

Faculty of Sports Medicine & Physiotherapy

Syllabus

For

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT) (Semester: I – IV)

Session: 2019-20



GURU NANAK DEV UNIVERSITY AMRITSAR

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**BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER SYSTEM**

SEMESTER – I:

Paper No.	Paper	M. Marks
Paper – I	Introduction to Hospital Industry	75
Paper – II	Human Anatomy and Physiology	75
Paper – III	Data Entry Using MS Word and MS Excel	75
Paper – IV	Basics of Medical Terminology–I	75
Paper – V	Communication Skills in English – I	50
Paper – VI	Punjabi (Compulsory) / ** ਮੁੱਢਲੀ ਪੰਜਾਬੀ / ** Punjab History & Culture (From Earliest Times to C 320)	50
Paper – VII	* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)	50

SEMESTER – II:

Paper No.	Paper	M. Marks
Paper – I	Descriptive Statistics	75
Paper – II	Basics of Medical Terminology–II	75
Paper – III	Front Office Management	75
Paper – IV	Medical Software Application–I (Practical)	75
Paper – V	Communication Skills in English – II (Th.35+Pr.15)	50
Paper – VI	Punjabi (Compulsory) / ** ਮੁੱਢਲੀ ਪੰਜਾਬੀ / ** Punjab History & Culture (C 321 TO 1000 B.C.)	50
Paper – VII	* Drug Abuse: Problem, Management and Prevention (Compulsory Paper)	50

Note: * Marks of this Paper will not be included in the Total Marks.

**** (Special Paper in lieu of Punjabi Compulsory)**

(For those students who are not domicile of Punjab)

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER SYSTEM

SEMESTER – III:

Paper No.	Paper	M. Marks
	General Education Component:	
Paper – I	Fundamental of Management (Theory)	50
Paper – II	Health Economics (Theory)	50
	Skill Component:	
Paper – III	Basics of Finance in Health Care (Theory)	50
Paper – IV	Patient Behavior and Psychology (Theory)	50
Paper – V	Emerging Trends in Health Care (Theory)	50
Paper – VI	Medical Software Applications-2 (Practical)	50

SEMESTER – IV:

Paper No.	Paper	M. Marks
	General Education Component:	
Paper – I	Fundamentals of Accounting (Theory)	50
Paper – II	Making Decisions (Theory)	50
	Skill Component:	
Paper – III	Quality Assurance(Theory)	50
Paper – IV	Ethical Issues in Health Care (Theory)	50
Paper – V	Nursing Administration-I (Theory)	50
Paper – VI	Training (Practical)	50
Paper – VII	* (ESL-221): Environmental Studies	100

*** Marks of EVS will not be included in the Total Marks**

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – I

Paper-I: INTRODUCTION TO HOSPITAL INDUSTRY

Time: 3 Hours

Max Marks: 75

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

Concept of health and diseases: Definition of health, Dimension of health, Spectrum of health, Levels of prevention, and modes of intervention for diseases and condition.

SECTION-B

Introduction to Hospitality: What is Hospital, Etymology, Types of hospitals, Hospital as system, Hospital organization, overview on Healthcare facilities, scale and scope?

SECTION-C

Introduction to hospital Departments:

- Detailed clinical services
- Detailed support services -Detailed utility services

SECTION-D

Current Trends in Healthcare Industry:

- Healthcare Industry- An Overview
- Changing Healthcare- Determinants

Current Trends:-

1. Medical Tourism or Medical Value Travel
2. Public Private Partnership (PPP)
3. Information Technology and Healthcare, Telemedicine, Video Conferencing, Bioformatics, Robotic Surgery
4. Health Insurance and TPA's

Resource Materials:

1. Powers Introduction to Management in The Hospital Industry by Wiley Blackwell
2. Introduction to Hospital and Health System Pharmacy Practice by David A Holford
3. Pharmacy Management: Essentials for all Practice settings, 4th Edition by Shane P Desselle.
4. Business Journals, Healthcare Status reports

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – I

Paper–II: HUMAN ANATOMY AND PHYSIOLOGY (Theory)

Time: 3 Hours

Max. Marks: 75

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION – A

Introduction to Human Biology: Cell, Tissues and Organs

Basic structure, function and common associated diseases of the following:

- Skeletal system- Bones, cartilage, tendons and ligaments
- Muscular system- skeletal muscles and smooth muscle throughout the body

SECTION – B

Basic structure, function and common associated diseases of the following:

- Circular system-Heart, blood vessels and blood
- Nervous system- Brain, spinal cord and peripheral nerves
- Respiratory system- Nose, trachea and lungs

SECTION – C

Basic structure, function and common associated diseases of the following:

- Digestive system- Mouth, esophagus, stomach, small and large intestines
- Excretory system- Kidneys, ureters, bladder and urethra
- Endocrine system- hypothalamus, pituitary, thyroid, pancreas and adrenal glands etc

SECTION – D

Basic structure, function and common associated diseases of the following:

- Reproductive system
- Lymphatic/ Immune system: Lymph, lymph nodes and vessels, white blood cells, T- and B-cells

Resource Materials:

1. Human Anatomy by B.D. Chaurasia
2. Anatomy and Physiology by Aggarwal Arya
3. Essentials of Medical Physiology by K. Sembulingam and Prema Sembulingam
4. Inderbir Singh, Textbook of Anatomy with Colour Atlas–Vol. 1,2,3 Jaypee Brothers
5. Text Book of Medical Physiology–Arthur Guyton (Mosby)

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – I

Paper–III: DATA ENTRY USING MS–WORD and MS–EXCEL

Time: 3 Hours

Max. Marks: 75

Note: Practical exam to be conducted by the external examiner.

Section – A

MS-Word: Overview, Creating, Saving, Opening, Importing, Exporting & Inserting files. Formatting pages, paragraphs and sections. Indents and outdates. Creating lists and numbering. Heading Styles, Fonts and size editing,

Section – B

Using editing and proofing tools, changing layout of a document, positioning & viewing text. Finding & replacing text, inserting page breaks, page numbers, book marks, symbols & dates. Using tabs and tables Header, Footer & Printings. Mail merge

Section – C

MS-Excel: Worksheet overview. Entering information in Worksheet. Opening and saving workbook. Formatting number and texts, Protecting cells. Producing Charges and printing operations graphs.

Section – D

Creating different formulas, 3D formulas, Copying and pasting formulas, conditional formatting and cell styles, creating worksheet charts, sharing workbook, tables, sorting data, filtering data, using what-if analysis, table related functions and making macros.

Suggested Readings:

1. Peter Norton, “Introduction to Computers”, McGraw-Hill, New Delhi.
2. Sanjay Sexana, “A First Course in Computers”, Vikas Publishing House, New Delhi.
3. Rajaraman, V., “Fundamental of Computers”, Prentice Hal India, New Delhi.
4. Srivastava, S.S., “MS-Office” Firewall Media, New Delhi.
5. Alexis Loeon and Matheus Leon, “Introduction to Computers with MS-Office 200”, Tata McGraw-Hill, New Delhi.

Note: The latest Editions of The Books should be followed.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – I

Paper–IV: BASICS OF MEDCAL TERMINOLOGY-1 (THEORY)

Time: 3 Hours

Max.Marks:75

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION – A

Building blocks of medical terminologies:

Roots

Prefixes

Suffixes

Pronunciation rules

SECTION – B

General body terminology

Medical terms related to different organ systems

SECTION – C

Medical terms related to Pharmacology

Prescriptions and OTC medications

SECTION – D

Medical terms related to Routes of administration

Medical terms related to Medication actions and effects and their Abbreviations

Resource Materials:

1. Basics of Medical Terminology, 5th Edition by J. Fisher
2. Basic Medical Terminology concepts by Marilyn White Wilson
3. Medical Terminology: A Programmed System Approach by Genevieve Love Smith,
Phyllis E. Davis

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – I

PAPER–V: COMMUNICATION SKILLS IN ENGLISH – I

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

The syllabus is divided in four sections as mentioned below:

Section–A

Reading Skills: Reading Tactics and strategies; Reading purposes–kinds of purposes and associated comprehension; Reading for direct meanings.

Section–B

Reading for understanding concepts, details, coherence, logical progression and meanings of phrases/ expressions.

Activities:

- Comprehension questions in multiple choice format
- Short comprehension questions based on content and development of ideas

Section–C

Writing Skills: Guidelines for effective writing; writing styles for application, personal letter, official/ business letter.

Activities:

- Formatting personal and business letters.
- Organising the details in a sequential order

Section–D

Resume, memo, notices etc.; outline and revision.

Activities:

- Converting a biographical note into a sequenced resume or vice-versa
- Ordering and sub-dividing the contents while making notes.
- Writing notices for circulation/ boards

Recommended Books:

- *Oxford Guide to Effective Writing and Speaking* by John Seely.
- *English Grammar in Use* (Fourth Edition) by Raymond Murphy, CUP

PAPER-VI: ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ : 50

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਪਾਠ-ਪੁਸਤਕਾਂ

ਸੈਕਸ਼ਨ-ਏ

ਆਤਮ ਅਨਾਤਮ (ਕਵਿਤਾ ਭਾਗ),
(ਸੰਪ. ਸੁਹਿੰਦਰ ਬੀਰ ਅਤੇ ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ)
ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।
(ਪ੍ਰਸ਼ਾਸਨ ਸਾਹਿਤ ਵਿਭਾਗ, ਸਾਰ)

ਸੈਕਸ਼ਨ-ਬੀ

ਇਤਿਹਾਸਕ ਯਾਦਾਂ (ਇਤਿਹਾਸਕ ਲੇਖ-ਸੰਗ੍ਰਹਿ)
ਸੰਪਾ. ਸ.ਸ.ਅਮੋਲ,
ਪੰਜਾਬੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਲੁਧਿਆਣਾ। (ਲੇਖ 1 ਤੋਂ 6)
(ਨਿਬੰਧ ਦਾ ਸਾਰ, ਲਿਖਣ-ਸ਼ੈਲੀ)

ਸੈਕਸ਼ਨ-ਸੀ

(ੳ) ਪੈਰਾ ਰਚਨਾ
(ਅ) ਪੈਰਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ।

ਸੈਕਸ਼ਨ-ਡੀ

(ੳ) ਪੰਜਾਬੀ ਧੁਨੀ ਵਿਉਂਤ : ਉਚਾਰਨ ਅੰਗ, ਉਚਾਰਨ ਸਥਾਨ ਤੇ ਵਿਧੀਆਂ, ਸਵਰ, ਵਿਅੰਜਨ,
ਸੁਰ-ਪ੍ਰਥਮ।
(ਅ) ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ : ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉਪ-ਭਾਸ਼ਾ ਦਾ ਅੰਤਰ, ਪੰਜਾਬੀ
ਉਪਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ-ਚਿੰਨ੍ਹ।

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ।
ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ
ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿੱਚ ਕਰ ਸਕਦਾ ਹੈ।

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BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – I

PAPER–VI: ਮੁੱਢਲੀ ਪੰਜਾਬੀ
(In lieu of Compulsory Punjabi)

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ: 50

ਪਾਠ-ਕ੍ਰਮ

ਸੈਕਸ਼ਨ-ਏ

ਪੈਂਤੀ ਅੱਖਰੀ, ਅੱਖਰ ਕ੍ਰਮ, ਪੈਰ ਬਿੰਦੀ ਵਾਲੇ ਵਰਣ ਅਤੇ ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ ਅਤੇ ਮਾਤ੍ਰਵਾਂ (ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ)
ਲਗਾਖਰ (ਬਿੰਦੀ, ਟਿੱਪੀ, ਅੱਧਕ) : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ

ਸੈਕਸ਼ਨ-ਬੀ

ਪੰਜਾਬੀ ਸ਼ਬਦ-ਬਣਤਰ : ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ
(ਸਾਧਾਰਨ ਸ਼ਬਦ, ਸੰਯੁਕਤ ਸ਼ਬਦ, ਮਿਸ਼ਰਤ ਸ਼ਬਦ, ਮੂਲ ਸ਼ਬਦ, ਅਗੇਤਰ ਅਤੇ ਪਿਛੇਤਰ)

ਸੈਕਸ਼ਨ-ਸੀ

ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ : ਬਾਜ਼ਾਰ, ਵਪਾਰ, ਰਿਸ਼ਤੇ-ਨਾਤੇ, ਖੇਤੀ ਅਤੇ ਹੋਰ ਧੰਦਿਆਂ ਆਦਿ ਨਾਲ ਸੰਬੰਧਤ।

ਸੈਕਸ਼ਨ-ਡੀ

ਹਫ਼ਤੇ ਦੇ ਸੱਤ ਦਿਨਾਂ ਦੇ ਨਾਂ, ਬਾਰ੍ਹਾਂ ਮਹੀਨਿਆਂ ਦੇ ਨਾਂ, ਰੁੱਤਾਂ ਦੇ ਨਾਂ, ਇਕ ਤੋਂ ਸੌ ਤਕ ਗਿਣਤੀ ਸ਼ਬਦਾਂ ਵਿਚ

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ।
ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

PAPER–VI: Punjab History & Culture (From Earliest Times to C 320)

**(Special Paper in lieu of Punjabi Compulsory)
(For those students who are not domicile of Punjab)**

Time: 3 Hours**Max. Marks: 50****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section–A

1. Physical features of the Punjab and its impact on history.
2. Sources of the ancient history of Punjab

Section–B

3. Harappan Civilization: Town planning; social, economic and religious life of the Indus Valley People.
4. The Indo-Aryans: Original home and settlements in Punjab.

Section–C

5. Social, Religious and Economic life during *Rig Vedic Age*.
6. Social, Religious and Economic life during *Later Vedic Age*.

Section–D

7. Teachings and impact of Buddhism
8. Jainism in the Punjab

Suggested Readings:

1. L. M Joshi (ed.), *History and Culture of the Punjab*, Art-I, Patiala, 1989 (3rd edition)
2. L.M. Joshi and Fauja Singh (ed.), *History of Punjab*, Vol.I, Patiala 1977.
3. Budha Parkash, *Glimpses of Ancient Punjab*, Patiala, 1983.
4. B.N. Sharma, *Life in Northern India*, Delhi. 1966.
5. Chopra, P.N., Puri, B.N., & Das, M.N.(1974). *A Social, Cultural & Economic History of India*, Vol. I, New Delhi: Macmillan India.

**PAPER – VII: DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION
(COMPULSORY PAPER)**

PROBLEM OF DRUG ABUSE

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section – A

Meaning of Drug Abuse:

Meaning, Nature and Extent of Drug Abuse in India and Punjab.

Section – B

Consequences of Drug Abuse for:

Individual	:	Education, Employment, Income.
Family	:	Violence.
Society	:	Crime.
Nation	:	Law and Order problem.

Section – C

Management of Drug Abuse:

Medical Management: Medication for treatment and to reduce withdrawal effects.

Section – D

Psychiatric Management: Counselling, Behavioural and Cognitive therapy.

Social Management: Family, Group therapy and Environmental Intervention.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – I

References:

1. Ahuja, Ram (2003), *Social Problems in India*, Rawat Publication, Jaipur.
2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
3. Inciardi, J.A. 1981. *The Drug Crime Connection*. Beverly Hills: Sage Publications.
4. Kapoor. T. (1985) *Drug epidemic among Indian Youth*, New Delhi: Mittal Pub.
5. Kessel, Neil and Henry Walton. 1982, *Alcoholism*. Harmond Worth: Penguin Books.
6. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
7. National Household Survey of Alcohol and Drug abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.
8. Ross Coomber and Others. 2013, *Key Concept in Drugs and Society*. New Delhi: Sage Publications.
9. Sain, Bhim 1991, *Drug Addiction Alcoholism, Smoking obscenity* New Delhi: Mittal Publications.
10. Sandhu, Ranvinder Singh, 2009, *Drug Addiction in Punjab: A Sociological Study*. Amritsar: Guru Nanak Dev University.
11. Singh, Chandra Paul 2000. *Alcohol and Dependence among Industrial Workers*: Delhi: Shipra.
12. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation*, Cambridge University Press.
13. Verma, P.S. 2017, “*Punjab’s Drug Problem: Contours and Characteristics*”, Economic and Political Weekly, Vol. LII, No. 3, P.P. 40-43.
14. World Drug Report 2016, United Nations office of Drug and Crime.
15. World Drug Report 2017, United Nations office of Drug and Crime.

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BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – II

Paper-I: DESCRIPTIVE STATISTICS (THEORY)

Time: 3 Hours

Max. Marks: 75

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section – A

Qualitative and quantitative observations, Measures of Central Tendency – Arithmetic Mean, Median and Mode, Position of averages. Graphical representation of data, Measures of dispersion – range, variance, mean deviation, standard deviation and coeff. of variation, Frequency distribution

Section – B

Introduction, Importance, Karl-Pearson's Coefficient of Correlation, Spearman's Rank Correlation Coefficient

Section – C

Sampling: Various concepts – Population, Sampling Units, Complete Enumeration sample Surveys, Concept of an Estimator and The Standard Error, Standard Error of Estimates. Features of a Good Sample, Random and Subjective Sampling, Simple Random Sampling, Stratified Random Sampling.

Section – D

Descriptive statistics, Comparison of means, T – tests, Analysis of Variance.

Text/References:

1. Methods in Biostatistics – Mahajan - J.P.
2. Statistics in Medicine - Colton - Little Brown, Boston.
3. Biostatistics: The Manual for Statistical Methods for Use in Health and Nutrition-
K.V. Rao-J.P.

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BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – II

Paper–II: BASICS OF MEDCAL TERMINOLOGY-II (THEORY)

Time: 3 Hours

Max.Marks:75

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION – A

Structure, recognition, analysis, definition and combination of medical terms from:

Roots

Prefixes

Suffixes and combining forms

SECTION – B

General terminology (procedures, diseases, treatment) related to the following body systems:-
circulatory system, digestive system

SECTION – C

General terminology (procedures, diseases, treatment) related to the following body systems:-
Respiratory System, Urinary System,

SECTION – D

General terminology (procedures, diseases, treatment) related to the following body systems:-
obstetrics and gynecology

Resource Materials:

1. Basics of Medical Terminology, 5th Edition by J. Fisher
2. Basic Medical Terminology concepts by Marilyn White Wilson
3. Medical Terminology: A Programmed System Approach by Genevieve Love Smith,
Phyllis E. Davis

Paper–III: FRONT OFFICE MANAGEMENT

Time: 3 Hours

Max. Marks: 75

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section – A

Front Office: Functions & Importance of front office, Front Office Staff Organisation Various sections of Front office Department, Staff requirement, Staff organization in the hospital, Functions of a reception, Selection of staff.

Section - B

Department Policies and Procedures: Content of the Module: OPD timings, Schedule, Registration, Billing, Report Delivery Process, Front Office Data Management, Effective Handling various problems of OPD'S

Section - C

Managing Front Office: Patient Problems: Patient Admission, Tele conversation, Telephone etiquettes, Increased Waiting time, Dissatisfaction with Quality of service and amenities, Doctors Complaints: Increased workload, less staff, increased workload

Section - D

Team Work in Front Office: Team Building, Importance of Team Work in Hospitals, Nature of scope in Team Work, Characteristics of Effective Team, Essentials of good team work

References:

1. Chopra, R. K., Office Management, McGraw Hill, 3rd Edition , 1997
2. Jain J.N. and Singh P.P, Modern Office Management, Deep and Deep Publications, 2007.
3. R.K. Sharma and Shashi K. Gupta, Office Management, Kalyani Publishers, 2003.
4. Michael L. Kasavana and Richard M. Brooks, Managing Front Office Operations, Educational Institute of American Hotel & Motel, 2005.
5. P. Abbott. and S.Lewry, Front Office: Procedures, Social Skills, and Management, Butterworth Heinemann, 1991.

Paper–IV: MEDICAL SOFTWARE APPLICATION–I (Practical)

Time: 3 Hours

Max.Marks:75

SECTION – A

Description & Objectives:

This module is designed to provide a comprehensive understanding of the medical software applications for the management and operation of health care information systems.

SECTION – B

Objectives:

- Basic understanding of functioning of computers and its application in healthcare with a perspective on hospital operations.
- Create basic awareness on healthcare record systems and infrastructure.

SECTION – C

Content of the Module:

- Introduction to HIS
- Concept of HIS
- Role of HIS
- Characteristics of HIS
- Pre Requisites of HIS
- Need & Importance of HIS
- Electronic Health Record (EHR) Vs Manual Records
- Computerized Patient Record System (CPRS)

SECTION – D

Classroom sessions, practical sessions, industry visit to understand the use of medical software to IT department and medical records department of hospital.

References:

1. Software Application: Concepts, Methodology, Tools and Applications by Tiako Pierre F.
2. Use and Impact of Computer in Clinical medicine by James G. Anderson, Stephen J. Jay
3. Medical Informatics: Coputer Applications in Health Care and Biomedicine by Edward Hance Shortlife, Leslie E. Perreault

PAPER–V: COMMUNICATION SKILLS IN ENGLISH – II

Time: 3 Hours

Max. Marks: 50
Theory Marks: 35
Practical Marks: 15

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Course Contents:

SECTION–A

Listening Skills: Barriers to listening; effective listening skills; feedback skills.

Activities: Listening exercises – Listening to conversation, News and TV reports

SECTION–B

Attending telephone calls; note taking and note making.

Activities: Taking notes on a speech/lecture

SECTION–C

Speaking and Conversational Skills: Components of a meaningful and easy conversation; understanding the cue and making appropriate responses; forms of polite speech; asking and providing information on general topics.

Activities: 1) Making conversation and taking turns

2) Oral description or explanation of a common object, situation or concept

SECTION–D

The study of sounds of English,
Stress and Intonation,
Situation based Conversation in English,
Essentials of Spoken English.

Activities: Giving Interviews

PRACTICAL / ORAL TESTING

Marks: 15

Course Contents:-

1. Oral Presentation with/without audio visual aids.
2. Group Discussion.
3. Listening to any recorded or live material and asking oral questions for listening comprehension.

Questions:-

1. Oral Presentation will be of 5 to 10 minutes duration (Topic can be given in advance or it can be student's own choice). Use of audio visual aids is desirable.
2. Group discussion comprising 8 to 10 students on a familiar topic. Time for each group will be 15 to 20 minutes.

Note: Oral test will be conducted by external examiner with the help of internal examiner.

PAPER–VI: ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ : 50

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਪਾਠ-ਪੁਸਤਕਾਂ

ਸੈਕਸ਼ਨ-ਏ

ਆਤਮ ਅਨਾਤਮ (ਕਹਾਣੀ ਭਾਗ),
(ਸੰਪ. ਸੁਹਿੰਦਰ ਬੀਰ ਅਤੇ ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ)
ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ।
(ਵਿਸ਼ਾ-ਵਸਤੂ, ਪਾਤਰ ਚਿਤਰਨ)

ਸੈਕਸ਼ਨ-ਬੀ

ਇਤਿਹਾਸਕ ਯਾਦਾਂ (ਇਤਿਹਾਸਕ ਲੇਖ-ਸੰਗ੍ਰਹਿ)
ਸੰਪਾ. ਸ.ਸ.ਅਮੋਲ,
ਪੰਜਾਬੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਲੁਧਿਆਣਾ। (ਲੇਖ 7 ਤੋਂ 12)
(ਸਾਰ, ਲਿਖਣ ਸ਼ੈਲੀ)

ਸੈਕਸ਼ਨ-ਸੀ

(ੳ) ਸ਼ਬਦ-ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ : ਪਰਿਭਾਸ਼ਾ, ਮੁੱਢਲੇ ਸੰਕਲਪ
(ਅ) ਸ਼ਬਦ ਸੂਚੀ

ਸੈਕਸ਼ਨ-ਡੀ

(ੳ) ਸੰਖੇਪ ਰਚਨਾ
(ਅ) ਮੁਹਾਵਰੇ ਅਤੇ ਅਖਾਣ

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿੱਚ ਕਰ ਸਕਦਾ ਹੈ।

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BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – II

PAPER-VI: ਮੁੱਢਲੀ ਪੰਜਾਬੀ
(In lieu of Compulsory Punjabi)

ਸਮਾਂ: 3 ਘੰਟੇ

ਕੁਲ ਅੰਕ: 50

ਪਾਠ-ਕ੍ਰਮ

ਸੈਕਸ਼ਨ-ਏ

ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ
(ਨਾਂਵ, ਪੜਨਾਂਵ, ਕਿਰਿਆ, ਵਿਸ਼ੇਸ਼ਣ, ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ, ਸਬੰਧਕ, ਯੋਜਕ ਅਤੇ ਵਿਸਮਿਕ)

ਸੈਕਸ਼ਨ-ਬੀ

ਪੰਜਾਬੀ ਵਾਕ ਬਣਤਰ : ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ
(ੳ) ਸਾਧਾਰਨ ਵਾਕ, ਸੰਯੁਕਤ ਵਾਕ ਅਤੇ ਮਿਸ਼ਰਤ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)
(ਅ) ਬਿਆਨੀਆ ਵਾਕ, ਪ੍ਰਸ਼ਨਵਾਚਕ ਵਾਕ ਅਤੇ ਹੁਕਮੀ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)

ਸੈਕਸ਼ਨ-ਸੀ

ਪੈਰ੍ਰਾ ਰਚਨਾ
ਸੰਖੇਪ ਰਚਨਾ

ਸੈਕਸ਼ਨ-ਡੀ

ਚਿੱਠੀ ਪੱਤਰ (ਘਰੇਲੂ ਅਤੇ ਦਫ਼ਤਰੀ)
ਅਖਾਣ ਅਤੇ ਮੁਹਾਵਰੇ

ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
2. ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ।
ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

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BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – II

PAPER–VI: Punjab History & Culture (C 321 to 1000 B.C.)
(Special Paper in lieu of Punjabi compulsory)
(For those students who are not domicile of Punjab)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section–A

1. Alexander's Invasion and its Impact
2. Punjab under Chandragupta Maurya and Ashoka.

Section–B

3. The Kushans and their Contribution to the Punjab.
4. The Panjab under the Gupta Empire.

Section–C

5. The Punjab under the Vardhana Emperors
6. Socio-cultural History of Punjab from 7th to 1000 A.D.

Section–D

7. Development of languages and Education with Special reference to Taxila
8. Development of Art & Architecture

Suggested Readings:

1. L. M Joshi (ed), *History and Culture of the Punjab*, Art-I, Punjabi University, Patiala, 1989 (3rd Edition)
2. L.M. Joshi and Fauja Singh (ed.), *History of Punjab* , Vol.I, Punjabi University, Patiala, 1977.
3. Budha Parkash, *Glimpses of Ancient Punjab*, Patiala, 1983.
4. B.N. Sharma: *Life in Northern India*, Delhi. 1966.

**PAPER – VII: DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION
(COMPULSORY PAPER)**

DRUG ABUSE: MANAGEMENT AND PREVENTION

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section – A

Prevention of Drug abuse:

Role of family: Parent child relationship, Family support, Supervision, Shaping values, Active Scrutiny.

Section – B

School: Counselling, Teacher as role-model. Parent-teacher-Health Professional Coordination, Random testing on students.

Section – C

Controlling Drug Abuse:

Media: Restraint on advertisements of drugs, advertisements on bad effects of drugs, Publicity and media, Campaigns against drug abuse, Educational and awareness program

Section – D

Legislation: NDPs act, Statutory warnings, Policing of Borders, Checking Supply/Smuggling of Drugs, Strict enforcement of laws, Time bound trials.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – II

References:

1. Ahuja, Ram (2003), *Social Problems in India*, Rawat Publication, Jaipur.
2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
3. Inciardi, J.A. 1981. *The Drug Crime Connection*. Beverly Hills: Sage Publications.
4. Kapoor. T. (1985) *Drug Epidemic Among Indian Youth*, New Delhi: Mittal Pub.
5. Kessel, Neil and Henry Walton. 1982, *Alcoholism*. Harmond Worth: Penguin Books.
6. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
7. National Household Survey of Alcohol and Drug Abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.
8. Ross Coomber and Others. 2013, *Key Concept in Drugs and Society*. New Delhi: Sage Publications.
9. Sain, Bhim 1991, *Drug Addiction Alcoholism, Smoking Obscenity*, New Delhi: Mittal Publications.
10. Sandhu, Ranvinder Singh, 2009, *Drug Addiction in Punjab: A Sociological Study*. Amritsar: Guru Nanak Dev University.
11. Singh, Chandra Paul 2000. *Alcohol and Dependence among Industrial Workers*: Delhi: Shipra.
12. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation*, Cambridge University Press.
13. Verma, P.S. 2017, “*Punjab’s Drug Problem: Contours and Characteristics*”, Economic and Political Weekly, Vol. LII, No. 3, P.P. 40-43.
14. World Drug Report 2016, United Nations office of Drug and Crime.
15. World Drug Report 2017, United Nations office of Drug and Crime.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – III

Paper –I: FUNDAMENTALS OF MANAGEMENT (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

Management: Introduction – Meaning, nature and characteristics of Management – Scope and functional areas of management – Management as a science, art or profession. Functions of Management.

SECTION-B

Management & Administration – Principles of management – **Social responsibility** of management and Ethics

SECTION-C

Human Resource Management: Acquisition of Human Resource – Human Resource Planning and Job Analysis: An Overview; **Recruitment** – Concept and Sources

SECTION-D

Selection – Concept and Process; Placement, Induction, **Training and Development:** Concept and Importance.

REFERENCE:

1. Koontz, H., “Principles of Management (Ascent Series)”, 2004, Tata McGraw Hill Publishing.
2. Robbins S.P. & Decenzo D., “Fundamentals of Management: Essential Concepts and Applications”, Third Edition, 2000, Pearson Education.
3. Gomez, Meja, Balkin, Cardy, “Managing Human Resources”, Pearson Education, New Delhi.
4. Aswathappa, K., “Human Resource Management Text and Cases”, Tata McGraw – Hill, New Delhi.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – III

Paper –II: HEALTH ECONOMICS (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

Introduction, Medical Care, Health Status, Economic units and Economic Flows, Measures of Individual health and population health measures.

SECTION B

Demand for Medical Care: A Simple Model- The concept of demand, changes in demand, Elasticity of demand – measuring quantitative responsiveness to price changes.

SECTION C

Health Care Production and Cost- The Input-output relationship, Short run & Long run cost – output relationship, Empirical estimation of cost curves; Hospital Marginal Cost, Hospital Economies of Scale, Nursing Home costs and Health insurance costs.

SECTION D

Economic Evaluation of Health Services: Purpose of Economic evaluation, steps in conducting Cost- Benefit analysis. Health Insurance: Introduction and importance. Medicare, trends in health insurance, Goals and limitations.

REFERENCES:

1. Culyer, A. J. (2000). Newhouse Handbook of Health Economics. Vol.1 and II. Amsterdam: Elsevier.
2. Folland, S. Et. Al. (2000). Economics of Health and Health Care. New York: Prentice Hall.
3. Henderson, James. W. (2011). Health Economics and Policy (3rd Ed.). South Western: Education Publishing.
4. Philips, Jacob, & Rapoport, John (2003). Economics of Health and Medical Care (5th Ed.). Jones & Bartlett publishers.
5. Todd, Maria. (2009). The Managed Care Contracting Handbooks (2nd Ed.). Productivity Press.
6. Venkat Raman, A., & Bjorkman, J. W (2009). Public Private Partnership in Health Care in India. London: Rutledge.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – III

Paper –III: BASICS OF FINANCE IN HEALTH CARE (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

Financial Accounting- nature and scope, accounting principles, journal, ledger and trial balance. Preparation of final accounts and balance sheets.
Receipts & payments account. Income and expenditure account

SECTION-B

Cost accounting- Nature and scope.
Cost classification & their concepts. Cost control and cost reduction

SECTION-C

Management and Accounting-nature and scope, cost-volume-profit (CVP) Analysis, cash flow analysis, fund flow analysis, ratio analysis, budgeting and budgetary control

SECTION-D

Concepts of business plan and project plan.
Productivity, resource mobilization.
Hospital rate setting-managerial cost and break-even analysis.

REFERENCES

1. Barton, P. L. 2009. Understanding the U.S. Health Services System.
2. Chicago: Health Administration Press. Lee P. R, and C. L. Estes. 2003.
3. The Nation's Health. Sudbury, MA: Jones and Bartlett Learning. Williams, S. J, and P. R. Torrens. 2008. Introduction to Health Services. Albany, NY: Delmar Publishers

Paper –IV: Patient Behavior and Psychology**Time: 3 Hours****Max. Marks: 50****Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

Introduction- History and origin of science of psychology, definitions and scope of psychology, relevance to healthcare managers, methods of psychology.

Biology of behavior-body mind relationship modulation process in health and illness, genetics and behavior: heredity and environment

Brain and behavior: nervous system, neurons and synapse, association cortex, RT and LT

Hemisphere. Psychology of sensations. Muscular and glandular control of behavior. Response mechanisms.

SECTION-B

Cognitive process-Attention: types, determinants duration and degree, alterations.

Perception: meaning principles, factors affecting errors.

Learning: nature, type's nature factors influencing development theories and methods of memorizing and forgetting.

Memory: meaning, types, nature, factors influencing, development theories and methods of memorizing and forgetting.

Thinking: types & levels, stages Intelligence: meaning classification, uses, theories .Aptitude: concept, types, individual differences and variability.

Psychometric assessment of cognitive processes.

SECTION-C

Motivation: Meaning, concepts, types, theories, motives and behavior, conflict resolution.

Emotions and stress: definition components, changes in emotions, theories, emotional adjustments, emotions in health and illness.

Stress: stressors, cycle, effect, adaptation & coping. Attitude: meaning, nature, development, factors affecting. Behavior and attitudes, Attitudinal change, Psychometric assessments of emotions and attitudes, Personality definitions, topography, types, theories, Psychometric assessments of personality.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – III

SECTION-D

Developmental psychology: psychology of people at different ages from infancy to old age.

Psychology of vulnerable individuals- challenged, women, sick, etc. Psychology of groups.

Mental hygiene and mental health: Concepts, Characteristic of mentally healthy person. Warning signs of poor mental health.

Primitive and preventive mental health strategies & services. Ego, defense mechanisms and implications. Personal and social adjustments. Guidance and counseling.

References

- 1.Organization Behavior – S. P. Robbins
2. Prentice Hall Organizational Behavior – Fred Luthans – McGraw Hill
- 3.Organizational Behavior – M. L. Prasad – S. Chand

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – III

Paper –V: EMERGING TRENDS IN HEALTH CARE (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

AMBIENT WELLNESS & VIRTUAL ACTUALIZATION: Virtual realities, real (physical, cognitive, emotional) improvements

Assessment of one's personal health. Introduction to population health and national and global health goals. Find out the Health boosting features – embedded into the environment .Assessing health information. Improving personal fitness

SECTION-B

Healthy Food Choices .Weight and Body Composition

Dietary choices for lifelong health. Achieving and maintaining a healthy weight

SECTION-C

Managing stress. Sleep hygiene, The Importance of Sleep .Lowering risk of infectious diseases. Chronic disease risk reduction. Telemedicine.

SECTION-D

Incredible Technological Advancements

Smart technology in hospitals. Biosimilars

New, innovative and seamless ways to access health services. Revolution in care.

Effects of Globalization in Health care. Functioning of modern hospitals & changing need of patients. Care offered in Specialty and Super specialty Hospitals.

REFERNCES:

1. Alfred, T., Ben-Shlomo, Y., et al. (2012). A Multi-cohort Study of Polymorphisms in The GH/IGF Axis and Physical Capability: The HALCYon Programme
2. Alwin, D. F. (2012). Integrating Varieties of Life Course Concepts. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 67(2), 206–220.
3. Antony, P. M., Balling, R., et al. (2012). From Systems Biology to Systems Biomedicine. *Current Opinion in Biotechnology*, 23(4), 604–608.
4. Arnesen, E., & Forsdahl, A. (1985). The Tromsø Heart Study: Coronary Risk Factors and Their Association with Living Conditions During Childhood. *Journal of Epidemiology and Community Health*, 39(3), 210–214.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – III

Paper –VI: MEDICAL SOFTWARE APPLICATION-2 (PRACTICAL)

Time: 3 Hours

Max. Marks: 50

Practical Examination will be conducted for this paper.

SECTION-A

Review of HIS & CPRS-Introduction, preparation, setup instructions, troubleshooting.
Front office module in HIS- Process of registration, admitting, billing, discharging of patients, financial management, OP &IP modules.

SECTION-B

Financial management module-components, planning and budgeting, project design and implementation.
Introduction to tally.

SECTION-C

Management information system- components, types, steps and key role. OT management system-necessity and principles.
Lab management and reporting system

SECTION-D

Exemplification/ Description of information systems in the areas of Clinical informatics, Consumer health informatics and Public health informatics.
Concept of Management Information System (MIS), Health Information System and its components, Identifying information needs and developing indicators, Designing HMIS, data transmission processing and quality, Ways to enhance use of information in decision making, Uses of HMIS:, Computerization of HMIS, concept of GIS (Geographic Information system) in hospitals. Concept of electronic medical records, & information security

REFERENCES

1. AHRQ. (2011). *National Strategy for Quality Improvement in Health Care*.
2. Akerkar, R. (2009). *Foundations of The Semantic Web: XML, RDF & Ontology*. Oxford: Alpha Science International Ltd.
3. Church, G. M., Gao, Y., & Kosuri, S. (2012). Next-generation Digital Information Storage in DNA. *Science*, 337, 1628.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – IV

Paper –I: FUNDAMENTALS OF ACCOUNTING (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

Introduction: Financial Accounting-Definition and Scope, Objectives of Financial Accounting, Accounting v/s Book Keeping, Terms used in accounting, Users of Accounting Information and Limitations of Financial Accounting.

Conceptual Frame work: Accounting Concepts, Principles and Conventions, Accounting Standards-Concept, Objectives, Benefits, Brief review of Accounting Standards in India, Accounting Policies, Accounting as a measurement discipline.

SECTION B

Recording of Transactions: Accounting Process/Cycle, Journal-Recording of transactions
Ledger with practical

SECTION C

Subsidiary Books-Types and practical application
Cash Book-Types and recording process

SECTION D

Trial Balance-Methods and errors to be rectified and not rectified

Final Accounts: Meaning of Financial Statements, Usefulness of Financial Statements, Elements of Financial Statements, Preparation of Trading and Profit & Loss Account and Balance Sheet without Adjustments.

REFERENCES:

1. Gupta, Ambrish, "Financial Accounting for Management: An Analytical Perspective", Pearson Education, New Delhi.
2. Khatri, Dhanesh, "Financial Accounting" Tata McGraw-Hill, New Delhi.
3. Horngren, Charles T., Sundem, Gart I, Elliot, John A. Philbrick, Donna R., "Introduction to Financial Accounting", Prentice Hall, New Delhi.
4. Ramachandran, N and Kakani, Ram, "Financial Accounting for Management", Tata McGraw-Hill, New Delhi.
5. Shukla, M.C., Grewal T.S. and Gupta, S.C., "Advance Accounts", Sultan Chand & Sons, New Delhi. Note: The latest editions of the books should be followed

Note: The latest editions of the books should be followed.

Paper –II: MAKING DECISIONS (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION A

Decisions of Medical firms under different objectives; Marginal analysis and its uses in the business decision making; Theories of demand: indifference and revealed preference approach; income and distribution effects; demand functions and demand forecasting.

SECTION B

Managerial Applications: The Production Function; Returns to Scale; Productivity Measurements; Constrained Optimization Approach to Developing Optimal Input Combination Relationships; Managerial Applications.

SECTION C

Managerial and Behavioural Theories of Firm: Sales maximization, growth maximization and satisfying theory of a firm. Theory of Firm: Profit maximization under different market structures; Pricing Strategies of firms; Cost plus Pricing; Simple Monopoly, Price discrimination, Monopolistic Competition- non-price competition

SECTION D

Market Power in Health Care: Determinants of Market Structure. Pricing of Inputs, Applications, Decision making under Risk and Uncertainty.

REFERENCES:

1. Allen, W. B., Doherty, N. A., Weigelt, K., & Mansfield, E. (2010). *Managerial Economics: Theory, Applications and Cases* (7th Ed.). London: W. W. Norton & company.
2. Baumol, W. J. (2009). *Economic Theory & Operations Analysis* (4th Ed.). New Delhi: Prentice Hall.
3. Brickley, J. A, Smith, C. W., & Zimmerman, J. L. (2008). *Managerial Economics & Organizational Architecture* (5th Ed.). New Delhi: McGraw Hill.
4. Hirschey, M. (2010). *Managerial Economics: An Integrative Approach* (1st Ed.). USA: Cengage Learning.
5. Koutsoyiannis, A. (2010). *Modern Micro Economics* (2nd Ed.). New Delhi: Palgrave, McMillan.
6. Mark, H. (2009). *Fundamentals of Managerial Economics* (9th Ed.). USA: Cengage Learning.
7. Petersen, H. C., Lewis, W. C., & Sudhir, K. J. (2009). *Managerial Economics* (9th Ed.). New Delhi: Prentice Hall of India.
8. Salvatore, D. (2007). *Managerial Economics* (6th Ed.). London: Oxford University press.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – IV

Paper –III: QUALITY ASSURANCE (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

Aspects of Quality

Quality mission, policy and objectives; concepts, evolution and determinants of quality; Interpretation and process of quality audits; cost of quality and economics of quality. Concepts of quality improvement, quality assurance, business score card.

SECTION B

Quality Management Concepts

Definition, underlying concepts, implementation and measurement of Quality Management, internal customer- supplier relationship, Quality Circles, Quality improvement teams, team work and motivation in Quality management implementation, training and education, role of communication in implementing quality management, policy deployment.

SECTION C

Quality Management Processes

Processes in service organization and their control, simple seven tools of quality control; check sheet, Histogram, Scatter diagram, Process Mapping, Cause and Effect diagram, Pareto analysis, control charts and Advanced tools of quality

SECTION D

Approaches to Quality Management

Facets of quality, quality planning, quality improvement methods, Kaizen, quality audits, dicmeal audit, accreditation, nursing care standards, Six Sigma, JIT and NABL

References:

1. Bester field H.Dale, Total Quality Management, Pearson New Delhi, 2005.
2. Sridhar Bhat, Total Quality Management, Himalaya House publications, Mumbai, 2002
3. Sundara Raju, S.M., Total Quality Management: A Primer, Tata McGraw Hill, 1995.
4. Srinivasan, N.S. and V. Narayana, Managing Quali- concepts and Tasks, New Age International, 1996.
5. Kume, H., Management of Quality, Productivity Press, 1996
6. Dennis, Lock., Handbook of Quality Management, 1992
7. Hammer, M. and Spect. Business Process Reengineering, 1995 .ISQUA Journal

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – IV

Paper –IV: ETHICAL ISSUES IN HEALTH CARE (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION –A

Law and establishment of hospitals-private/public hospitals, legal requirements under medical council Acts. Punjab clinical establishment act and rules (as amended till date). Basics concepts of labor laws in India. Hospitals as an industry”- application of labor enactments-discipline in hospitals”-disciplinary action-a study of valid requirements of domestic enquiry-Trade union act

SECTION-B

Essentials of contract Act Contractual obligations in hospital services-requisites of a valid contract –hospital as “bailer”-sale and purchase of goods-duties towards patients-code of ethics-violation legal consequences.

SECTION-C

Legal aspects relating to organ transplantation, MTP Act, 1971, basics of drugs and cosmetics act, anesthesia.ESI Act, PNDT Act, human experimentation, clinical trials, industrial dispute Act.

SECTION –D

Legal liability of hospitals-criminal, civil and tortuous, liability for negligence, consumer protection law, absolute liability and vicarious liability, legal remedies available to patients: remedies under contract law, tort, criminal law and consumer protection act. Medical jurisprudence. Medical ethics-basic issues, importance, process of developing and implementing ethics and values in institution-codes of conduct: Hippocrates oath and declaration of Geneva-MCI regulation-professional conduct, etiquette and ethics.

REFERNCES:

1. Chan BTB. What Happened to Canada's Physician Workforce in the 1990's? Canadian Institute for Health Information: 2002.
2. Bonnell G. Family Docs Won't Back Temporary Deal. National Post. March 17 2005.
3. Ferguson R. Town's Last Six Doctors Quitting. Toronto Star. Feb 18 2005.
4. Kohn LT, Corrigan JM, Donaldson MS, Editors to Err is Human: Building a Better Health System. Institute of Medicine, Committee on Quality of Health Care in America; 1999.
5. Flory J, Emanuel E. Interventions to Improve Research Participants' Understanding in Informed Consent for Research: A Systematic Review. JAMA. 2004;292:1593–1601. doi: 10.1001/jama.292.13.1593.
6. Ersek M, Scanlon C, Glass E, Ferrell BR, Steeves R. Priority Ethical Issues in Oncology Nursing: Current Approaches and Future Directions. Oncology Nursing Forum. 1995;22:803–7.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – IV

Paper –V: NURSING ADMINISTRATION-I (THEORY)

Time: 3 Hours

Max. Marks: 50

Instructions for the Paper Setters:-

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

SECTION-A

Principles and functions of management- Introduction to Management in Nursing .History, Definition, concepts and theories.
Functions of management. Principles of management. Role of nurse as a manager and her qualities.

SECTION-B

Management Process: Planning, mission, philosophy, objectives, operational plan.
Staffing: Philosophy, staffing study, norms, activities, patient classification system, scheduling, human resource management, recruiting, selecting, deployment, retaining, promoting,
Budgeting: Concept, principles, types, cost benefit analysis audit.
Material management: equipment and supplies. Directing process (Leading).
Controlling: Quality management.
Program Evaluation Review Technique (PERT).

SECTION-C

Hospital Organization: Definition, types and functions of hospital. Governing body Hospital administration . Control & line of authority . Hospital statistics including hospital utilization indices. Role of hospital in comprehensive health care.
Development of new management practices: Marketing of Hospitals, Specialty Hospitals

SECTION-D

Management of nursing services in the hospital: Planning & Hospital & patient care units including ward management & Emergency and disaster management Human resource management & Recruiting, selecting, deployment, retaining, promoting, superannuation & Categories of nursing personnel including job description of all levels & Patients/ population classification system & Patients/ population assignment and nursing care responsibilities & Staff development and welfare programmes .
Budgeting: Proposal, projecting requirements for staff, equipments and supplies for & Hospital and patient care units & Emergency and disaster management. Material management: Procurement, inventory control, auditing and maintenance in & Hospital and patient care units & Emergency and disaster management.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – IV

REFERENCES

1. Nursing Administration and Management, 1st edn, Academic Press: New Delhi, 2000.
2. Shakharkar, B M. Principles of Hospital Administration and Planning, Jaypee Brothers: Bangalore, 1998. 3. Pai, Pragna. Effective Hospital Management, 1st edn, The National Book Depot: Mumbai, 2002.
4. Srinivasan, A V. Managing a Modern Hospital, 1st edn, Sage Publications: New Delhi, 2002.
5. Basavanthappa, B T. Nursing Administration, 1st edn, J P Brothers Medical Publishers: New Delhi.

BACHELOR OF VOCATION (B.VOC.) (HEALTH CARE MANAGEMENT)
SEMESTER – IV

Paper –VI: TRAINING (PRACTICAL)

Time: 3 Hours

Max. Marks: 50

Practical Examination will be conducted for this paper.

SECTION-A

Practical training in EDP/IT Department, reception, admission, billing & discharge .OPD services, public relation office, pharmacy services, stores and housekeeping.

SECTION-B

Training in laboratory services, imaging services, personnel/HR Dept, kitchen and dietary services, marketing, computerized medical record, security services and wards.

SECTION-C

Role of health / hospital administrator in central sterile supply dept, library in hospital, emergency, critical care unit, maintain medical record, work in operation theatre and maintenance dept. Management of health care team- Types of committees governing health team. Management of Para-medical personnel, Nurses, field workers, other Para-medical staff.

SECTION –D

Practical training in biomedical dept, diagnostic imaging, dental service, dialysis unit, burn units, blood bank, telemedicine and medical transcription.

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SEMESTER – IV

Paper –VII: (ESL-221): ENVIRONMENTAL STUDIES

Time: 3 Hrs.

Max. Marks: 100

Teaching Methodologies

The Core Module Syllabus for Environmental Studies includes class room teaching and field work. The syllabus is divided into 8 Units [Unit-1 to Unit-VII] covering 45 lectures + 5 hours for field work [Unit-VIII]. The first 7 Units will cover 45 lectures which are class room based to enhance knowledge skills and attitude to environment. Unit-VIII comprises of 5 hours field work to be submitted by each candidate to the Teacher in-charge for evaluation latest by 15 December, 2019.

Exam Pattern: **End Semester Examination- 75 Marks**
 Project Report/Field Study- 25 Marks [based on submitted report]
 Total Marks- 100

The structure of the question paper being:

Part-A, Short answer pattern with inbuilt choice – 25 Marks

Attempt any five questions out of seven distributed equally from Unit-1 to Unit-VII. Each question carries 5 marks. Answer to each question should not exceed 2 pages.

Part-B, Essay type with inbuilt choice – 50 Marks

Attempt any five questions out of eight distributed equally from Unit-1 to Unit-VII. Each question carries 10 marks. Answer to each question should not exceed 5 pages.

Project Report / Internal Assessment:

Part-C, Field work – 25 marks [Field work equal to 5 lecture hours]

The candidate will submit a hand written field work report showing photographs, sketches, observations, perspective of any topic related to Environment or Ecosystem. The exhaustive list for project report/area of study are given just for reference:

1. Visit to a local area to document environmental assets: River / Forest/ Grassland / Hill / Mountain / Water body / Pond / Lake / Solid Waste Disposal / Water Treatment Plant / Wastewater Treatment Facility etc.
2. Visit to a local polluted site – Urban / Rural / Industrial / Agricultural
3. Study of common plants, insects, birds
4. Study of tree in your areas with their botanical names and soil types
5. Study of birds and their nesting habits
6. Study of local pond in terms of wastewater inflow and water quality
7. Study of industrial units in your area. Name of industry, type of industry, Size (Large, Medium or small scale)
8. Study of common disease in the village and basic data from community health centre
9. Adopt any five young plants and photograph its growth
10. Analyze the Total dissolved solids of ground water samples in your area.
11. Study of Particulate Matter (PM_{2.5} or PM₁₀) data from Sameer website. Download from Play store.
12. Perspective on any field on Environmental Studies with secondary data taken from Central Pollution Control Board, State Pollution Control Board, State Science & Technology Council etc.

Unit-I

The multidisciplinary nature of environmental studies

Definition, scope and importance, Need for public awareness

(2 lectures)

Unit-II

Natural Resources: Renewable and non-renewable resources:

Natural resources and associated problems.

- (a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
- (b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
- (c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- (d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- (e) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
- (f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
 - Role of an individual in conservation of natural resources.
 - Equitable use of resources for sustainable lifestyles.

(8 Lectures)

Unit-III

Ecosystems

- Concept of an ecosystem
- Structure and function of an ecosystem
- Producers, consumers and decomposers
- Energy flow in the ecosystem
- Ecological succession
- Food chains, food webs and ecological pyramids
- Introduction, types, characteristic features, structure and function of the following ecosystem: Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, ocean estuaries)

(6 Lectures)

Unit-IV

Biodiversity and its conservation

- Introduction – Definition: genetic, species and ecosystem diversity
- Biogeographical classification of India
- Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values
- Biodiversity at global, national and local levels
- India as a mega-diversity nation

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SEMESTER – IV

- Hot-spots of biodiversity
- Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts
- Endangered and endemic species of India
- Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

(8 Lectures)

Unit-V

Environmental Pollution :

Definition :

- Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear pollution
- Solid waste management: Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management: floods, earthquake, cyclone and landslides

(8 Lectures)

Unit-VI

Social Issues and the Environment

- From unsustainable to sustainable development
- Urban problems and related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns. Case studies.
- Environmental ethics: Issues and possible solutions
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation
- Consumerism and waste products
- Environmental Protection Act, 1986
- Air (Prevention and Control of Pollution) Act, 1981
- Water (Prevention and control of Pollution) Act, 1974
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness

(7 Lectures)

Unit-VII

Human Population and the Environment

- Population growth, variation among nations
- Population explosion – Family Welfare Programmes
- Environment and human health
- Human Rights

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SEMESTER – IV

- Value Education
- HIV / AIDS
- Women and Child Welfare
- Role of Information Technology in Environment and Human Health
- Case Studies

(6 Lectures)

Unit-VIII

Field Work

- Visit to a local area to document environmental assets River / forest / grassland / hill / mountain
- Visit to a local polluted site – Urban / Rural / Industrial / Agricultural
- Study of common plants, insects, birds
- Study of simple ecosystems-pond, river, hill slopes, etc

(Field work equal to 5 lecture hours)

References:

1. Bharucha, E. 2005. Textbook of Environmental Studies, Universities Press, Hyderabad.
2. Down to Earth, Centre for Science and Environment, New Delhi.
3. Heywood, V.H. & Waston, R.T. 1995. Global Biodiversity Assessment, Cambridge House, Delhi.
4. Joseph, K. & Nagendran, R. 2004. Essentials of Environmental Studies, Pearson Education (Singapore) Pte. Ltd., Delhi.
5. Kaushik, A. & Kaushik, C.P. 2004. Perspective in Environmental Studies, New Age International (P) Ltd, New Delhi.
6. Rajagopalan, R. 2011. Environmental Studies from Crisis to Cure. Oxford University Press, New Delhi.
7. Sharma, J. P., Sharma. N.K. & Yadav, N.S. 2005. Comprehensive Environmental Studies, Laxmi Publications, New Delhi.
8. Sharma, P. D. 2009. Ecology and Environment, Rastogi Publications, Meerut.
9. State of India's Environment 2018 by Centre for Sciences and Environment, New Delhi
10. Subramanian, V. 2002. A Text Book in Environmental Sciences, Narosa Publishing House, New Delhi.