Cameras Work-F-Stops & Shutter Speeds; What Are F Stops; How The Shutter Work; Introduction to Exposure Control. Depth of Field: How Depth Of Field Works; Compensation With Shutter Speeds; Selective Depth Of Field Examples; Using The Scale And Preview

Section-B

Lenses: Lens Focal Length; Lens Speed; Lens 'angle-of-view'; Lens Extenders

Daylight Photography: To Write With Light; How to Use Light; Our Changing Sunlight; Shooting in Bright SunlightFlash Photography: Creating Your Own Light; Flash, Types & Sizes; Exposure Controls; Flash Examples Filters: Using Color Filters; Skylight And UV Filters; The Polarizing Filter; Special Effects Filters: Using Color Filters; Skylight And UV Filters; The Polarizing Filter; Special Effects Filters

Section-C

Introduction to Light Hardware, Dimmers and Cables, Tungsten lights, Cool lights and Flash Lights; Technical details of power consumption; Mix dimmer load, solo dimmer load, load distribution and power requirement; Light Stands, Cutter Stands, Flags and Dollies for Lights. Use of Natural Lighting as the only available light; Use of reflectors, flaxy reflectors, skimmers; still photography lights and flash Guns, trigging sync lights; multiple light setup Practical Lighting for Commercial Projects, Difference between Day and Night Lighting, Setup of a complex TV set, News Setup, Chroma Key Lighting; Projects Using Porta Lights/Jokar Par and Portable Lights.

Learning Outcomes:

Upon completion of the course, the students will be able to:-

- 1. Understand about the technical and creative aspects of photography.
- 2. Use the lighting techniques for indoor and outdoor Photography.
- 3. Execute different theme/subject (creative) based photographs.

Recommended Books:

- 1. Bate, David (2016), *Photography-The Key concepts*, UK: Berg Publishers,
- Langford, Michael, Langford's Basic Photography, Waltham, Massachusetts: Focal Press Book
- 3. Lou, Jacobs (Jr.) (2013), *Point and Shoot*, US: Amphoto.
- 4. Freeman, John (2002), *Practical Photography, How to Get the Best Picture Every time*, US: Ultimate Editions
- 5. Arena, Syl (2012). Lighting for Digital Photography: From Snapshots to Great Shots, San Francisco: Peachpit Press
- 6. Long, Ben. (2001). *Complete Digital Photography*. United States US. Cengage Learning, Inc.
- 7. Kelby, Scott. (2007). *The Digital Photography Book Volume 1 & 2*. United States US. Peachpit Press.

Business Environment

Course Objectives:

- 1. To acquaint the students with the critical elements of business environment and their impact on Business Decisions.
- 2. To provide students with an awareness of current Business trends and an overview on Indian Economy, MNC's and Union Budget.
- 3. To exposing students about general principles of Company Law Such as Company, Memorandum of Association, Article of Association and winding up of companies.
- 4. To understand the role of Director in a company according to Company Law and understanding of meetings, resolutions and dividends.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.

Course Contents:

- **Unit I** Introduction to business and its characteristics, Meaning and nature of business environment, Macro and micro environment, Social responsibility of business, Business current affairs.
- Unit II Introduction to Indian economy-Characteristics problems and solutions Industrial policy 1991- Provisions and Approval privatization, Globalization and MNC- Need advantage and Indian experiences, Introduction to union budget.
- Unit III Definition of company, Nature, Types, Procedure of registration, Memorandum of association, Article of association, Winding up a company.
- **Unit IV** Shares and debentures-Types, Allotment, Procedure and principles, Transfer of shares-physical and electronic (Demat).
- Unit V Directors-Position, Appointment, Disqualification, Power and duties, Types of meeting, Minutes, Types of resolution, statutory provisions regarding dividend. Insolvency and Bankruptcy Code, 2016: Introduction, Corporate Insolvency Resolution Process, Liquidation of a Corporate Person.

Learning Outcomes:

Upon completion of the course the student will be able to:

- Interpret the impact of Micro & Macro environment on Business Decision
- Learn about factors affecting social orientation of Business
- Understand the basic concepts related with Indian economy, Industrial Policy, 1991 and Union Budget.
- Learn about Company registration process.
- Understand process of winding up of a company.

Suggested Readings:

- Cherunilam, F. (2016). *Business Enviornment Text and Cases* (25 ed.) Mumbai, Himalaya Publishing House
- Ghosh, B. N. (2015). *Business Environment* (1ed), New Delhi, Oxford University Press.
- Kapoor, N.D. (2016). Elements of Company Law (30 ed), New Delhi, Sultan Chand & Sons.
- Pandey, I.M. (2015). Financial Management (11 ed.), Noida, Vikas Publishing House Pvt. Ltd.

Suggested E-Learning Material:

- 1. MSG. (2014). *Capitalization in Finance*. Retrieved from Managment Study Guide: https://www.managementstudyguide.com/capitalization.htm
- 2. Philip, T. (2017, April). *Directors:Duties&Liabilities*. Retrieved from: https://www.youtube.com/watch?v=b8y2vIuTrP4
- 3. Hitbulleye (2016, January 7). *Basics of Indian Economy*. Retrieved from: https://www.youtube.com/watch?v=CnF M050g4o
- 4. Shashi, A. (2018, October 10). *Industrial Policy 1991*. Retrieved from https://www.youtube.com/watch?v=EWqqaVkix6g

Introduction to Computer Applications

Learning Outcomes:

On successful completion of the course students will be able to

Understand input and output devices of computers and recognize the basic terminology used in computer programming

Understand the Microsoft Office package, MS-DOS and Unix Systems

Understand concept of Database and Networking

Unit 1 Introduction to Computer System: Simple model of computer, Basic components of computer system, Generation of computers.

Introduction to Software: System and Application Software

Introduction to Operating System: Types and Function, MS DOS, Basic DOS and Unix Commands, Windows Operating System.

Unit 2 Number System: Data Representation-Binary, Octal, Hexadecimal, 1's and 2's complement method of representation and binary arithmetic (addition, subtraction)

Characters and codes: BCD, ASCII, EBCDIC Unicode coding.

Unit 3 Input/ Output devices: Types of I/O Devices, Serial, Parallel and Graphical.

Memory: RAM, ROM, EPROM, PROM and concepts of other types of memory, Storage devices – Sequential, Direct and Index Sequential.

Unit 4 Office automation with world and Excel: working with MS Office packages

MS Word: creating file, editing, inserting object, formatting, inserting table, mail merge, spell check etc.

MS Excel: Creating sheet, formatting, inserting function, creating charts etc.

Unit 5 Presentation and data skill development

MS Power Point: creating presentation, editing, inserting animation etc.

MS Access: concept of database and DBMS, database operation, creation, updation, selection, deletion, Report generation etc.

Suggested Readings:

- 1. Sinha, P.K. *Computer Fundamental*. New Delhi: B.P.B. Publications.
- 2. Govil, R. et al. *PC Software*. New Delhi : B.P.B. Publications.
- 3. Norton, Peter. (1989) Peter Nortan's DOS guide. Auburn: Brady.
- 4. Rajaraman, V. Fundamentals of Computers. New Delhi: PHI

- 5. Das, Sumitabha.(2006). *UNIX Concepts and Applications*. New Delhi: Mc Graw hill
- 6. Rutkosky, S. (2008). Office 2007. New Delhi: B.P.B. Publications.

Suggested E-Learning Material:

- Introduction to Programming in C https://nptel.ac.in/courses/106104128/
- Introduction to MS Office https://support.office.com

Introduction to Computer Applications Lab

- Unit 1 Introduction to DOS/ Unix: Basic DOS and Unix Commands.
- Unit 2 MS Word: Introduction to the IDE of Microsoft Word,
 Functionality of various tool bars Quick Access, Title, Ribbon,
 Ruler and Status Bars. Understanding document Views,
 Formatting, Editing and Understanding non printing characters,
 Using Auto Text, Using Indentation & Alignment, Style set, Page
 breaks, Page numbers and Setting Page Layouts and Printing
 Documents.
- Unit 3 MS Excel: Introduction to Electronic Spreadsheet, Worksheet, Cells, Quick Access Toolbar, Formula Bar, Status Bar, Clipboard, Font, Alignment, Number, Cells Styles, Editing, Perform Mathematical Calculations, Working with Headers & Footers, Perform Automatic Calculations, Perform Advance Mathematical Calculations, Work with Long Text Format Numbers, Excel Functions, Using Reference Operators and Printing.

Charts: Creating and applying Chart Layout, Adding Labels, Switching Data, Changing the Chart Style, Size and Position, Chart Type.

- Unit 4 Power Point: Introduction to the IDE of Power Point, Introduction to various toolbars like Quick Access, Placeholders, Creating Title Slides, Slide shows, Introduction to layouts, Themes, Clipboard, Font paragraph, Drawing & Editing, Animations, Transitions, Spell Check, Outline, Tab Slides Tabs, Sorter View and Printing.
- Unit 5 MS Access: Introduction to IDE of MS Access, Table Creation, Query formation, Forms, Report generation.

Application Software for Business

Course Objectives:

- 1. The main objective of this course is to provide students with the background to design, implement, and use database management systems
- 2. Provide an introduction of DBMS and their use;
- 3. Describe the main features and function of the DBMS;
- 4. Describe & Design of relational database and E-R diagrams;
- 5. To enable students to learn the concept of application software for business.
- 6. To work with basic application software tools like MS Excel, MS Access, Tally, Photoshop and its relevance in organizational functioning.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in taking at least one question from each unit.

Course Contents:

- Unit I Organization of data in files, Introduction to Database and DBMS, Advantages and Disadvantages of Databases, Cases in Marketing, HR, Finance, Production etc.
- Unit II Understanding Databases and its Environment, Understanding concept of Relational Model, Logical View of Data, Keys,

- Integrity Rules, Relationships, ER Model, Database Design, Normalization, SQL DML & DDL.
- Unit III Querying with QBE Grid, Creating and Customizing forms, Viewing data using forms, Exploring form Design Tools, Building forms, using Macros, Macro Window, Building Macros, Building Reports, Saving form as a report, Importing and Exporting Data.
- Unit IV Features of Computerized Accounting, Company Creation,
 Alteration and Deletion of Company, Accounts Configuration:
 General Configuration, Accounts/Inventory Information
 Configuration, Classification of Accounts: Accounts group,
 Ledger Accounts, Hierarchy of Accounts, Reserved Accounts
 group, Contents of Reserved group, Account groups of balance
 sheet.
- Unit V Graphics Environment: IDE, Creation of Files, Understanding Interface, Toolbox, Floating Palettes, Storing and Retrieving Files, Type Basics: Raster versus Vector Programs, Working with Types, Creating and Understanding Selection, Moving and Floating Selection, Flag Collage, Filling and Stroking Working in Layers, Clock Collage, Truck Collage.

Learning Outcomes:

Upon completion of the course student will be able to:

- 1. Understand the use and basic designing of a database system
- 2. Understand the concept of relational databases and normalization
- 3. Design a database and run queries using MS Access
- 4. Create ledger accounts and balance sheets using Tally
- 5. Use Photoshop for simple image editing and creating collages.

Suggested Readings:

- Greenberg, A. D. (2000). *Fundamental Photoshop 5.5* (1 ed.). New Delhi: Mc Graw Hill.
- Nadhani, A. N. (2007). *Implemeting Tally ERP 9* (1 ed.). New Delhi: BPB Publications.
- Saxena, S. (2000). MS Office 2000 for Everyone (1 ed.). New Delhi: Vikas Publication.

Suggested E-Learning Materials:

- 1. Studios, S. (2018, March 24). *Adobe Photoshop For Absolute Beginners*. Retrieved March 2019, from Youtube: https://www.youtube.com/watch?v=KfXSt4XLedc
- 2. World, G. L. (2017, December 30). *Tally ERP 9 Basic Course for Beginners Free Tally*. Retrieved March 2019, from Youtube: https://www.youtube.com/watch?v=1d2y7J0gESM

Application Software for Management

Course Objectives:

- 7. The main objective of this course is to provide students with the background to design, implement, and use database management systems
- 8. Provide an introduction of DBMS and their use;
- 9. Describe the main features and function of the DBMS;
- 10. Describe & Design of relational database and E-R diagrams;
- 11. To enable students to learn the concept of application software for business.
- 12. To work with basic application software tools like MS Excel, MS Access, Tally, Photoshop and its relevance in organizational functioning.

Note: The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in taking at least one question from each unit.

Course Contents:

- Unit I Organization of data in files, Introduction to Database and DBMS, Advantages and Disadvantages of Databases, Cases in Marketing, HR, Finance, Production etc.
- Unit II Understanding Databases and its Environment, Understanding concept of Relational Model, Logical View of Data, Keys, Integrity Rules, Relationships, ER Model, Database Design, Normalization, SQL DML & DDL.
- Unit III Querying with QBE Grid, Creating and Customizing forms, Viewing data using forms, Exploring form Design Tools, Building forms, using Macros, Macro Window, Building Macros, Building Reports, Saving form as a report, Importing and Exporting Data.
- Unit IV Features of Computerized Accounting, Company Creation,
 Alteration and Deletion of Company, Accounts Configuration:
 General Configuration, Accounts/Inventory Information
 Configuration, Classification of Accounts: Accounts group,
 Ledger Accounts, Hierarchy of Accounts, Reserved Accounts
 group, Contents of Reserved group, Account groups of balance sheet.
- Unit V Graphics Environment: IDE, Creation of Files, Understanding Interface, Toolbox, Floating Palettes, Storing and Retrieving Files, Type Basics: Raster versus Vector Programs, Working with Types, Creating and Understanding Selection, Moving and Floating Selection, Flag Collage, Filling and Stroking Working in Layers, Clock Collage, Truck Collage.

Learning Outcomes:

Upon completion of the course the student will be able to:

- 6. Understand the use and basic designing of a database system
- 7. Understand the concept of relational databases and normalization
- 8. Design a database and run queries using MS Access
- 9. Create ledger accounts and balance sheets using Tally

10. Use Photoshop for simple image editing and creating collages.

Suggested Readings:

- Greenberg, A. D. (2000). *Fundamental Photoshop 5.5* (1 ed.), New Delhi, Mc Graw Hill.
- Nadhani, A. N. (2007). *Implemeting Tally ERP 9* (1 ed.), New Delhi, BPB Publications
- Saxena, S. (2000). MS Office 2000 for Everyone (1 ed.), New Delhi, Vikas Publication.

Suggested E-Learning Material

- 3. Studios, S. (2018, March 24). *Adobe Photoshop For Absolute Beginners*. Retrieved March 2019, from Youtube: https://www.youtube.com/watch?v=KfXSt4XLedc
- 4. World, G. L. (2017, December 30). *Tally ERP 9 Basic Course for Beginners Free Tally*. Retrieved March 2019, from Youtube: https://www.youtube.com/watch?v=1d2y7J0gESM

Application Software for Management Lab

Course Objectives:

- 1. The objective of the course is to enable the students to learn the concepts of Excel, Tally, Photoshop.
- **2.** To develop understanding of the computers for practical purpose.

Course Contents (100 hrs.)

Understanding Database in Excel

8 hrs.

1. Data Management in Excel

2.	Using Conditional Formatting				
3.	Sorting and Filtering Data				
4.	Organizing and Editing Data				
5.	Grouping and Outlining Data				
6.	Consolidating Data				
Database Creation Using Access 38 hr					
1.	Creating tables (Understanding fields, data types, range etc.)				
2.	Establishing relationships				
3.	Creating Tables using Wizard				
4.	Creating Tables using Data View				
5.	Creating Select Queries				
6.	Designing queries with QBE Grid				
7.	Creating other types of queries (Cross tab, update etc.)				
8.	Creating forms using wizards				
9.	Creating Forms using Toolbar				
10.	Inserting data in tables using forms				
11.	Validating Forms				
12.	Creating Reports for table data				
Financial Accounting Using Tally 16 hrs.					
1.	Creating Companies				
2.	Creating Voucher and Journal Entries				
3.	Implementing Trial Balance				
4.	Checking Balance Sheets				

Graphical Applications using Photoshop

8 hrs.

- 1. Implementing effects on images
- 2. changing format of images
- 3. Applying layers on images

Project

1. Implementing a Business Oriented DBMS Application.

Learning Outcomes:

Upon completion of the course the student will be able to:

- 1. Use computer for better business presentations.
- 2. Get ready for the entry level jobs where computer knowledge is necessary.

Suggested Readings:

- Greenberg, A. D. (2000). Fundamental Photoshop 5.5 (1 ed.). New Delhi: Mc Graw Hill.
- Nadhani, A. N. (2007). Implemeting Tally ERP 9 (1 ed.). New Delhi: BPB Publications.
- Saxena, S. (2000). *MS Office 2000 for Everyone* (1 ed.). New Delhi: Vikas Publication.

Suggested E-Learning Material

- Studios, S. (2018, March 24). *Adobe Photoshop For Absolute Beginners*. Retrieved March 2019, from Youtube: https://www.youtube.com/watch?v=KfXSt4XLedc
- World, G. L. (2017, December 30). *Tally ERP 9 Basic Course for Beginners Free Tally*. Retrieved March 2019, from Youtube: https://www.youtube.com/watch?v=1d2y7J0gESM

Business Data Processing

Learning Outcomes:

On successful completion of the course students will be able to

- 1. Develop Business applications in Cobol.
- 2. Identify all peripheral devices.
- 3. Prepare of all documents developed during system development.

Syllabus

- Unit 1 Introduction to Business organization: Business system and its environments, major business functions including production, marketing, personnel & finance, information systems need and role of management services.
 - I/O devices: Properties of simple I/O devices, types of I/O devices on-line, off-line, serial and parallel, commonly used I/O devices keyboard, mouse, joystick, scanners, printers (impact & nonimpact), display devices (raster & random scan), color monitors, readable media inputs CDROM, MICR, OCR. Memory and Storage Devices: Memory device characteristics, RAM, ROM, EPROM, Random & Sequential access storage devices, magnetic disks and disk drives, CDROM drives.
- Unit II System Analysis & Design: introduction, SDLC, Role of system analyst, investigation: project selection, feasibility analysis, fact gathering, System design & implementation, cost/benefit analysis, system evaluation, input form design, interfacing, input data validation, documents & its importance, system maintenance and its review.
- Unit III COBOL Language: COBOL program structure: Divisions, Sections, Paragraphs, Input-Output verbs, Data transfer verbs, conditional verbs including condition-name-condition, Table handling in COBOL.
- **Unit IV** Introduction to file processing: record, files, file organization: sequential, indexed & direct access (random) files, various file operations, master files and transaction files.
- Unit V File handling in COBOL: SORTING, MERGING, UPDATION, SORT & MERGE statements, Character handling, subroutine, Report writing facility in COBOL, Segmentation, Library facility.

Suggested Books:

1. Clifton, H. D. (1974). Systems analysis for business data processing.

- 2. Orilla, An Introduction to Business Data Processing, Mc Graw Hill
- 3. Roy, M. K., & Dastidar, D. G. (1989). *COBOL Programming*. Tata McGraw-Hill Education.
- 4. Awad, E. M. (1985). Systems Analysis and Design.
- 5. Irwin, R. D., .Stern, N. B., & Stern, R. A. (1985). *Structured COBOL Programming*. John Wiley & Sons.

Suggested E-Resources:

- COBOL Programming
 http://www.csis.ul.ie/cobol/course/Default.htm
- Norton, P. (2002). *Introduction to computers*. McGraw Hill. https://onlinestudy4u.files.wordpress.com/2012/10/introduction-to-computers-by-peter-norton-6th-ed.pdf

Business Data Processing and Database Management System

Learning Outcomes

On successful completion of the course students will be able to

- 4. Develop Business applications in Cobol.
- 5. Identify all peripheral devices.
- 6. Prepare of all documents developed during system development.
- 7. Identifies key of various types, use SQL-the standard language of relational databases, normalize data base.
- 8. Develop COBOL Programming language.
- Unit 1 Introduction to Business organization: Business system and its environments, major business functions including production, marketing, personnel & finance, information systems need and role of management services. Introduction to file processing: record, files, file organization: sequential, indexed & direct access (random) files, Data Base system architecture: Basic concepts, data structures, classical data models (relational, hierarchical and network).
- Unit 2 COBOL Language: COBOL program structure: Divisions, Sections, Paragraphs, Input Output verbs, Data transfer verbs, conditional verbs including condition-name-condition, Table handling in COBOL.

- Unit 3 File handling in COBOL (Sequential, Relative, Indexed files): SORTING, MERGING, UPDATION, SORT & MERGE statements, Character handling, subroutine, Report writing facility in COBOL, Segmentation, Library facility.
- **Unit 4** Data modeling using E-R Model, mapping constraint, super key, Candidate key, primary key, Relational data model, Integrity and security of DBMS, SQL, Query handling.
- Unit 5 Database Design, Functional dependencies, Normal Forms: 1 NF, 2
 NF, 3 NF 4 NF, BCNF, 5NF, steps in database design,
 Introduction to Transaction Processing & Concurrency control

Suggested Books:

- Orilla, An Introduction to Business Data Processing, Tata Mc Graw Hill
- Roy, M. K., &Dastidar, D. G. (1989). *COBOL programming*. Tata McGraw-Hill Education.
- Elmasri, R., &Navathe, S. (2010). *Fundamentals of database systems*. Addison-Wesley Publishing Company.
- Bayross I, Structured Query Language, BPB
- Stern, N. B., & Stern, R. A. (1985). Structured COBOL programming. John Wiley & Sons.
- Martin, J. (1977). Computer database organization. Prentice Hall PTR
- Date, C. J. (1990). An introduction to database systems. Volume 1
- Silberschatz, A., Korth, H. F., &Sudarshan, S. (1997). Database system concepts (Vol. 4). New York: McGraw-Hill
- Leon, A., & Leon, M. (2010). *Database management systems*. Vikas Publishing House Pvt. Limited

Suggested E-Resources:

- COBOL Programming http://www.csis.ul.ie/cobol/course/Default.htm
- 4. Norton, P. (2002). *Introduction to computers*. McGraw Hill. https://onlinestudy/au files wordpress.com/2012/10/introduct
 - https://onlinestudy4u.files.wordpress.com/2012/10/introduction-to-computers-by-peter-norton-6th-ed.pdf
- 5. Data Base Management System https://nptel.ac.in/courses/106105175/
- 6. Database Management Essentials

Software Skills Lab

Practical:

- 1. Adobe Photoshop (Image editing)
- 2. Adobe Illustrator (Creating graphic images)
- 3. Adobe In Design (Creating layout and compositions)
- Corel Draw

Learning Outcome:

Upon completion of the course, the students will be able to:

- Apply softwares as tool for design solution.
- Use Adobe Photoshop, Illustrator and in Design for creative purposes.

Recommended Books:

- Team, A. C. (2012). *Adobe Photoshop CS6: Classroom in a book*. Berkeley, Calif: Adobe Press/Peachpit.
- Adobe Photoshop CC: Classroom in a book. (2013).
 San Francisco, CA: Adobe Press/Peachpit.

Design Methods and Processes

Theory:

Section-A

- Fundamentals of Design
 - Definition of Design
 - Necessity of Design

- · Design and Society
- Form and Function

Section-B

Design Thinking: Critical thinking-exploring possibilities, constraints and inherited psychographs; Significance of design research and design practice; Sustainability; Convergence – prototyping alternatives and possible scenarios; Aesthetics and function; Problem solving – where process meets method; Design – client needs and/or user needs; Green design.

Section-C

Methodology: Concept; Design brief; Branding; Research; Analysis; Implementation/prototyping; Costing, specifications for multiplication; Production; Quality monitoring.

Learning Outcomes:

Upon completion of the course, the students will be able to:

- 1. Develop critical and lateral thinking approach.
- 2. Develop a basic design concept, visualization and manipulation techniques.
- 3. Develop an appreciation of function, aesthetics and technology in design.
- 4. Develop basic design thinking and communication skills.
- 5. Create activities and experiences for basic process of design, adapt in their abilities, interest and design in context of human society, economy, politics and socio-cultural aspect.

Recommended Books:

- Balaram, S (2011). Thinking Design, SAGE Publications India Pvt
 Ltd
- b. Papanek, Victor (1971). *Design for the Real World: Human Ecology and Social Change*, New York, Pantheon Books.
- c. Vyas, H. Kumar (2009). *Design and Environment: A Primer* (3rd ed.). India, National Institute of Design.
- d. Munari, Bruno (1971). *Design as Art.* Penguin books

Recommended E-Resources:

https://www.bloomsburydesignlibrary.com/taxonomy?id=disciplines

Design Methods and Processes Lab

Practical:

- Define a need by considering appropriate human, functional and aesthetic factors;
- Gather and use relevant information for design decision making.
- Generate and develop ideas using appropriate methods.
- Test and evaluate their design ideas, making appropriate modifications.
- Apply appropriate communication techniques to inform and defend ideas.
- Developing forms and planning the steps in making their artifact.
- Explore appropriate materials and suitable techniques to make final artifact.
- Make appropriate modifications to enhance the artifact.
- Find a design solution as per all above given details.

Learning Outcomes:

- 6. Develop critical and lateral thinking approach.
- 7. Develop a basic design concept, visualization and manipulation techniques.
- 8. Develop an appreciation of function, aesthetics and technology in design.
- 9. Develop basic design thinking and communication skills.
- Create activities and experiences for basic process of design, adapt in their abilities, interest and design in context of human society, economy, politics and socio-cultural aspect.

Recommended Books:

- Balaram, S (2011). Thinking Design, SAGE Publications India Pvt Ltd
- Papanek, Victor (1971). Design for the Real World: Human Ecology and Social Change, New York, Pantheon Books.
- Vyas, H. Kumar (2009). Design and Environment: A Primer (3rd ed.). India, National Institute of Design.
- Munari, Bruno (1971). Design as Art. Penguin books

Recommended E-Resources:

https://www.bloomsburydesignlibrary.com/taxonomy?id=disciplines

Economics and Management

Objectives:

 To introduce the fundamental concepts of economics and management to Designers and explain how these will contribute in achieving commercial success in design profession

Theory:

Section A

Introductory Micro Economics with brief introduction of following topics

- o Demand & Supply
- o Production Function
- o Cost and breakeven analysis

Section B

Introductory Macro Economics with brief introduction of following topics

- o National Income and Related aggregates
- o Money and Banking
- o Government Budget and the Economy
- o Foreign Trade and Balance of payments

Section C

- o Principles of Managements Planning-Organizing-Staffing-Directing and Controlling
- o Types of Business Organizations
- o Functional Management with brief overview of following topics
 - 1. Marketing Management
 - 2. Production Management
 - 3. Financial Management
 - 4. Human resource Management

Learning outcomes:

- 1. Enable students to understand what research is and how to proceed with it.
- 2. Enable student students to evaluate literature, from a variety of sources, pertinent to the research objectives.
- 3. Identify and justify the basic components of the research framework, relevant to the tackled research problem.
- Students will get to know about how to collect research data, analyze, interpretation and conclude it.

Recommended Books:

- Siddiqui S. A., (2006), *Managerial Economics and Financial Analysis*, New Delhi: New Age International.
- B L Gupta (2011) *Introductory Micro and Macro Economics*, Sirmour, H.P: Arya Publications.
- Koonz Weihrich, (2004) Essentials of Management: An International and Leadership Perspective 9th Edition, New Delhi: Tata McGraw-Hill
- Philip Kotler Kevin Lane Keller (2009) *Marketing Management : A South Asian Perspective* 14th Edition , New Delhi: Pearson Education.

Human Factors

Section A

The complex relationships between people and the spaces they inhabit. Universal design solutions along with issues concerning privacy, crowding, territoriality, and noise will be examined as students study how people are perceived and use space at home and in public spaces.

Section B

To explore objects and spaces they inhabit as sensory and psychological experiences that effect human comfort, efficiency, function and emotion.

Section C

Introduction to Anthropometrics and Ergonomics. Understanding performance, and the interface of the human body in space, focusing on scalar and proportional issues within *Interior* and spatial design

Learning Outcomes:

Upon completion of the course, the students will be able to:

- > Develop understanding of human body and its surrounding.
- ➤ Identify the mentioned standards for different spaces.
- ➤ Do a comprehensive analysis of the design standards for a living, working and playing environment.
- > Develop critical thinking skills.

Recommended Books

- Joseph DeChiara. 2001. *Time Saver Standards For Interior Design and Space Planning*, McGraw-Hill Education.
- Pheasant Stephen.1986.*Bodyspace* (Anthropometry, Ergonomics and the Design of Work). Taylor & Francis Inc. Philadelphia.PA
- Dube <u>Shyama Charan</u> .1958. *India's changing villages: human factors in community development*. Routledge and Paul. London

Sound Design and Video Editing Lab

Practical:

- Dialogue, foley, fx& background music, Sync and non sync sounds
- Equipment & Recording Technique:Introduction to sound recording hardware, Cables and connectors and flow of sound, Stereo and multi-track sound recording softwares
- Sound designing for various projects: Sound designing for an animation film, Dubbing and sound designing for feature films, Sound for special projects
- Stereo and 5.1 Sound mixing: Stereo mixing of projects, Automation, panning and effects, Concept of 5.1 mixing for theatre
- Editing: Introduction of editing; Physical and Psychological Justification of editing, cutting and Reaction, Dramatic Emphasis; Impact of sound on the technical aesthetic aspects of Film Editing; Integrating dialogue and visuals; Conventions of Continuity Editing: Convention of Directional Continuity, point of view in editing, parallel action/cross cutting/inter cutting, time manipulation, visual &

temporal transitions, visual punctuations, audio transitions; Principle of continuity editing: Selection of shots, order of shots, editing the picture, selection of Angles and Magnifications, timing, smoothness, matching consecutive actions, matching tone, making sound flow over a cut; Editing for different Genre. Experiments in Editing; Understanding video formats and different form prevalent in media. Edit machine in practice and latest trends in special effects. Introduction to television switchers, Chroma screen shooting and post production, understanding special FX plug-ins compatible with FCP, Adobe Premiere pro and After effects; Integration of new technologies with basic edit software, possibilities over internet and other web technology; Understanding basics of the job of a sound recorders, cameraman and director working as one on a shoot in continuity film, dialogue exercise, documentary and fictional film.

Learning Outcomes:

Upon completion of the course, the students will be able to:-

- Understand about the editing and sound designing for short film projects.
- Ability to use editing and sound techniques to make a short audiovideo projects.
- Understand the importance of post production work for films.

Recommended Books:

- a. Gibbs, Tony (2007) *The Fundamentals Of Sonic Art & Sound Design*, Lausanne: AVA Publishing
- Murch, Walter (2001), *In the Blink of An Eye*, US: Silman-James Press
- Gorbman, Claudia, (1994), *Audio-Vision: Sound On Screen*. New York: Columbia University Press
- Roy, Thompson and Christopher, J. Bowen (2017), *Grammar of the Edit*, UK-Routledge
- Lamb, Gabriel (2011), A Thesis in Editing and Sound Design, Riga: VDM Verlag

Advertising Design Lab

Practical:

- Advertising Research for Advertising Design activity by selecting a topic (Product/Service)
- Creation of Design brief elaborating the Creative Advertising Strategy based on new or existing USPs/ESPs, Creative Idea, Selection of Media (newspapers, magazines, outdoor/transit, Internet, television and beyond) and a Concept/Visual Note based on the Creative Idea
- Rough Scribbling and iterations based on Concept/Visual Note and Moodboard Creation.
- Implementation of suitable aspect for Various Media of advertising execution, whether it's a Motion Graphics, Animation, or Audio-Visual.
- 4. Utilization and exploration of copywriting techniques using creative and active words.
- 5. Advertising Layout Design based the brand guidelines using Adobe Photoshop, Adobe Illustrator, Adobe InDesign or equivalent program, enhancing brand recognition.

Learning Outcomes:

Upon completion of the course, the students will be able to:

- Interpret the target audiences for designing advertisements
- Utilize Graphic Design Rules for Advertising Design by demonstrating a practical knowledge of design fundamentals, inclusive of the elements and principles of design.
- Create design solutions for specific media demonstrating fundamental knowledge of trends in advertising.
- Develop the holistic approach in Communication Design through implementation of Design Thinking as constant attributes. On the other hand, practically implementing the theoretical aspects of the subject of Advertising.

Recommended Books:

• Barry, Pete. *The Advertising Concept Book: Think Now, Design Later:* a Complete Guide to Creative Ideas, Strategies and Campaigns. Thames & Hudson, 2016.

- Barry, Pete. *The Advertising Concept Book: Think Now, Design Later:* a Complete Guide to Creative Ideas, Strategies and Campaigns. Thames & Hudson, 2016.
- Pricken, Mario. Creative Advertising: Ideas and Techniques from the World's Best Campaigns. Thames & Hudson, 2013.
- Williams, Eliza. *This Is Advertising*. Laurence King, 2010.
- Eriksson, Peer. *Photography in Advertising*. Peerbook, 2004.
- Altstiel, Tom, and Jean Grow. *Advertising Creative: Strategy, Copy, Design.* SAGE, 2017.

Business Practices

Theory:

Section A

Introduction to marketing: Definition, importance and scope of marketing, Understanding needs, wants, demands; marketing approaches, modern day approach towards marketing, mass marketing to customization; Value delivery process, the structure of service industry.

Section B

Segmentation in Interior Design Industry; Career Opportunities in Interior Design Industry, terminologies; Role and responsibilities of an Interior Designer, Process to be followed in Industry while working, Entrepreneurial aspect of Industrial Design

Section C

Segmentation in Interior Design Industry; terminologies; Role and responsibilities of a Interior Designer. Product Life cycle - stages and strategies for different stages of production. Product-mix, product mix decisions; Pricing decisions, pricing objectives, policies methods of setting price, pricing strategies, factors affecting each segment; Marketing communication: advertising, sales promotion, personal selling, publicity and public relations.

Learning Outcomes:

Upon completion of the course, the students will be able to:

- 1. Understand the Market environment in interior design Industry.
- 2. Understand Customer centric approach in modern marketing

Recommended Books

- 1. Kotler, Philip (2003) Marketing management, Pearson, New Delhi
- 2. Gandhi, J. C. (1985) *Marketing: an managerial introduction*, Tata Mcgraw-Hall, New Delhi
- 3. Ramaswamy, V. S. (2002) *Marketing management: planning, Implementation and control*, Macmillion, Delhi
- **4.** Easey, Mike (2002) Fashion marketing, Blackwell, Oxford.

Recommended E-Resources:

- Bloomsbury Design Library: an online resource for Design https://www.bloomsburydesignlibrary.com/
- CW Interiors http://www.cwinteriors.in/
- https://www.oreilly.com/library/view/understanding-industrialdesign/9781491920381/

E-Courses:

- 1. https://alison.com/course/fundamentals-of-marketing-your-business-online
- 2. <u>https://www.edx.org/course/marketing-fundamentals-who-customer-babsonx-bpet-mktx-0</u>
- 3. <a href="https://info.flexible.falmouth.ac.uk/falmouth-advertising-strategy-online-sp?utm_campaign=Falmouth+study+portals&utm_source=StudyPortals&utm_source=StudyPortals&utm_medium=MastersPortal&utm_content=ASPGradDip
- 4. https://www.coursera.org/learn/wharton-marketing

Calculation and Costing

Theory:

Section-A

Basic costing concepts: Classification of costs, types of costs, methods of costing, elements of cost.

Section-B

a. Spinning Calculations

- Yarn numbering, Direct & Indirect system of yarn numbering, Universal yarn numbering system, conversion from one system to other, Calculation of resultant yarn number of plied yarn.
- Yarn Twist, Twist factor, twist per unit length, S & Z twists

b. Weaving Calculations

- a. Calculation of length of warp and weft in a fabric, Weight of warp and weft required for particular length of cloth, weight per unit area of cloth,
- b. Cloth cover, cover factor
- **c.** Concept of cloth setting

Section-C

Fabrics, apparel and other textile made-ups, accessories costing

- 1. Cost of raw material
- 2. Calculation of processing cost
- 3. Cost of packing and transportation
- 4. Other cost components

Learning Outcomes:

Upon completion of the course, the students will be able to:

- Estimate the cost of products with different methods and elements.
- o Cost the given sample of fabric according to its construction.
- Cost the end-product from fabric to apparels, including packaging and transport

Recommended Books:

- a. Taggart W. S. (1998), *Cotton Spinning Calculations*, Navneet Prakashan, Bombay.
- **b.** Gupta Sen (1971), *Weaving Calculation*, Taraporevala Publishers, Bombay.
- **c.** Ashen hurst T.R. (1998). *Textile Calculations*, Abhishek Publishers, Chandigarh.

Critical Thinking

Theory

Section A

- Definition of Critical thinking.
- Introduction of critical thinking as a competitive recourse.
- Creativity and psychology
- Thought process and types of thinking

Section B

- To develop lateral thinking and generate innovative ideas.
- Definition of universal design
- Application of universal design

Section C

History of Interiors, difference in design thinking across history

Learning Outcomes:

Upon completion of the course, the students will be able to:

- 1. Think critically the parameters to be considered while designing a space can be analyzed well functionally and conceptually. They will be able to create new ideas as per space.
- 2. Understand the importance of relation between design and services while planning.

Recommended Books

- Hilary Collins .2010. Creative Researc, Bloomsbury. Visual Arts AVA Books. Switzerland
- Design Thinking. Nigel Cross. E-Book

Critical Thinking Lab

Practicals:

- To re-design interior with the help of critical thinking method
- To design a product of universal design
- Make a replica / model of furniture from History

Learning Outcomes:

Upon completion of the course, the students will be able to:

- 3. Think critically the parameters to be considered while designing a space can be analyzed well functionally and conceptually. They will be able to create new ideas as per space.
- 4. Understand the importance of relation between design and services while planning.

Recommended Books

- Hilary Collins .2010. Creative Researc, Bloomsbury. Visual Arts AVA Books. Switzerland
- Design Thinking. Nigel Cross. E-Book

Introduction to Trends and Forecasting

Theory:

Section-A

Introduction to the world of Fashion, the structure of the Industry; The terminologies of Fashion: Style, Fashion, Design, Silhouette, Haute Couture, Ready-to-Wear; The Fashion Cycle and its stages. Long-run and Short-run Fashions.

Section-B

Trends and the role of trend forecasting; Forecasting Personnel: Fashion Forecasters, Forecasting services/agencies, publications, trend portfolio; Fashion promotion as a tool for trend forecasting

Section-C

Forecasting process: From Producers to Consumers, primary and Secondary Market Forecasts; Fashion Theme Development; Fashion Trend Presentation, Fashion Shows

Learning Outcomes:

Upon successful completion of the course students will be able to:

 Critically assess and review the requirements and operational methods of the role of a trend forecaster relevant to fashion and textiles brands and companies. 2. Identify, evaluate and communicate the potential impact of cultural, social, economic and technological components in the trend forecasting process.

Recommended Books:

- 1. Burns, L. D., Bryant, N. O., & Mullet, K. K. (2011). *The business of fashion: Designing, manufacturing, and marketing*. Fairchild Books, New York.
- 2. McKelvey, K., & Munslow, J. (2008). *Fashion forecasting*. Chichester, Wiley-Blackwell, U.K.
- 3. Rousso, C. (2012). Fashion forward: A guide to fashion forecasting. Fairchild Books, New York.
- 4. Raymond, M., & Raymond, M. (2010). *The trend forecasters handbook*, Laurence King, London
- 5. Frings, G.S.(1999) Fashion From Concept To Consumer Upper Saddle River, N.J by Prentice Hall
- 6. Scully,K.,Cobb,D.J.(2012). *Color Forecasting for Fashion*. Laurence King Publishing

Recommended E- resources:

1. https://www.bloomsburyfashioncentral.com/products/fairchild-books/shop/fashion-forecasting/ebook

Introduction to Trends and Forecasting Lab

Practical:

To study and explore the application of Trends and Forecasts for Apparel / Accessories / Home Textiles range according to present trends and forecasting (Colors, Styles, Fabrics)

Learning Outcomes:

Upon successful completion of the course, students will be able to:

 Substantiate and apply appropriate research methodologies to identify and analyze alternative research sources for identifying global trend directions. 2. Research and critically analyze the challenges and opportunities of translating trend scenarios into the development of textile and fashion products.

Recommended Books:

- Burns, L. D., Bryant, N. O., & Mullet, K. K. (2011). The business of fashion: Designing, manufacturing, and marketing. Fairchild Books, New York.
- McKelvey, K., & Munslow, J. (2008). Fashion forecasting. Chichester, Wiley-Blackwell, U.K.
- Rousso, C. (2012). Fashion forward: A guide to fashion forecasting. Fairchild Books, New York.
- Raymond, M., & Raymond, M. (2010). *The trend forecasters handbook*, Laurence King, London
- Frings, G.S.(1999) Fashion From Concept To Consumer Upper Saddle River, N.J by Prentice Hall
- Scully, K., Cobb, D.J. (2012). *Color Forecasting for Fashion*. Laurence King Publishing

Recommended E- resources:

1. https://www.bloomsburyfashioncentral.com/products/fairchild-books/shop/fashion-forecasting/ebook

Introduction to Web Design Lab

Practical

- Apply UX strategies to a site's content & design.
- Understand Information Architecture to enhance the content on your website.
- Using Adobe Photoshop, Adobe Illustrator for GUI Design.
- Web Design Principles: Basic principles involved in developing a
 web site, Planning process, Five Golden rules of web designing,
 Designing navigation bar, Page design, Home Page Layout, Design
 Concept.
- **Basics in Web Design:** Brief History of Internet, What is World Wide Web, Why create a web site, Web Standards Audience requirement.

- **Introduction to HTML:** HTML Documents, Basic structure of an HTML document, Creating an HTML document, Mark up Tags, Heading-Paragraphs, Line Breaks, HTML Tags.
- **Elements of HTML:** Introduction to elements of HTML, Working with Text, Working with Lists, Tables and Frames, Working with Hyperlinks, Images and Multimedia, Working with Forms and controls.
- Introduction to Cascading Style Sheets: Concept of CSS, Creating Style Sheet, CSS Properties, CSS Styling (Background, Text Format, Controlling Fonts), Working with block elements and objects, Working with Lists and Tables, CSS Id and Class, Box Model (Introduction, Border properties, Padding, Properties, Margin properties, 5.9 CSS Advanced (Grouping, Dimension, Display, Positioning, Floating, Align, Pseudo class, Navigation Bar, Image Sprites, Attribute sector), CSS Color, Creating page Layout and Site Designs.
- Introduction to Web Publishing or Hosting: Creating web site structure, Creating Titles for web pages, Themes-Publishing web sites.

Learning Outcomes:

Upon completion of this course, students will be able to

- 1. Know how to create an HTML page and add content and images, links, tables and lists.
- 2. Have a good understanding of the meaning of inheritance, cascade, pseudo classes, pseudo elements and selectors which are concepts that are commonly used in web pages.
- 3. Familiar with using font, background styles and style sheets. This course will use Adobe Dreamweaver to create a website with HTML, CSS, JavaScript, and Flash.
- 4. Understand naming conventions, index files, welcome screen, graphical user interface (GUI) and many more settings that are useful when creating a website successfully.

Recommended Books:

- Cooper, Alan, et al. (2007). About Face 3: the Essentials of Interaction Design. Wiley.
- Nodder, Chris. (2013). *Evil by Design: Interaction Design to Lead Us into Temptation*. John Wiley Et Sons.

Sustainable Environments

Theory

Section A

- Definition of green building, and sustainable and eco-friendly design,
- Global environmental issues as per UN charter.
- Global concern, policy options in developing and developed counters.

Section B

- Inclusive manufacturing its meaning and scope.
- Sustainable and inclusive manufacturing concepts, implementations and concern

Section C

- 1. Science of Acoustics
- 2. Behavior of sound in enclosed space.
- 3. Understanding acoustics and its integration with sound absorbent.
- 4. Thermal Comfort heat flow, thermal properties of material, human response to thermal environment.
- 5. Comfort vs functionality.

Learning Outcomes:

Upon completion of the course, the students will be able to:

- Understand and learn to utilize material in a sustainable manner.
- Understand the parameters required to be considered during the designing of any sustainable projects.

Recommended Books

- Chan, Yenna. (2007). Contemporary Design in Detail: Sustainable Environments. Rockport.
- Mobbs, Michael. (2005). Sustainable House Living for Our Future. Choice Books,

- Winning Strategies for a Sustainable Future Reinhard Mohn Prize 2013. Bertelsmann Stiftung, 2013
- Fulekar, m. H. (2016). *Environment and sustainable development. Springer*, India, private.

Portfolio and Presentation Techniques

Theory

Section A

- Presentation Technique
- Verbal and non verbal communication
- Problems of communication

Section B

- Portfolio Presentation techniques. Industry Visit, Group Discussion, Panel discussion (With External).
- 1. Expansion of Demo- Reel (Digital & Physical)

Section C

- Role of personality and different presentation
- Documentation & Correspondence

Learning Outcomes:

Upon successful completion of the course, students will be able to:

- 1. Deal with nerves and think more positively about public speaking
- 2. Use body language and tone of voice to enhance their presentations
- 3. Use slides and visual aids effectively
- 4. Deliver an enthusiastic and well-practiced presentation
- 5. Determine and develop personal presentation style
- 6. Find ways to overcome nervousness for presentation

Recommended Books

- Gorden L Raymond. (1998). Basic Interviewing Skills. United States, US, Waveland Press.
- Ganguly, Anand. (2017). *Success In Interview*. India In. Ramesh Publishing House.

Portfolio and Presentation Techniques Lab

Practical:

- 2. Class room lectures, Group discussion, power point presentations, one to one interaction, rehearsal, discussion will be applied to understand Portfolio Presentation techniques. Industry Visit, Group Discussion, Panel discussion (With External).
- 3. Expansion of Demo- Reel (Digital & Physical)
- To develop and categories all learning outcomes to make. 3 types of portfolio.
 - a) Digital Portfolio
 - b) PDF portfolio to be sent with CV
 - c) A physical portfolio for personal interviews
- To make presentation of work on PPT to present work as an introduction to oneself
- To understand the basic principal of presentation and use of gestures sound and other behavior patterns

Learning Outcomes:

Upon successful completion of the course, students will be able to,

- 7. Learn, practice and acquire the skills necessary to deliver effective, presentation with clarity and impact.
- 8. Use a structured presentation methodology to prepare presentation material and effective visual aids

Recommended Books

- Gorden L Raymond. (1998). Basic Interviewing Skills. United States, US. Waveland Press.
- Ganguly, Anand. (2017). *Success In Interview*. India In. Ramesh Publishing House.

ANALYTICAL LABORATORY PRACTICE-I

Biotechnology

ALP 1

- 1. To test for adulteration in turmeric.
- 2. To test for adulteration in wheat flour.
- 3. To test for adulteration in ghee.
- 4. To test for adulteration in milk.
- 5. Description of plant identification.
- 6. To study vegetation by Quadrat method.
- 7. Physical Properties of soil viz. pH, density and water retention.
- 8. Qualitative analysis of nitrate, carbonate and replaceable base deficiency in soil Samples.
- 9. Preparation of different culture media
- 10. Sterilization
- 11. Isolation
- 12. Inoculation
- 13. Staining of microbes.

Botany

ALP 1

- 1. Testing of adulterated foods.
- 2. Prepatation of different culture media.
- Sterilization.
- 4. Isolation.

Zoology

ALP 1

- 1. Blood group testing along with Rh factor.
- 2. Counting of R.B.C. and W.B.C.

- 3. Haemoglobin estimation.
- 4. Hematocrit/PCB value
- 5. ESR

Chemistry

- 1. Preparation of adhesives (polymeric adhesive).
- 2. Preparation of antiseptic creams (boric acid containing cream).
- 3. Preparation of surfactants (soap from oil, preparation of Vim).
- 4. Preparation of analgesic ointments (non-staining iodine ointment, e.g. iodex).
- 5. Preparation of azo dyes (methyl red and methyl orange).
- 6. Extraction of caffeine from tea leaves and clove oil from clove.
- 7. Isolation of citric acid from lemon juice.
- 8. Estimation of vitamin-C.

Indian Ethos and Human Quality Development

Objective: Primary purpose is Self-Realization. Further to enable students to understand the main characteristics of Indian Society and Culture. To assimilate Indian ethos and values relevant for management entrepreneurship and development. To empower women students to managerial approaches in conformity with Indian ethos/realities.

- Unit I Concept of Indian ethos & Bhartiyata, Indianism as a Foundation of Indian Management in different tradition. India as a matrix Society, Indian folk lores, proverbs and local idioms as a source of management, Introduction to stories from Panchtantra.
- Unit II Vivekananda's ideas on Vedant, Concept of Purusharth, Managerial Purusharth, Karma yog, Theory K of Indian Management. Basket of needs, Harm minimization & harmonization, Overcoming cognitive dominance, Indian models

- of holistic person and enlightened leadership OSHA, Corporate Rishi, VEDA Model.
- Unit III Business ethos & the concept of Shubh Labh, Spiritually guided materialism. Total Quality of Management (TQOM), Indian ethics & the spirit of development. Emancipatory approach to human & social development.
- Unit IV Character competence, Values & ethics, Value categorization Panchmukhi Vikas, Indian tools of creativity: techniques for mind liberation, Arrival of best: a foundation principle for human values, Per capita happiness
- Unit V Women's issues in the Indian social context in general and organizational context in particular gender issues, discrimination, glass ceiling, sexual harassment, Role Stress, Role balancing, Concept of Yin Trinity, Feminine strengths enabling excellence and growth, Rights of women, Study of successful women from Bhartiya Scriptures

Text Book:

- T1: Sharma Subhash: Management in New Age: Western Windows Eastern Doors Management, WISDOM, New Age International Pvt. Ltd.
- T2: Sharma Subhash: New Mantras in Corporate corridors From Ancient Routes to Global Roots, New Age International Pvt. Ltd.

Reference Books:

- R1. Chakraborty S.K.: Human Values for Managers, Oxford
- R2. WISDOM Publication: Women in Management & Development
- R3. Bhagwad Geeta(Geeta Press)
- R4. Kalia H.L.: Women Work & Family
- R5. Sharma Subhash: Wisdom & Consciousness from the east
- R6. Sharma Vishnu: Panchtantra Stories
- R7. Shastri Madhav: "Kyo"
- R8. Jeevancharya Vigyan(Geeta Press)
- R9. Anand Coomaraswamy: Dance of Shiva.

People Management

Objective: To help students to develop their managerial competencies by understanding the issues related to human behavior and to acquaint the

students with the theory and practice of Human Resource Management systems of contemporary organizations and develop an understanding of the management of human resource.

Note: The paper will contain nine questions. In any one of the units, there would be a 'case study problem' and in that unit there will be no choice question for the candidates. For the remaining four units, there would be two questions from each unit. Candidates are required to attempt four questions, taking at least one question from each unit, in addition to attempting the case study problem.

Course Contents:

- Unit I Personality Definition, determinants of personality, Big Five Model, introduction to MBTI, major personality attributes influencing organizational behavior, personality-job fit theory, person-organization fit Perception Meaning: process of perception, perception distortion, application of perception in organization.
- **Unit II** Learning- Definition, classical conditioning, instrumental conditioning, social learning, role of punishment and rewards in shaping behavior.

Attitudes- Meaning, types of attitudes, cognitive dissonance theory.

Values- Meaning, value system, types of values, values across cultures.

Unit IIIMotivation- Definition, motivation cycle, Theories of motivation: Maslow's Hierarchy of Need's Theory, Herzberg's Two Factor Theory, Theory X and Y, ERG Theory, Mc Cleland's Achievement Theory, Equity Theory.

Leadership- Definition, Theories of Leadership: trait approach, behavioral theories (Ohio State Studies, Michigan Studies, Scandinavian Studies, Blake and Mouton's Managerial grid), contingency theories: (Fiedler's contingency theory, path-goal theory, LMX theory, Hersey and Blanchard's situational theory, Leader-Participation Model), overview of Charismatic and transformational Leadership.

Unit IVGroups-Formal and Informal groups, reasons for group formation, stages of group development- five stages development model, Punctuated-Equilibrium Model, Group Processes-social loafing, social facilitation effect, group vs. individual decision making, group think, group shift.

Power- Meaning: bases of power, power and politics.

Unit V HRM Concept, difference between HRM and Personnel Management.

Human resource Planning- process of HRP, techniques of demand forecasting and supply forecasting.

Job Analysis- process and methods of Job Analysis. Procurement-Recruitment: process and sources of recruitment, Selection: process and tools of selection

Suggested Readings:

- 1. Robbin P. Stephen: Organizational Behaviour; PHI.
- 2. Luthans Fred: Organizational Behaviour; McGraw Hill.
- 3. Pareek Udai: Understanding Organizational Behavior; Oxford University Press.
- 4. Decenzo A. David and Robbins Stephen: Personnel and Human Resource Management; Prentice Hall of India Private Limited.
- 5. Flippo B. Edwin: Personnel Management; McGraw Hill.
- 6. Dessler Gary: Human Resource Management; PHI.

Global Marketing Management

Objectives :To give an overview of the scope and challenges of international marketing and emerging trends in globalisation, the procedure, promotional measures and documentation in the Indian context and electronic marketing.

Note: The paper will contain 10 questions having 2 questions from each unit. Candidates will be required to attempt 5 questions taking 1 question from each unit.

Course Content:

- Unit I Major problems faced by the firms in international marketing. Theories of international trade, International product life cycle, Tariff and Non tariff barriers, Positive and negative aspects of multinational companies. Ethnocentric, polycentric and geocentric orientation. Trading blocks-NAFTA, ASEAN, MERCOSUR, EU etc.
- **Unit II** Marketing mix for international marketing, Standardised marketing mix vs. Customisation of marketing mix, product adaptation and modification, pricing, Distribution channels, using marketing research for international marketing. Information needs and data sources.

- Unit IIIBusiness promotion in International arena: Traditional way, New Trends Online Marketing-Need, various Business Models, Understanding Online Customer, Challenges, Ethical Issues, Advantages and Disadvantages, strategies, push technologies, online catalogues.
- Unit IVBOP and its relevance for Marketing managers, Role of Government in Export Promotion, Export Procedures and documentation, Custom Formalities. Insurance, Preshipment Inspection.
- Unit V Strategic Orientation in international marketing, which market to enter, mode of entry, expanding base, Negotiations with International Customers, Partners and Regulators, Relations of International Marketing with other Departments, Strategy for Building a company wide marketing orientation, using Intranet and Extranet, Introduction to creating a web page, Performance Evaluation

Suggested Readings:

- 1. Cateora: International Marketing, Tata McGraw Hill
- 2. Keegan: Global Marketing, Pearson
- 3. Daniels: International Business, Pearson
- 4. Turban : E-Commerce, Pearson.
- 5. Strauss: E-Marketing, Pearson.
- 6. Nabhi Manual of Export Management, Nabhi Publishers

Intellectual Property Rights

SECTION-A

Intellectual property rights (IPR): Definition, scope, objectives, Concepts and fundamentals: intellectual property (IP), intellectual property protection (IPP) and intellectual property rights (IPR); economic importance, mechanism for protection of intellectual property.

Patents: (Criteria for patentability, Indian patent act. 1970, filing of a patent application, precautions before patenting-disclosures/non-disclosures, publication-article/ thesis, prior art search – published patents search, internet search patent sites, specialized service search requests, costs, patent application forms and guidelines, fee structure, time frames, jurisdiction aspects, types of patent application- provisional, non-provisional, PCT and convention patent applications, international patenting requirement procedures and costs.

Patent infringement: Meaning, scope, litigation, drug related patents infringements, case studies and examples, patenting by research students.),

SECTION-B

Copyright, **Trademarks:** (Introduction, meaning of trademark, criteria for eligibility, filling application for trademark registration).

Trade secrets: Scope modalities and protection case studies. Role of IP in pharmaceutical industry.

Trade related aspects of intellectual property rights: Intellectual property and international trade, concept behind WTO (World Trade Organization), WIPO (World Intellectual Property Organization), GATT (General Agreement on Tariff and Trade), TRIMS (Trade Related Investment Measures) and GATS (General Agreement on Trades in Services).

WTO-objectives, scope, functions, structure, status, membership and withdrawal, dispute settlement, impact on globalization

SECTION-C

Technology development/transfer commercialization related aspects: Meaning, drug related technology development, bioequivalence (BE), scale-up, semi-commercialization and commercialization—practical aspects and problems, significance of transfer of technology (TOT), bottlenecks, managing technology transfer, guidelines for research students, scientists and related personnel, TOT agencies in India APCTD, NRDC, TIFAC, IBCIL, TBSE/SIDBI.

TOT related documentation: Confidentiality agreements, licensing, MOUs, legal issues, compulsory licensing and issuing of access to medicines, DOHA declaration.

Related quality systems: Objectives and brief review of US-FDA, UK-MCA, and TGA guidelines.

Standard institutes and certification agencies like: ISI, BSS, ASTM.

Community Work and Social Action

Rationale:

Through this paper students are expected to develop their understanding of community dynamics, community power structure and organization in society. Students may also understand the different approaches to

community organization, locality development, community problem. In other words, this paper intends to develop amongst students, the analytical skills and attitudes appropriate for community organization and social work.

Section - A

Community: Systems and Characteristics, community as a social system.

Framework to understand the community: Social system, Power system and Ecological system.

Community work as a method of social work, Community development, community organization and Social planning.

Section - B

Community Work: Values, Assumption, Goals and Principles, Stages of Community Work and Role of Social Worker.

Models of Community Work: Neighborhood Development Approach, Area Development Approach, Local and Economic Development approach.

Accountability Mechanism.

Strategy for understanding Community and Developing Intervention.

Use of community Intervention Techniques: Participatory Rural Appraisal (P.R.A.) Participatory Learning Action (P.L.A.), Problem Analysis, Stakeholder Analysis, Strategic Planning.

Community Profile, Need Assessment.

Section C

Social Action: History of Social Action in India

Concept and Needs, Goals and Principle, Social Action as a Methods of Social Work, Process of Social Action, Gandhian Perspective of Social Action, Paulo Friere's Technique of Conscientisation. Strategies for Social Action from various Social Movements.

References:

- 1. Ross, M.G., (1967): Community Organisation: Theory, Principles and Practice, New York. Harper & Row.
- 2. Gangrade, K.D. (1971): Community Organisation in India, Bombay; Popular Prakashan.
- 3. Murphy, C.G. (1954): Community Organisation Practice, Boston: Houghton Miffin Co.
- 4. Twelvetrees, Alan C. (1982), Community Work, Palgrave Macmillan : New York.
- Dayal, R. (1970): Panchayati Raj India, Delhi: Metropolitan Books Co.
- 6. Panda, S., (1985): Community Power, Elites and Political Zodernisation, Delhi. B.R. Pub. Company.

- 7. Dandeker, V.M. (1977): Nature of Class Conflict in the Indian Society, Bombay. Bharat Foundation.
- 8. Development Support Team, (1987): Development Support Community Development: An Attempt by People's Team. Multipurpose Development Society. Pune.

Communication Skills

Objectives:

- To overcome hesitation and fear of public speaking
- To improve communication skills and enhance personal effectiveness
- To improve writing skills and instill confidence while writing for job applications
- Developing skills for facing group discussions and job interviews confidently.

Section-A

Types of Communication- oral communication, written communication-formal, informal, Business letters – types of letter, writing letters, business correspondence, applying for job, Resume writing, filling out employment application.

Language skills: constructing correct sentences by using the right tenses, prepositions, concord. Vocabulary building.

Section-B

Report writing- Defining and determining reports purpose, Report Planning, collecting information, Developing an outline, section of report, types of report, writing short reports, writing long project reports. Writing an abstract for a research paper, dissertation, project report, guidelines for writing a good abstract. Writing a project synopsis-research project synopsis and summer training project synopsis.

Guidelines for writing a good research paper.

Section-C

Introduction to soft skills and hard skills, self development-etiquette and manners, positive attitude and self confidence, motivation skills, communication skills

Body language: Facial Expression, Posture, Gesture, eye contact, Appearance (Dress Code). Interpersonal Skills: Negotiations, listening skills, social skills, assertive skills, cross-cultural communications.

Goal setting, priority management, time management & career planning. Resume building, Group discussions and Interview skills: Effective interview techniques, mock interviews, stress interviews.

Text Books:

- 1. Raman Meenakshi & Sharma Sangeeta, Technical Communication Principles and Practice, Oxford University Press, New Delhi, 2004.
- 2. Kaul, Asha, Business Communication 2nd edition, PHI learning Pvt Ltd, New Delhi, 2009.
- SOFT SKILLS, 2015, Career Development Centre, Green Pearl Publications.

Reference Books:

- 1. Tyagi Kavita & Mishra Padma, Advanced Technical Communication, PHI learning Pvt Ltd. New Delhi, 2011.
- 2. Sharma Sangeeta & Mishra Binod, Communication skills for Engineering and Scientists, PHI learning Pvt Ltd, New Delhi, 2009.
- 3. Flatley, Lesiker., Basic Basic Business Communication, 10th edn. New Delhi: Tata McGraw Hill, 2005.
- 4. Flatley, Lesiker., Basic Business Communication: Making Connections in a Digital World, 11th edn. New Delhi: Tata McGraw Hill, 2008.
- 5. Chaturvedi, P.D. and Mukesh Chaturvedi, Business Communication, 2_{nd} edition New Delhi:Pearson, 2011.
- 6. Covey Sean, Seven Habit of Highly Effective Teens, New York, Fireside Publishers, 1998.
- 7. Carnegie Dale, How to win Friends and Influence People, New York: Simon & Schuster, 1998.
- 8. Thomas A Harris, I am ok, You are ok, New York-Harper and Row, 1972.

Stage Performance - I

- 1. Solo performance (30 minutes) selected by student according to syllabus
- Ability to recite the Boles giving Taal during the performance as in a Traditional Kathak recital.

Paper III – IV (Practical)

List of Taals:

- (a) Trital (b) Chautal (c) Jhaptal (d) Pancham savari (e) Dhamar Taal
- (f) Rudra Taal (g) Shikar Taal

Note

- 1. Performance of any three taals according to syllabus.
- 2. Special Attention of used Bandish in performance.
- 3. Compulsory practice in variety of Bandish and Layakari.

Stage Performance - II

- 1. Solo performance (30 minutes) selected by student according to syllabus.
- 2. Ability to recite the boles giving taal during the performance as in a traditional Kathak recital.

Paper III –IV (Practical)

List of Taals:

- (a) Trital (b) Ektal (c) Sooltal (d) Gaj-Jhampa tal
- (e) Aadachautal (f) Ashtmangal (g) Matttal

Note:

- 1. Performance of any three taals according to syllabus.
- 2. Special Attention of used Bandish in performance.
- 3. Compulsory Practice in variety of Bandish and Layakari.

Books -

1. Kathak Nritya Parampara - Dr. Prem Dave

2. Kathak Nritya Shiksha Part – 1, 2 - Dr. Puru Dadhich

3. Aitihasik Pariprekshay main Kathak Nritya - Maya Tak

4. Bharat ke Shastriya Nritya - Chaya Bhatnagar

5. Kathak Darpan - Pt. Tirath Ram Aazad

6. Natya Shastram - Aacharya Bharat

7. Natya Shastram - Shri Paras Nath Dwivedi

8. Natya Shastra ka Itihas - Dr. Paras Nath Dwivedi

- 9. Natya Shastra
- 10. Braj ka Ras Rang
- Bhartiya Natya Parampara aur Abhinaya Darpan
- 12. Abhinaya Darpan
- 13. Abhinaya Darpanam
- Sangeet Ratnakar
- 15. Sangeet Ratnakar
- 16. Dashrupak
- 17. Kathak Prasang
- 18. Hamare Sangeet Ratna
- 19. Kathak Nritya
- 20. Bhartiya Sangeet aur Sangeetagya
- 21. India's Kathak Dance Centre
- 22. Dance of India
- 23. Indian Classical Dances
- 24. Some Dancers of India
- 25. Natya Shastra

- Shri Braj Ballabh Mishra
- Shri Ram Narayan Agrawal
- Vachspati Gerola
- Dr. Puru Dadhich
- Aacharya Nandikeshwar
- Sharangdev
- Dr. Subhadra Choudhary
- Aacharya Dhananjay
- Rashmi Vajpai
- Dr. Lakshmi Narayan
 - Garg
- Dr. Lakshmi Narayan
 - Garg
- Shri Ramlal Mathur
- Reginald Massey
- David Waterhouse
- Kapila Vatsyayan
- Susheela Mishra
- Kapila Vatsyayan

Stage Performance-III

- 1. A perfect independent Kathak Dance performance (30 minutes)
- Ability to recite the Boles giving taal during the performance as in a traditional way.

Stage Performance – IV

- 1. A perfect independent Kathak Dance performance (30 minutes)
- 2. Ability to recite the Boles giving Taal during the performance as in traditional way.

Books -

Natya Shastram

- Shri Paras Nath Dwivedi

2	Him I: Ninters Chapters		Chai Daha I al Chastai
2.	Hindi Natya Shastram	-	Shri Babu Lal Shastri
3.	Natya Shastra ka Itihas	-	Shri Paras Nath Dwivedi
4.	Taal Vadhya Shastra	-	Dr. Manohar Bhal Chandra
			Rao Marathe
5.	Bhartiya Talon ka Shastriya	-	Dr. Arun Kumar Sain
	Vivechan		
6.	Saundarya Shastra evam Ras	-	Dr. Nirmala Jain
	Nishpatti		
	Kathak Darpan	-	Pt. Tirath Ram Azad
8.	Kathak Nritya Parampara	-	Dr. Prem Dave
9.	Kathak Nritya Shiksha Part – 1, 2	-	Dr. Puru Dadhich
10.	Bhartiya Sanskriti main		
	Kathak Parampara	-	Mandvi Singh
11.	Thumri ki Utpatti, Vikas aur Shailig	ya-	Shri Shatrudhan Shukla
12.	Thumri Parichaya	-	Shri Leela Karwal
13.	Sangeet Nibandh	-	Shri R.S. Agnihotri
14.	Sangeet Nibandh Mala	-	Shri Jagdish Narayan Pathak
15.	Sangeet Nibandh Sangrah	-	Shri Harishchandra
			Shrivastava
16.	Sangeet Nibandhawali	-	Dr. Lakshmi Narayan Garg
17.	Bhartiya Sangeet aur Sangeetagya	-	Shri Ramlal Mathur
18.	Rangmanch	-	Shri Sitaram Chaturvedi
19.	Ras Mimansa	-	Aacharya Ramchandra Shukla
20.	Sahitya Darpanam	-	Pt. Shankhraj Sharma
	Rengmin		,
21.	Kathak ke Prachin Nrityang	-	Geeta Rachuveer
22.	Bhartiya Natya Parampara aur		
	Abhinaya Darpan	-	Vachspati Gerola
23.	Abhinaya Darpan	-	Dr. Puru Dadhich
24.	Tabla Puran	-	Pt. Vijay Shankar Mishra
25.	Taal Parichya Part – 2, 3	-	Girish Chandra Shrivastava

Ecology and Environment

Section A

Introduction to Environment

- a) Concept of Environment
- b) Factors of the environment: Physiographic, Climatic, Edaphic, Biotic and Anthropogenic.
- c) Bio Geochemical Cycles: The Carbon cycle, the Oxygen cycle, the Nitrogen cycle.
- d) The Hydrological cycle.

Section B

Concept of Ecology, Ecosystem and Biomes

- a) Concept of Ecosystem: With special reference to desert, forest and aquatic ecosystem.
- b) Food chain, Food web & succession.
- c) Ecological Pyramids and their types.
- d) Energy flow in ecosystem.
- e) Concepts of Biomes. Major biomes of the world: Tropical forest, Temperate forest, Grassland and Tundra.

Section C

Environmental Pollution and its Effect

- a) Environmental pollution-Pollutants and sources:
 - 1. Water pollution,
 - 2. Soil pollution,
 - 3. Air pollution and
 - 4. Noise pollution.
- b) Global warming
- c) Global climatic changes: Indicators and Theories
- d) Biodiversity: Threats and Conservation

Books Recommended:

- 1. Atkinson & Raw, Michael (2007): Biogeography. Philip Allan Updates.
- 2. Gautam, A (2007): Environmental Geography, Sharda Pustak Bhawan, Allahabad.
- 3. Gautam, A. (2005): Resource and Environment (in Hindi), Sharda Pushtak Bhawan, Allahabad.
- 4. Huggett, R. J (1998): Fundamental of Biogeography. Routledge, London.

- 5. Kayastha, S.L. and Kumra V.K. (1986): Environmental Studies. Tara Book Agency, Varanasi.
- 6. Mathur, H.S.(1998): Essentials of Biogeography, Pointer Publishers, Jaipur.
- 7. Mehtani, S. & Sinha, A. (2010): Biogeography. Commonwealth Publisher.
- 8. New begin: Plant and Animal Geography.
- 9. Odum, E. P. (1975): Ecology. Rowman and Littlefield, Lanham USA.
- 10. Odum, E.P.(1968): Fundamentals of Ecology, W.B. Sanders. Company, Philadelphia and London.
- 11. Saxena, H. M. (1999): Environmental Geography. Rawat Publications., Jaipur and New Delhi.
- 12. Saxena, H. M. (2000): Environmental Management. Rawat Publications., Jaipur and New Delhi.

Environmental Impact Assessment and Management

Section A

Introduction:

- a) Historical development of Environmental Impact Assessment (EIA)
- b) Definition and scope of EIA
- c) Objectives of EIA
- d) Basic EIA principles.

Impact study:

- a) Approach for environmental impact studies
- b) EIA as planning tool
- c) EIA methodology
- d) Predictive model of impact assessment.

Section B

Impact Prediction and assessment for air, water and noise: Air:

- a) Knowledge of air quality, Air quality standards, Sources of pollutants, Effects of pollutions
- b) Conceptual approach for air impacts prediction.

Water:

- a) Information on water quality (Surface water and ground water), water quality standards
- b) Identification and prediction of impact and assessment.

Noise:

- a) Information on noise legislation and guidelines
- b) Methodology for noise-impacts prediction
- c) Assessment of impact significance.

Section C

Environmental Risk Assessment (ERA) and Management in EIA:

Environmental risk assessment, treatment of uncertainty, key steps.

Management Plan:

- a) Impact prediction, evaluation and mitigation
- b) Preparation of EIA plan for industrial project and functions
- c) Factors for consideration, managing the EIA process, Monitoring and auditing.

Books Recommended:

- 1. Attri S. D., Tyagi A.," Climate Profile of India", Ministry of Earth Sciences, New Delhi.
- 2. Glasson J., Therivel R., ChadwickA., "Introduction to Environmental Impact Assessment", Routledge- Taylor & Francis Group.
- 3. Lawrence, D.P., (2003): Environmental Impact Assessment Practical solutions to recurrent problems, Wiley-Interscience, New Jersey.
- 4. Petts, J., (1999): Handbook of Environmental Impact Assessment, Vol., I and II, Blackwell Science, London.

Human Physiology

Objectives:

- Enabling the students to understand the integrated functioning of all systems in the body.
- Enabling the students to understand the alteration and adaptation of the functions of various organs in relation to internal and external environment in different physiological, pathological and environmental conditions.

• To acquaint the students with certain techniques/methods of hematological and urine analysis.

Section A

- Definition of anatomy and physiology. Importance of the study of physiology. Brief overview of the cellular and tissue levels of structural organization.
 - (a) Cell structure and function: Various sub cellular organelles and their functions. Transport across cell membrane and primary cellular communication
 - (b) Brief overview of the various types of elementary tissues and their general characteristics.
- 2. Fundamental aspects of the Nervous System
 - Structure and functions of brain and spinal cord and reflex action, conduction of nerve impulse, synaptic transmission and role of neurotransmitters.
- 3. Endocrine System: Main structural features and functions of endocrine glands:- Hypo-thalamus, pituitary, thyroid, parathyroid, adrenals, ovary, testis, a and β endocrine cells of the pancreas.

Section B

- 1. Gastrointestinal Physiology: Secretary, digestive and absorptive functions of the organs of gastrointestinal tract. Roles of liver, pancreas and gall bladder and their dysfunctions. Brief overview of absorption and transport of macronutrients: carbohydrate, fat, protein and micronutrients; calcium, iron and zinc
- 2. Circulatory System
 - (a) Blood Physical characteristics, general functions, components and their brief description, Blood coagulation, blood groups. Brief overview of anaemia and its types.
 - (b) Structure and function of heart, blood vessels, regulation of cardiac output, blood pressure and its significance, hypertension
- 3. Excretory System:- Structure and function of kidney, nephron. Process of urine formation, role of kidney in maintaining blood pH, acid base, electrolyte and water balance.

Section C

1. Homeostasis and its regulation under different conditions by the nervous and endocrine system.

- 2. Musculo- Skeletal System-: Brief overview of structure and function of muscles. Fundamental points of muscle contraction, metabolism and fatigue.
- 3. Immune System: Cell mediated and humoral immunity, defensive properties of neutrophils and macrophages, phagocytosis and inflammation allergy.
- 4. Sense organs: Brief overview of the structure of skin, eye, ear, nose and tongue and their role in the perception of stimuli.

References:

- 1. Chatterjee, C.C. 1992 Human Physiology, Vol I & II (11th Edition) Medical Allied Agency, Calculta
- 2. Guyton, A. C. and Hall, J.B. (1995) Text book of Medical Physiology (9th edition) W.B. Saunders company, A division of Harceurt Brace and company.
- 3. Wilson, K.J.W. and Waugh A. (1996): Ross and Wilson, Anatomy and physiology in Health and Illness, 8th edition, Churchill Livingstone.
- 4. Tortora, J. and Grabowski S.R.(1996). Principles of Anatomy and Physiology 8th (ed.) Harper Collins College Publisher
- 5. Kale C.A. and Neil F. Samson N.F. Weight's Applied Physiology, O.U.P. (1994)
- 6. Sharma, S. Practical Biochemistry 1993. Classic Pub. House, Jaipur.

Human Physiology Lab

- Determination of blood groups and clotting time.
- Estimation of haemoglobin by cyan methemoglobin method.
- Examination of urine: Physical examination, specific gravity, pH, Abnormal (Pathological) Constituents: protein, glucose, ketone bodies, bile salts and bile pigments
- Measurement of blood pressure
- Microscopic examination of cells and tissue

Nutrition for Health and Fitness

Objectives:

- To understand the components of health and fitness and the role of nutrition in these.
- To make nutritional dietary and physical activity recommendations to achieve fitness and well being.
- To develop ability to evaluate fitness and well being.

Section A

- 1. Introduction to fitness, wellness and lifestyle management. Basic principles of physical fitness. Definition, components and assessment criteria of age specific fitness and health.
- 2. Holistic approach to the management of fitness and health:
 - Energy input and output
 - Diet and Exercise
 - Effect of specific nutrients on work performance and physical fitness.
- 3. Nutrition, exercise, physical fitness and health inter-relationship

Section B

Dietary supplements and ergogenic aids

- 1. Nutrition in sports: Sports specific requirements Diet manipulation pre performance and post game meal. Diet for person with high energy requirements, stress, fracture and injury.
- 2. Water and electrolyte balance: Loss and their replenishment during exercise, effect of dehydration, sports drinks.
- 3. Effect of work environment on health, safety, and performance adaptive responses
 - (i) physical factors-heat, cold, noise, vibration and light.
 - (ii) nutritional factors (water, electrolyte, energy, foods, protein, vitamin, essential trace minerals),
 - (iii) Environmental contaminates (dust, gases, fumes, chemical)

Section C

- 1. Significance of physical fitness and nutrition in the prevention and management of -
 - weight
 - diabetes mellitus
 - Cardiovascular disorders
- 2. Nutrition and exercise regimes for pre and post natal fitness
- 3. Alternative systems for health and fitness like ayurveda, yoga, meditation, vegetarianism and traditional diets

References:

- 1. Mahan, L.K. & Eccohstum P.S (2000) Krause's Food, Nutrition and Diet therapy 10th Edition, W.B. Saunders Ltd.
- 2. Sizer F and Whitney, E (2000) Nutrition concepts and controversies 8th Edition, Wadsworth, Thomson Learning.
- 3. Whitney E.N. & Rolfes S.R. (1999) Understanding Nutrition 8th Edition west wads worth, An Multinational Thomson Publishing Co.
- 4. Ira Wolinsky (Ed.) Nutrition in Exercise and spots 3rd Edition.
- 5. Parizkova, J. Nutrition, Physical activity and heath in early life, Ed. Wolinsky, CRC Press.
- 6. Shils, M.E. Olson . J.A., Shike, N. and Ross, A.C. (Ed.)(1999) Modern Nutrition in Health and Disease 9th Edition Williams and Wilkeins.
- 7. MCArkle, W. Katch . F. and katch, V (1996) Exercise physiology Energy, Nutrition and human Performance, 4th Edition Williams and Wilkins, Philadelphia.

Journals:

- 1. Medicine and Science in sports and Exercise
- 2. International Journal of Sport Nutrition

Nutrition for Health and Fitness Lab

- 1. Assessment of nutritional status and Physical fitness
 - Height, weight, BMI
 - Mid Upper arm circumference
 - Skin fold thicknesses
 - WHR
 - Diet survey and diet calculations

Entrepreneurship

Objectives: The aim of this course is to spread an entrepreneurial culture, by combining a set of technical and social skills, which are aimed to encourage the creation of new entrepreneurship or intraentrepreneurship projects. This course aims to contribute to the

- development of an entrepreneur attitude and to make students look closely to subjects related to the entrepreneurship process.
- **Note:** The paper will contain 10 questions having 2 questions from each unit. Candidate will be required to attempt 5 questions taking 1 question from each unit.
- Unit 1: What is Innovation? What is Entrepreneurship? The Power of Entrepreneurship, Entrepreneurial traits and competencies, entrepreneur vs intrapreneur, social intelligence for entrepreneurs, classification and types of entrepreneurship, Factors affecting entrepreneurial growth
- Unit 2: Motivation, Entrepreneurial Motivational training, Different Motivational theories, Grass-root ideas in entrepreneurship, Meaning of rural entrepreneurship and problems of rural entrepreneurship

Entrepreneurial support systems- current government policies and measures towards promotion of entrepreneurship; Incubation cell

- Unit 3: Social Entrepreneurship: Concept, Models of social entrepreneurship (Elkington & Hartigan 2008) and relevant case studies, Triple bottom line and role of social entrepreneurs
 - Women Entrepreneurs: Reasons for low women entrepreneurs in India, role, problems and prospects, stories of women entrepreneurs.
 - Why entrepreneurs fail, how they succeed? Case studies of start ups
- Unit 4: MSME: Definition, role in India's economic development, Sources of information for entrepreneurs in India, Incentives and benefits available to MSME entrepreneurs. Creating Entrepreneurial Venture: Ideation sources of new ideas, methods of generating ideas; creative problem solving; opportunity recognition; environmental scanning: SWOT, PESTLE; competitor and industry analysis
- Unit 5: Feasibility study: Technical, Financial, Marketing, Personnel and Management, preparing business plan. Sources of capital: debt or equity financing, commercial banks, venture capital; financial institutions supporting entrepreneurs Legal issues: brief overview of- intellectual property rights, patents, trademarks, copy rights, trade secrets, licensing. Business Crises

Suggested Readings:

1. Jain P.C.: Hand Book for New Entrepreneurs, Oxford University Press

- 2. Hisrich Robert D., Manimala Mathew J., Peters Michael P., Shepherd Dean A.: Entrepreneurship, McGraw Hill Publication
- 3. Desai Vasant : Dynamics of Entrepreneurial Development & Management, Himalaya Publishing House.

Indian Ethos and Culture

Objective: The course aims to develop understanding about the main characteristics of Indian ethos and culture along with relevance in contemporary times. To assimilate Indian ethos and values relevant for commerce, management and entrepreneurship. To enable participants with skill to analytically approach Indian ideas for application in life.

- **Note:** The paper will contain 10 questions having 2 questions from each unit. Candidate will be required to attempt 5 questions taking 1 question from each unit.
- Unit 1: Rationale for studying Indian ethos, Overcoming cognitive dominance, Concept of Indian ethos and culture, Indian cultural traditions, Indian folk lores, proverbs and local idioms as a source of management, Insights for commerce from of Panchtantra stories.
- Unit 2: Concept of Yin Trinity and implications, Vivekananda's ideas on Vedant, Concept of Purusharth, Karma Yog,Basket of needs, Harm minimization & harmonization, Commerce principles in Kautilya's Arthshastra
- Unit 3: Character competence, Values & ethics, Value categorization, Panchmukhi Vikas, Dada Bhai Naoroji's Drain theory, Brain Drain and economic implications, Integrative intelligence as a solution to VUCA.
- Unit 4: Indian models of holistic approach OSHA, VEDA Model, Indian tools of creativity: Techniques for mind liberation, Arrival of best: A foundation principle for human values
- Unit 5: Indian ethics & the spirit of development, Business Systems in Ancient India, Business ethos & the concept of Shubh Labh, Spiritually guided materialism, Bharatiya Model of Financial Literacy

Suggested Readings:

- 1. Subhash Sharma: Management in New Age: Western Windows Eastern Doors Management, New age publication.
- Management Concepts in Ancient Indian Psycho- Philosophical Thought and Their Significance for Present Day Organization-Ipshita Bansal, Popular Book Depot.
- 3. Subhash Sharma: New Mantras in Corporate corridors From Ancient Routes to Global Roots, New age Publications.
- 4. S.K. Chakraborty: Human Values for Managers, Oxford University Press.
- 5. Sharda S. Nandram, Puneet K. Bindlish, Wim A.J. Keizer: Understanding Integrative Intelligence Embodied in S model, Springer.
- 6. Sharda S. Nandram, Puneet K. Bindlish: Managing VUCA Through Integrative Self- Management, Springer
- 7. Bhagwad Geeta(Geeta Press)
- 8. Vishnu Sharma: Panchtantra Stories, Chaukhamba Publications.
- 9. Madhav Shastri: "Kyo", Chaukhamba Publications.
- 10. Jeevancharya Vigyan(Geeta Press)
- 11. A history of Indian Econmic Thought: Asit Das Gupta Routledge Publication.

Personal Financial Management

- **Objective:** The objective of the course is to expose students to Personal Financial Management and its various components to enable them to improve personal financial management skills.
- **Note:** The paper will contain ten questions having at least two questions from each unit. Candidates are required to attempt five questions in all taking at least one question from each unit.
- Unit 1: Personal Finance: Introduction, Goals, Need, Personal Financial Statements, Personal financial planning process, Life cycle approach to financial planning, Components of financial plan, developing financial plan. Budgeting: Principles of Successful Budgeting, Spending money wisely, Time value of Money, careers in personal finance advisory, Bharatiya Model of Financial Literacy.
- Unit 2: Introduction to various investment avenues: Mutual Fund, Types of Mutual Fund, Risk return ratio, performance evaluation, NAV

Calculation (through excel). Insurance: Types of Insurance products Life and Non Life, Principle of insurance, Need for insurance, Requirement of Insurable risk, Role of insurance in portfolio diversification, Steps in Insurance Planning. Basics of Equity and Debt markets Other Investment avenues: Gold, PPF, Post office savings Scheme, Various Types of Bank Deposits.

- Unit 3: Retirement Planning: Introduction to retirement planning process, estimating retirement corpus, determine retirement corpus, retirement products. Retirement solutions and pension plan, choosing the right product, Reverse Mortgage as a retirement avenue. Estate planning: Relevance, consequences of dying intestate, Element of Estate Planning, Tools of Estate planning, Wills, Gifts, Joint holding and nomination, Family settlement and trusts, Power of Attorney and Mutation, Succession Act (Hindu & Indian).
- Unit 4: Tax planning: Heads of income, Exemptions and Deductions, Types of Assesses, Rates of Taxation, obligations for filling and reporting, return filling procedure, tax aspects of investment products and types of tax benefits, taxation of dividends taxation of interest income, taxation of capital gain, set off and carry forward of losses, Advance Tax planning and instruments for tax planning.
- Unit 5: Regulatory Bodies and Ethical issues: Introduction to Regulatory bodies and various functions of the regulatory bodies RBI, SEBI, IRDA, redressal in banking, investor grievance redressal mechanism

Suggested Readings:

- 1. Swapna Mirashi, I can do Financial Planning (Academic Foundation New Delhi)
- 2. Tax Planning by IMS Proschool (Mc-Graw Hill)
- 3. Articles by Monika Halan, accessible on https://monikahalan.wordpress.com/
- 4. Investment Planning by IMS Proschool (Mc-Graw Hill)
- 5. Gopinath, Banking Principles & Operations- Snow white 2011.
- 6. Retirement Planning & Employer Benefits by IMS Proschool (Mc-Graw Hill)
- 7. Matai Sanjay, Your guide to Finance & Investments by Network 18 Publication Pvt Ltd.

- 8. Irani Mehrab, Commandments for Financial Freedom by Vision Books.
- 9. Introduction to Financial Planning by IMS Proschool (Mc-Graw Hill)
- Pandit Amar, The only Financial Planning book that you ever need Network 18 Publication Pvt Ltd.
- 11. NISM-Series-X-A: Investment Adviser (Level 1) Certification Examination.
- 12. NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination

Computer Applications

Learning Outcome:

After completion of the course, the student will be able to:

- Basic knowledge of the computer system and its peripherals.
- Concept of operating system and their functions
- Understand databases and Network applications.
- Understand concept of Application software tools like MS- WORD, MS-EXCEL, MS-PowerPoint and SPSS.

Section- A

Introduction: What is Computer, Applications of computer, Elements of computer: Hardware & Software, Block Diagram of Computer System Functions of the computer components, Concept of Data and Information, Evolution and Classification of Computer Software: What is Software and Types of Software Operating System: Introduction and function of Operating System Programming languages: Generation of languages, Language Translators: Assembler, Compiler and Interpreter Database Management Systems: Concepts & Applications

Section-B

PC Software:Word Processing: Creating, opening and Saving Documents, Formatting, Inserting Tables and Pictures and Mail Merge Spreadsheets Package: Creating, Opening & Saving Worksheets, Use of Formulas & Functions, Charts: types, creation, editing. Sorting and Filtering of Data, What-if analysis: Scenarios & pivot table, Goal Seek. Presentation Packages: Introduction to Presentation Packages, Inserting Slides,

Templates, Slide views, Graphics and Animation Introduction to Computer Network: What is Network, Advantages, types of Network: LAN, WAN, MAN Internet: Applications, Web browsers, Servers, Internet Services-WWW, E-mail, URL, Search Engines, Concept of Blogging

Section- C

Analysis through Statistical Packages (SPSS): Types of Variables, Classification and Tabulation of Data, Graphical presentation of Data: Histogram, Bar, and Pie Diagram. Import/Export of Data, Measures of Central tendency: Mean, Mode, and Median. Measure of Dispersion: Standard Deviation. Correlation analysis, Chi-Square Test.

Recommended Books:

- Sinha, P. K. (2004). *Computer Fundamentals: Concept, Systems and Applications*. BPB Publications.
- Goel, A. Computer Fundamentals. Pearson Education
- Jaiswal, S., (1996) *P.C.Software Bible*. Galgotia, New Delhi.
- Garg, P., Gupta, S. (2013). *Computer Fundamentals & Office Automation*. Shubham Publications.
- Govil, M.C. *Computer Fundamentals and Programming in C.* Jaipur Publication House.
- Forouzan, A. B. *Data Communications & Networking* (4th ed.). Tata McGraw-Hill.

E- Learning Material

1. https://nptel.ac.in/courses/106105082/

Computer Applications Lab

Learning Outcome:

After completion of the course, the student will be able to:

S.No.	Practical
1.	Introduction to SPSS
2.	Introduction to Different Table
3.	How we represent data in SPSS (Data View and Variable View)

4.	How we import and export the file in SPSS	
5.	Creation of Histogram, Bar and Pie diagram	
6.	Import the file in SPSS and Perform following operation	
	(i) Frequency Analysis for each variable and draw Histogram.	
	(ii) Descriptive Analysis for each variable	
7.	Perform frequency analysis Generate Pie chart showing age in X	
	axis, Gender in Y axis Slice by name, age, gender.	
8.	Perform the Mean Mode and Median operation using SPSS on	
	given data set.	
9.	Perform frequency analysis Generate Bar chart between age and	
	education. Define, id, Name, Age, Gender, Educational	
	Qualification, Educational course	
10.	Find out the standard deviation using SPSS on given data set.	
11.	Perform correlation analysis	
12.	Perform nonparametric chi Square test.	

Recommended Books:

- R1. Sinha, P. K. (2004). Computer Fundamentals: Concept, Systems and Applications.
- R2. Goel, A. Computer Fundamentals. Pearson Education
- R3. Govil, M.C. Computer Fundamentals and Programming in C. Jaipur Publication House.
- R4. Forouzan, A. B. *Data Communications & Networking* (4th ed.). Tata McGraw-Hill.

Artificial Intelligence

Objectives:

- To understand the introduction to concept of Artificial Intelligence.
- · To learn knowledge representation in A.I.
- To understand concept of Cognitive Computing.
- To understand the process of design and implement a Cognitive System.

Section-A

Introduction to Artificial Intelligence, General problem solving, state space and graph model techniques, Heuristic designs, Aim-oriented

heuristic algorithms versus solution guaranteed algorithms, Game playing strategies.

Knowledge Representation: Knowledge representation tools, First order predicate calculus. Understanding Logic Programming Using PROLOG. Semantic Nets, Frames, production rules, knowledge base, the inference system, forward and backward deduction.

Section-B

Cognitive Computing: Introduction, Elements of Cognitive Systems. Understanding Complex Relationships Between Systems. Understanding Cognition. Transformation of Artificial Intelligence into Cognitive Computing Systems. Uses of Cognitive Computing Systems. System of Judgment and Choice. Designing a Cognitive System. Graining Insight from Data. Bringing Data into Cognitive System. Defining Objective. Defining Domain. Understanding the Intended Users and Defining their Attributes. Defining Questions and Exploring and Refining the Corpora. Insights. Creating Training Testing Understanding Natural Language. Parsing techniques, context free and transformational grammar, transition net, augmented transition nets, Fillmore's grammar, Shanks conceptual dependency. Grammar free analysers, Sentence generation, Translation.

Section-C

Enabling Reasoning in Cognitive Systems Through Probabilistic Learning: Bayesian Networks, Approximate Inference, Constructing Bayesian Networks. Markov Chains, Hidden Markov Model: Forward Algorithm, Viterbi Algorithm, Baum-Welch Algorithm. Application of Cognitive Computing: Enhancing the Shopping Experience. Leveraging the Connected World of Internet of Things. Voice of the Computer. Fraud Detection. Case Study of Cognitive Computing Systems.

Text and Reference Books:

- 1. Stuart Russell and Peter Norvig, "Artificial Intelligence: A Modern Approach", 3rd Ed, Prentice Hall, 2013.
- David Vermon, "Artificial Cognitive Systems A Primer", MIT Press, 2014.
- 3. Rich Elaine & Knight Kevin, Artificial Intelligence, 3 Ed, Mc-Graw Hill, 2011.
- 4. Patterson Dan W, Introduction to Artificial Intelligence and Expert Systems, Pearson Education, India, 1990.

- 5. Avron Barr & Edward A. Feigenbauen, The Handbook of Artificial Intelligence., Addison-Wesley Pub, Vol I, Vol II, Vol III, 1982.
- 6. James Allen, Natural Language Understanding, 2nd Edition, Pearson Education India, 1995.

Cyber Security

Section-A

Introduction to Cybersecurity, Cybersecurity: objectives, roles; Differences between Information Security & Cybersecurity. Cybersecurity Principles: The CIA triad (Confidentiality, integrity, & availability), Authentication & non-repudiation

Section-B

Information Security (IS) within Lifecycle Management, Lifecycle management landscape, Security architecture processes, Security architecture tools, Intermediate lifecycle management concepts, Risks & Vulnerabilities, Basics of risk management

Section-C

Operational threat environments, Classes of attacks, Incident Response, Incident categories Incident response, Incident recovery, Future Implications & Evolving Technologies, New & emerging IT & IS technologies Mobile security issues, risks, & vulnerabilities, Cloud concepts around data & collaboration

Text Books:

- 1. Introduction to Computer Networks and Cybersecurity, Chwan Hua, CRC Press, Taylor and Francis.
- 2. The Art of Software Security Assessment: Identifying and Preventing Software Vulnerabilities, 1st Edition, Addison-Wesley Professional.

Reference Book:

 Cyber Security Essentials, James Graham, CRC Press, Taylor and Francis.

Introduction to Computers

Learning Outcomes:

On successful completion of the course students will be able to:

- 1. Demonstrate knowledge of the computer system
- 2. Have ability to define operating system and Network applications
- Have an understanding of the proper contents of a computer system and these software tools like MS- WORD, MS-EXCEL, MS-PowerPoint and CorelDraw/Adobe Illustrator
- 4. Understand different types of images and their format

Section A

Introduction to Computers

Elements of a Computer System, Block diagram of Computer System and functions of its components, evolution of computers and classification, concept of hardware and software. Introduction to Operating Systems (DOS, Windows and UNIX).

Section B

(a) PC Software

Word Processing: Creating and Saving documents, formatting, Inserting Tables and Pictures and Mail Merge. Spread sheet: Creating worksheet, Use of functions and Creating Charts. Introduction to Presentation Packages, Graphics and Animation packages.

(b) Introduction to Computing

Programming languages, system and application software, compiler and interpreters, concept of a program, program design & development, algorithms and flowchart development.

Section C

(a) Internet & Web

Introduction to popular packages on concept of computer communication, computer network (LAN, WAN, MAN), Internet, Internet Services-www, e-mail etc.

(b) Introduction to Computer Applications in Home Science

Data Base Management Systems, Statistical Packages, Expert Systems, Multilingual Applications.

Suggested Books:

- Sinha P. K., *Computer Fundamentals*: Concepts, Systems and Application, BPB Publications
- Rutkosky, S. (2008). Office 2007. New Delhi: B.P.B. Publications

Suggested E-Resources:

a) Computer Fundamental by P.K. Sinha

https://www.edutechlearners.com/computer-fundamentals-p-k-sinha-free-pdf/

b)Introduction to MS Office https://support.office.com/

Introduction to Computers Lab

- 1. Working with Windows
- 2. Working with MS office Package (MS-Word, Excel, Power Point).
- 3. Working with CorelDraw
- 4. Using Internet services
- 5. Using subject specific application packages

Web Technology

Objectives

- To enable the students to learn the concept of Internet and its relevance in organizational functioning.
- Introducing the design principles and techniques of web site design.

 To familiarize the students with Web Design and Development Process using Web Languages (like HTML, JavaScript, PHP etc.)

Section-A

Internet: Concept of Networking, Applications, Evolution of Internet, Basic Internet services, WWW, Concept of Web browser, Web server, Domain Name Server (DNS), URL, HTTP, Internet Service Providers, Search engines, Cookies, Basics of Web site design, Characteristics of a good website, Web hosting and Web publishing, Web crawlers, Introduction to Web Design Tools (Front page, Dreamweaver).

HTML: Introduction, Elements, Structure of HTML code, Attributes, Headings, Paragraphs, Styles, Formatting, Lists, Quotations, Links, Images, Tables, Forms, Frame, DHTML.

Section-B

Cascading Style Sheets (CSS): Syntax, Internal, External and Embedded CSS. CSS: Text, Fonts, Links, Tables, Border, Outline, Margin, Class Selector, ID Selector.

JavaScript: Introduction, Syntax, Data types, Variables, Expressions, Operators, Conditional statements, Looping structures: while, do while, for. Arrays, Functions, Forms and validations, Event Handling, DOM of JavaScript, JavaScript objects.

Section-C

PHP Introduction: Origin, PHP with the Web Server, syntax, data types, variables, constant, expression, operator, Control structure, Loops, Functions, argument passing in functions, References, Pass by Value & Pass by references, Return Values, Variable Scope, Array, Form handling, String handling, Cookies and Sessions, Basics of MySql, Connectivity with MySql.

Text Books:

- Deborah S. Roy, Eric J. Roy, "Mastering HTML 4.0", BPB Publication.
- 2. Ivan Bayross, "Web Enabled Commercial Applications Development Using HTML, DHTML and PHP" Ivan Bayross, 4th Edition, BPB Publication.
- 3. Steven Holzner, "PHP: The Complete Reference", McGraw-Hill, 2008.
- 4. P.J. Deitel & H.M. Deitel, "Internet and World Wide Web How to Program", Pearson Education.
- 5. Raymond Greenlaw, Ellen Hepp, "Fundamentals of Internet and the World Wide Web", McGraw-Hill Higher Education; 2nd Edition.

Web Technology Lab

Lab Num	ber Problems
L1-L2	Create a page with HTML basic tag like, Paragraph, formatting, inserting image
L3	Create different types of list using HTML
L4	Create pages with internal and external linking using HTML
L5-L6	Create different types of tables using HTML
L7	Create different types of image maps using HTML
L8-L9	Create pages with different frame formats using HTML
L10-L11	Create pages using HTML form, CSS Introduction
L12- L14	Types of CSS Designing a web page using Font Tables and Link in CSS and HTML
L15	Create a pages using DIV
L16	Create a pages using Class and ID Selector
L17-18	Java Script Introduction, Use of data types, variables, constant, Expression, operator in Java Script
L19-L21	Use of conditional statements in Java Script
L22-L24	Use of looping statements in Java Script
L25-26	Java Script functions
L 27- L28	Java Script DOM and Event in Java Script
L29-L30	PHP Introduction, Use of data types, variables, constant, Expression, operator
L31	Use of conditional statements in PHP
L32-L33	Use of looping statements in PHP
L34-L35	Creating different types of arrays
L36-37	Usage of array functions
L38-39	Creating user defined functions, Functions Call by value and call by reference
L40	Form handling using GET, POST
L41	Creation of sessions, Cookies
L 42	Creating web page using Query String and Hidden Field
L43- L45	Database Connectivity, ADD, DELETE, UPDATE and VIEW data from database

Contemporary Global Issues

Theory:

Section A

- a. Natural resources and their conservation.
 - Renewable and non-renewable
 - Use and exploitation of natural resources.
 - Water and solid waste management.
- b. Biodiversity and its conservation.
 - Definition, types, importance and conservation.
 - Introduction to environment science and ecosystem.
 - Endangered and endemic species in India and world.
 - Threats and remedies to protect the biodiversity globally.
- c. Environmental pollution.
 - Definition, causes and types of pollution.
 - Control and preventive measures of different types of pollution.
 - Global problems and remedies to tackle pollution types.
- d. Human population and social issues.
 - Causes and remedy to population growth and control measures.
 - Social causes sex ratio, female infanticide, education of women affecting society.
 - Public health and awareness.
 - Role of information technology in environment and human sustenance.

Section B

Theoretical approaches to contemporary global management issues.

- a. Energy security, food scarcity, global demographics, international aid relief, conflict resolution, global business, climate change, microfinance, globalization, regional blocs, environment management, development, regeneration program, and reform of the United Nations and other international organizations.
- b. Triple concept of flows: flows of people (from international work migrants and asylum seekers to tourists and backpackers), flows of goods and capital (e.g. international trade, both in its legal and illegal dimension) and flow of information (with focus on digitalized

- information because of the major role of the internet). The study of flows will have perspective of sociology, human geography and international political economy and subsequent counter flows, notably in terms of reactions, barriers, barriers and impacts.
- c. International development including, economic development policy, regional development and policy, demographics and development, human geography of global change, microfinance, health and environmental management, community responses; public health and international development; institutional governance; poverty and inequality and the concerns and aspirations of the UN (Millennium Development Goals).

Section C.

- a. Contemporary design scenario.
- b. Role of design and designer in society.

Marketing and Entrepreneurship

Course Objectives:

The course aims to acquaint the students with challenges of starting new ventures and enable them to investigate, understand and internalize the process of setting up a business.

Theory:

Section - A

Entrepreneurship: Concept, knowledge and skills requirement; characteristic of successful entrepreneurs; role of entrepreneurship in economic development; entrepreneurship process; factors impacting emergence of entrepreneurship; managerial vs. entrepreneurial approach and emergence of entrepreneurship.

Section - B

Starting the venture: generating business idea – sources of new ideas, methods of generating ideas, creative problem solving, opportunity recognition; environmental scanning, competitor and industry analysis; feasibility study – market feasibility, technical/operational feasibility, financial feasibility; drawing business plan; preparing project report; presenting business plan to investors.

Section - C

Functional plans: marketing plan – marketing research for the new venture, steps in preparing marketing plan, contingency planning; organizational plan – form of ownership, designing organization structure, job design, manpower planning; Financial plan – cash budget, working capital, Performa income statement Performa cash flow, perform balance sheet, break even analysis.

Sources of finance: debt or equity financing, commercial banks, venture capital; financial institutions supporting entrepreneurs; legal issues – intellectual property rights patents, trade marks, copy rights, trade secrets, licensing; franchising.

Suggested Readings:

- Hisrich, Robert D., Michael Peters and Dean Shepherded, Entrepreneurship, Tata McGraw Hill, ND
- Barringer, Brace R., and R., Duane Ireland, Entrepreneurship, Pearson Prentice Hall, New Jersey (USA).
- Lall, Madhurima, and ShikhaSahai, Entrepreneurship, Excel Book, New Delhi.
- Charantimath, Poornima, Entrepreneurship Development and Small Business Enterprises, Pearson Education, New Delhi.

Research and Documentation

Objectives of Research

Banasthaliis a university where scholarly activity and innovation are valued and encouraged, allowing the students to participate in post graduate research that engages their intellectual curiosity, satisfies their thirst for discovery, and gives them an outlet for their creativity.

A lot of learning occurs when graduate students do research – learning that does not happen during traditional coursework. Classroom knowledge is reinforced and more completely assimilated when students are given the opportunity to apply that knowledge. The Objective of this course to pay attention to the most important dimension of Research.i.e.

- to verify and test important facts
- to analyze an event or process or phenomenon to identify the cause and eûect relationship

- to develop new scientiûc tools, concepts and theories to solve and understand scientiûc and nonscientiûc problems
- to ûnd solutions to scientiûc, nonscientiûc and social problems and to overcome or solve the problems occurring in our every day life.

It will enable the Researchers to develop the most appropriate methodology for their Research Studies. The mission of the course is to impart research skills to the beginners and help improve the quality of Research by the existing researchers.

Theory:

Section - A

Research: Meaning, characteristics, need and purpose

Research method: Steps and method of research

Types of research: Basic and applied:

- Qualitative and quantitative, conceptual and empirical and other miscellaneous types of research.
- Formation of research problem: criteria and sources for identifying the problem
- Developing assumptions

Section-B

Collection of data:Secondary and primary source of data; Concept of population and sample; Various methods of sampling; Characteristics of good sample

Forming questionnaire: Conducting interviews; Writing observations

Analysis of data: Method of analysis; Use of computer

Section - C

Research ethics: References; Plagiarisms and copyrights

Presenting research: In paper article; address conference, seminars, symposium and workshop

Synopsis and thesis writing: Characteristics and format

Suggested Reading:

- Research methodology: methods and techniques by Kothari, C. R.
- Research and Design by Seivewright, Simon
- Research methodology: a step by step guide for beginners by Kumar Ranjit

- Research methodology by Trivedi, R. N.
- Research methodology: techniques and trends by Khanzode, V. N.
- Case study research: design and methods by Yin, Robert K.
- Questionnaire design: how to plan, structure and write survey material for effect by Brace, lan
- · Research methodology in media studies by Jyotirmayee, Vandana
- Using qualitative research in advertising: strategic, techniques, and application by Margaret A. Morrison.
- Creativity research: an inter disciplinary and multi disciplinary research handbook by Edited by ericshiu.

Study of Innovation, Visualization and Conceptualization

Theory:

Section A

- a. Relationship between innovation, visualization and conceptualization.
- b. Introduction to creativity as a competitive resource.
 - Explaining creativity.
 - Creativity and psychology.
 - Creativity process.
 - Thought process and types of thinking.
- c. What is design? Design process.
- d. Visualization of design concept, sources and inspiration.
- e. Transformation of 2D to 3D visualization and its characteristics.

Section B

- a. Elements of design/principles of design.
- b. Definition and necessity of design in daily life.
- c. Form and function, texture.
- d. To understand human psychology of color, gender preference and marketing techniques.
- e. CAD in design.

Section C

a. Conceptualize design based on clients' needs and utility.

- b. Understand market trends, products, demand and retail, and viability of design commercially.
- c. To develop lateral thinking and generate innovative ideas.
- d. Analyze and generate innovative solutions to solve design problems.
- e. Introduction to strategic design brand management.
- f. History of modern design chronological identification of major events, discoveries, products, techniques and materials related to the global scenario.

Positive Psychology

Learning Outcomes:

After completion of the course, the students will be able to:

- a. Analyze the importance of positive emotions in well-being and mental health.
- b. Apply concepts of positive psychology for the development of positive values.
- c. Analyze the role and importance of positive relationships in the lives of human-beings.
- d. Synthesize the role of flexibility and complexity in intra- and interpersonal well-being.

Section- A

- o Introduction to Positive Psychology: Definition, Significance, History, Goals, Perspectives: Western and Eastern.
- O Principles of Pleasure: Concept of Affect, Distinguish between Positive & Negative Affect.
 - Happiness: Concept, Hedonic and Eudaimonic Happiness, Subjective Well-being (Hedonic base of Happiness), Self-Realization (Eudaimonic base of Happiness), Compare Hedonic and Eudaimonic views of Happiness.

Positive Emotions: Concept, Positive Emotions and Health Resources, Positive Emotions and Wellbeing, Cultivating Positive Emotions.

Sense of Humor: Concept, Cultivation and measurement of Sense of Humor.

 Positive Relationships: Concept of Attachment, Types and Adult Attachment.

Love: Concept, Typologies, Triangular Theory of Love, Self-Expansion Theory.

Flourishing Relationships.

Section-B

- Prosocial Behavior: Concept of Altruism, Egotism Motive, Empathy Motive and Empathy-Altruism Hypothesis, Genetic & Neural foundations of Empathy, Cultivating Altruism, Measuring Altruism.
 Gratitude: Concept, Cultivating, Measuring Gratitude, Psychophysiological foundations of Gratitude. Forgiveness: Concept, Cultivating, Measuring, Evolutionary and Neurological bases of Forgiveness.
- 2. Positive Cognitive States & Processes-
- 6. Self-Efficacy: Concept, Neurobiology of Self-Efficacy, Measuring Self-Efficacy, Collective Self-Efficacy.
- Optimism: Concept, Measuring, Learned Optimism, Neurobiology of Learned Optimism, Measuring Learned Optimism.
- 8. Hope: Concept, Neurobiology of Hope, Measuring Hope, Collective Hope. Resilience: Concept, Perspectives, Skills & Applications.
- 9. Wisdom: Concept, Theories, Developing Wisdom, Measurement of Wisdom.
- 10. Courage: Concept, Theories, Becoming Courageous, Measurement, Relationship between Fear & Courage.

Section- C

1. Mindfulness: Concept, Benefits of Mindfulness.

- Flow: Flow State, Autotelic Personality, Fostering Flow. Spirituality: Indian & Western View, Benefits of Spirituality.
- Positive Institutions: Positive Parenting, Skills of Positive Parenting.
 Positive Schooling: Goals, Components and Skills. Organization (Work Place): Goals, Strengths.

Religion: Goals, Strengths.

3. Betterment of Communities-

Individualism: History, Emphases in Individualism.

Collectivism: History, Emphases in Collectivism.

ME/WE Balance.

Recommended Books:

- 1. Aspinwall, L. G. & Staudiger, U. M. (2002). A Psychology of human strengths: Fundamental questions and future directions for a positive psychology. Washington, (Eds.)
- 2. Averill, J. R. & Nunley, E. P. (1992), Voyages of the heart: Living an emotionally creative life. New York: Free Press.
- 3. Baltes, P. B. (2005). Wisdom: The orchestration of mind and character. Boston: Basil Blackwell.
- 4. Baumgardner, S. R. & Crothers, M. K. (2009). *Positive Psychology*. New Delhi: Dorling Kindersley.
- 5. Branden, N. (1994). *The six pillars of self-esteem*. New York: Bantam Books.
- 6. Buchanan, G. and Seligman, M.E.P. (1995). *Explanatory Style* (Eds.). Hillsdale, N.J.: Erlbaum.
- 7. Buckingham, M. & Clifton, D. O. (2001). *Now, discover your strengths*. New York: Free Press.
- 8. Carr, A. (2007). Positive Psychology: The science of happiness and human strength. Routledge Taylor & Francis group London, New York.
- 9. Csikszentmihalyi, M. (1990). Flow: The psychology of optimum experience. New York: Harper & Row.
- 10. Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Collins.
- 11. DC: American Psychological Association.

- 12. Gillham, J.E. (2000). *The Science of Optimism and Hope: Research Essays in Honor of Martin* (Ed.) E. P. Seligman. Radnor, PA: Templeton Foundation Press.
- 13. Linley, P. A. & Joseph, S. (2003). *Positive psychology in practice*. (Eds.) Hoboken, NJ: Wiley.
- 14. Lopez, S. & Snyder, C. R. (2003). *Positive psychological assessment: A handbook of models and measures* (Eds). Washington, DC: APA.
- 15. McCullough, M. E. Pargament, K. I. & Thoresen, C. E. (2000). *Forgiveness: Theory, research, and practice* (Eds.). New York: Guilford Press.
- 16. McDermott, D., & Snyder, C. R. (1999). *Making hope happen: A workbook for turning possibilities into realities*. Oakland, CA: New Harbinger Publication.
- 17. McDermott, D., & Snyder, C. R. (2000). *The great big book of hope*. Oakland, CA: New Harbinger Publications.
- 18. Peterson C, & Seligman, M.E.P. (2004). *Character Strengths and Virtues A Handbook and Classification*. Washington, D.C.: APA Press and Oxford University Press.
- 19. Peterson, C. (2006). *A primer in Positive Psychology*. New York: Oxford University.
- 20. Saarni, C. (1999). *Developing emotional intelligence*. New York: Guilford.
- 21. Seligman, M. E. P. (1999). Learned optimism. NY: Knopf.
- 22. Seligman, M. E. P. (2002). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment. NY: Free Press.
- 23. Seligman, M. E. P., Reivich, K., Jaycox, L., & Gillham, J. (1995). *The optimistic child*. NY: Houghton Mifflin.
- 24. Snyder, C. R. (2000). *Handbook of hope: Theory, measures, and applications*. San Diego, CA: Academic Press.
- 25. Snyder, C. R., & Lopez, S. J. (2002). *The handbook of positive psychology* NY: Oxford University Press.

- 26. Snyder, C. R., McDermott, D. Cook W., &Rapoff, M. (2002). Hope for the journey: Helping children through the good times and the bad (Rev. ed) Clinton Corners, NY: Percheron.
- **27.** Snyder, C. R. & Lopez, S. J. (2009). *Positive Psychology: The scientific and practical explorations of human strengths.* Lawrence: Sage.
- **28.** Synder, C. R., & Lopez, S. J. (2009). *Positive Psychology*. Sage Publication India Pvt. Ltd.

Suggested E-learning Material:

- a. Positive psychologist on positive psychology https://www.pdfdrive.com/positive-psychologists-on-positive-psychology-e26890470.html
- b. Positive psychology in practice https://www.pdfdrive.com/positive-psychology-in-practice-researchgate-e13947710.html
- Positive psychology https://www.pdfdrive.com/positive-psychologye33549648.html

Computer Programming

Learning Outcomes:

On successful completion of the course students will be able to

- Understanding the concepts of computer basics and programming.
- Understanding of the organization and operations of a computer system.
- Understanding of Binary logic in design of electronic circuits.
- Students would have logical thinking for Analyzing problems, designing and implementing algorithmic solutions.
- Students would get the skills for the use of the C programming language to implement the real world applications.

Section-A

Fundamentals of Computer System: Block Diagram, CPU, Memory, Input/Output Devices. Hardware and Software, Booting Process and DOS Commands.

Steps in Program Development: Problem analysis, algorithms & flow charts, High level and low level programming languages.

Computer Programming Using C: History, Data types (simple and structured) and their representation, Constants and variables, Operators, Arithmetic's and logical expressions, Type casting, Input and output statements.

Section-B

Control Statements: Sequencing, Conditional and unconditional branching and looping.

Arrays: Single and multidimensional arrays, Arrays and strings, String built-in functions, Applications of arrays: Searching (linear and binary), Sorting (bubble, selection and insertion).

Structured Programming: Function declaration and definition, Function call, Passing parameters to the functions: call by value, call by reference. Returning values, Recursive functions, Passing arrays to functions.

Section-C

Storage classes in C: Automatic, Register, External, and Static.

Pointers:Pointer arithmetic, Pointers and arrays, Pointers and strings, Pointer to pointer, Dynamic Memory Allocation.

Derived Data Types: Structures, unions, Array of structure, Pointer to structure, enumerated data types.

File Handling in C: Types of files, Opening and closing a data file, reading and writing a data file, Random access in a file, Error handling during file I/O operations, Command line arguments.

Suggested Books:

- 1. Kanetkar, Y. P. (2009). Let us C. BPB Publications.
- 2. Sinha, P. K. (2004). *Computer Fundamentals: Concept, Systems and Applications*. BPB Publications.
- 3. Kernighan, B. W., & Ritchie, D. M. (2006). *The C Programming Language*. PHI Learning Pvt. Ltd., New Delhi.
- 4. Kanetkar, Y. P. (2009). *Understanding Pointers in C.* BPB Publications.
- 5. Dromey, R. G. (2007). *How to Solve it by Computer*. PHI Learning Pvt. Ltd . New Delhi.
- 6. Govil, Mahesh Chand, *Computer Fundamentals and Programming in C*, Jaipur Publishing House.
- 7. Venugopal, K. R. (2005). *Programming with C.* Tata McGraw-Hill.

8. Balagurusamy, E., (2010). *Programming in ANSI C.* Tata McGraw-Hill.

Suggested E-learning material:

- 1. Introduction to Programming in C: https://nptel.ac.in/courses/106104128/
- 2. Introduction to Programming in C: Specialization by Duke University
 - https://www.coursera.org/specializations/c-programming
- Computer Fundamentals by P. K. Sinha https://www.edutechlearners.com/computer-fundamentals-p-k-sinhafree-pdf/

NGOs, Social Advocacy and Networking

Learning Outcomes: After the completion of this Course student will be able to

- Be competent in understanding varied roles of NGOs, Civil Society, and Cooperatives etc. in promoting status of different sections of the society.
- Understand the mechanism of social advocacy and legal support while working on various social issues.
- Develop knowledge on the importance of lobbying, propaganda, public opinion and Mass communication while working with NGOs.

Section A

Concept of Non Government Organization: Societies, Trust, Co-operatives, Civil Society and Voluntary Organization.

Social Advocacy: Concept, Need, Principles, Steps and Means.

Legal Support Mechanism: P.I.L., Lok Adalat, R.T.I., Legal Aid Programme.

Advocacy issues: Displacement, Water and Forest, Unorganized Sector, Child Abuse.

Section B

Lobbying and Propaganda: Political System and Social Advocacy, Public Opinion, Political Parties, Interest Groups and Pressure Groups, NGOs and Politics.

Communication: Concept, Definition and Process, Barriers to Communication

Mass Communication: Concept, Importance, Strategies and Techniques (Traditional and Modern), Use of information Technology in Social Advocacy.

Media Relations: Type of Mass Media, Strategic choice of Media, Media Relation, Sensitizing Media and Media Documentation (Writing News, Features, Stories etc.)

Section C

NGO Networking: Network and Networking, Generic and Issue based Present Status of networking at National and International Scenario, Models of Networking. Challenges Faced in the sustainability of Network, Importance of Network in Social Advocacy

Recommended Books:

- 1. Meyer C. M. (1999). *The economics and politics of NGO in Latin America*. Westport, CT, and London: Praeger Publishers.
- 2. Dale, R. (2000). Organisation and development strategies structures and processes. New Delhi: Sage Publications.
- 3. Dantawala, M.L.(Ed). (1998). Social *change through voluntary action*. New Delhi : Sage Publications.
- 4. Abdelrahman, M. (2004). *Civil society exposed: The politics of NGO in Egypt.* London: Tarries Academic Studied.
- 5. PRIA (1989). *NGO Government relations*. New Delhi : Participatory Research in Asia.
- 6. Sankaran & Rodriguesn (1983). *Handbook for management of voluntary organisation*. Madras: Alpha Publications.
- 7. Kamat S. (2002). *Development hegnemony: NGOs and the state in India*. Delhi; New York: Oxford University Press.

- 8. Werker & Ahmed (2008). What do non- governmental organisation do? <u>United States of America</u>, <u>American Economic Association</u>, *Journal of Economic Perspectives*, 22 (2).
- 9. Charnovitz, S. (1997). "Two centuries of participation: NGOs and international governance." *Michigan Journal of international Law*, 18.

Suggested E- resources:

Advocacy in social work

Platform: Sage publications.

Link: https://us.sagepub.com/sites/default/files/upm-binaries/90577
https://us.sagepub.com/sites/default/files/upm-binaries/90577
https://us.sagepub.com/sites/default/files/upm-binaries/90577
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<a href="https://us.sagepub.com/sites/upm-binarie

Social work advocacy: professional self interest and social justice.

Platform: Researchgate.

Link: https://www.researchgate.net/publication/283517910 Social wor https://www.researchgate.net/publication/283517910 Social justice

NGO Interaction, coordination and networking.

Platform: Researchgate.

Link: https://www.researchgate.net/publication/270392928_NGO_Interaction_Coordination_and_Networking

 Lobbying and public relations: overlapping of two different professions.

Platform: Croatian Scientific Bibliography.

Link: https://bib.irb.hr/datoteka/797645.02commforum-jugo-miholic-zigic.pdf

Teaching, Teaching and Higher Education

Learning Outcomes:

After completion of the course, the student will be able to:

- 1. Understand the reciprocity of teaching and learning processes
- 2. Make use of various aids to enhance their teaching skills.
- 3. Familiarize themselves with Academic Bodies of Higher Education

- **4.** Analyze the current situation of higher education in India.
- 5. Understanding Education and its role in Holistic development

Course Content:

Teaching and Learning: Meaning and Importance

Role and Prerequisites of Teacher in Higher Education

Overview of Higher Education in India

Structure and Functions of Academic Bodies- UGC, ICSSR, ICHR,

ICCR

Methods for Teaching-Lecture, Discussion, Role Play, Workshop,

Seminar and Audio-Visual

Making of Effective Handouts and Lesson Plans

Innovative Pedagogy and Critical Pedagogy for Classroom teaching

Current Challenges before the Higher Education

Recommended Books:

Aggarwal, J.C. (2012). *Principles, Methods & Techniques of Teaching*. New Delhi: Vikas Publishing.

Association of Indian Universities. (2003). *Globalization of Indian Higher Education*.

Mangal. S.K. & Manga. U. (2014). *Essentials of Educational Technology*. Delhi: PHI Learning.

Suggested E-Resources

• Innovative Pedagogy

https://res.mdpi.com/societies/societies-07-00030/.../societies-07-00030.pdf?

Critical Pedagogy

https://www.researchgate.net/.../240724612_Critical_Pedagogy_in_the Sociology Class..

https://www.tandfonline.com/doi/full/10.11120/elss.2008.01010008