

# **PRNSS COLLEGE MATTANUR**

## **OPEN COURSE LIST 2023 JUNE**

1. 5D01(1) ENG English for Competitive Examinations
2. 5D01 (5)ENG Gender studies
3. 5D 01 SSE Basics of Economics
4. 5 D 04 HIN Hindi Meim Anuvad
5. 5D01 HIS Social Reform Movements in Kerala
6. 5D 01 COM Basic Accounting
7. 5D02 MAT Quantitative Arithmetic and Reasoning
8. 5 D04 PHY Joy of Star Watching
9. 5D03 CHE/PCH Environmental Studies
10. 5 D 02 ZLG Apiculture
11. 5D 01 BOT Mushroom Cultivation
12. 5D 01 PED Health And Physical Education

**Kannur University**  
**BA English Language and Literature**  
**Generic Elective Courses**  
Curriculum, Syllabus and Scheme for  
5D01 (1)ENG:English for Competitive Examinations

**Course Outcomes**

- To familiarise students with the language items required to take competitive examinations at various levels
- To acquaint the students with the basics of English grammar
- To enable the students to enrich their vocabulary
- To provide opportunities for the students to improve their listening and reading comprehension skills
- To familiarise the students with the questions that are commonly asked in various interviews and to help them frame the desirable responses

**Course Details**

Course Code: 5D01 (1)ENG

Title of the Course: English for Competitive Examinations

Semester Assigned:5

No. of Credits: 2

Contact hours/week: 2

Total No. of contact hours: 36

**Content Specifications**

**Module I (1 hour)**

**Basic Grammar**

- a) Concord
- b) Articles
- c) Modals
- d) Tenses

- e) Prepositions
- f) Question Tags
- g) Punctuations

**Module II (1 hour)**

**Vocabulary and Writing**

- a) Error Correction
- b) Vocabulary Test
- c) Rearrangement of words to form meaningful sentences
- d) Idiomatic Expressions
- e) Comprehension Passages
- f) Phrasal Verbs
- g) Collocation

**Guidelines for Evaluation (SD01 (1) ENG**

**Internal Evaluation: (Total Marks=5)**

1. Model Examination =2.5 Marks
2. Assignment/Viva Voce/Seminar = 2.5 Marks

**End Semester Examination (Total Marks - 20)**

**Pattern of Question Paper**

Time – 2 Hours Maximum Marks - 20

1. One short essay (150 words) out of two from Module- 1&2 (Marks -1x5=5)
2. Comprehension/Punctuation/Error Correction/ any other task(Marks =3)
3. Twelve short answer questions (Marks- 12x1 =12)

**Kannur University**  
**BA English Language and Literature**  
**Generic Elective Courses**  
 Curriculum, Syllabus and Scheme for  
 5D01(5) ENG: Gender Studies

**Course Outcomes**

- Understand and engage with central debates in the field of Women's and Gender Studies.
- Apply a variety of methods of analyzing gender in society, drawing upon both primary and secondary sources.
- Apply concepts and theories of Women's and Gender Studies to life experiences and historical events and processes.
- Communicate effectively about gender issues in both writing and speech, drawing upon Women's and Gender Studies scholarship and addressing a public audience.

**Course Details**

Course Code	5D01(5)ENG
Title of the Course	Gender Studies
Semester Assigned	5
No. of Credits	2
Contact hours/week	2
Total No. of contact hours	36

**Content Specifications****Module I**

- **Key terms**  
Sex, gender, gender dysphoria, masculinity, femininity, patriarchy, other, stereotypes, identity, transgender

**Module II**

1. Speech on Gender Equality : Emma Watson
2. Mein Maa Hoon: Journey of Transgender Mother (interview) : Gauri Sawant

**Module III**

1. Tara (play) : Mahesh Dattani
2. The Day I Become a Woman (film): Marzich Mishkini
3. My Life in Pink (film) : Alain Berliner

**Short fiction**

1. Boys and Girls : Alice Munro

- 2.Lihaaf :IsmatChughtai  
3.Hijra :Kamala Das

Suggested Reading:

1. Barrett, Michele. *Women's Oppression Today*. London: Verso,1988.
2. Belsey, Catherine and Jane Moore. Eds. *The Feminist Reader: Essays in Gender and the Politics of Literary Criticism*. 2nd edition. Basingstoke,Palgrave,1997.
3. Christian, Barbara. *Black Feminist Criticism: Perspectives on the Black Women Writer*. New York: Pegamon Press,1985.
4. Fuss, Diana. Ed. *Inside/Out*. New York and London: Routledge,1991.
5. Moi, Toril. *Sexual/Textual politics*. London: Methuen,1985.
6. Jacobus, Mary. *Women Writing and Writing About Women*. London: Croomhelm,1979.
7. Eagleton, Mary , Ed. *Feminist Literary Criticism*. London: Longman,1991.
8. Showalter ,Elaine. Ed. *Speaking of Gender*. London: Routledge,1989.
9. Butler, Judith. *Gender Trouble: Feminism and the Subversion of Identity*. New York and London: Routledge,1990.
10. Lewis. Reina and Sara Mills. (2003). ed. *Feminist Postcolonial Theory: A Reader*. New York and London: Routledge. - Chandra Talpade Mohanty, bell hooks, Adrienne Rich, Sara Mills.

**Guidelines for Evaluation**

**Internal Evaluation(Total Marks -5)**

1. ModelExamination- 2.5marks
2. Assignment- 2.5marks

**End Semester Examination(Total Marks - 20)**

**Pattern of Question Paper**

Time--2Hours

Maximum Marks—20

- |  |          |
|--|----------|
| 1. One out of two questions from Module3 (drama&films)<br>1x6=6) | (Marks - |
| 2. Three out of four questions from Module 1 &2<br>3x3=9)        | (Marks - |
| 3. Five out of seven questions from Module 3<br>5x1=5)           | (Marks - |

### GENERIC ELECTIVE COURSE -1: BASICS OF ECONOMICS

SEMESTER	COURSE CODE	HOURS PER WEEK	CREDIT	EXAM HOURS
5	5D01SSE	2	2	2

#### COURSE OUTCOMES:

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

1. understand the basic concepts of economics in everyday life
2. evaluate major economic issues in and around them

#### Module I: Introduction to Economics

Definition of Economics – Nature and scope of economics – Problems of scarcity and choice: The three key economic questions – Opportunity Cost - Micro and Macroeconomics – Elementary theory of demand: determinants of household demand, market demand, movement along and shift of the demand curve – Elementary theory of supply: determinants of supply, movement along and shift of supply curve – Market equilibrium (18 Hours).

#### Module II: Market and Economy

Forms of Market: Features of Perfect competition, Monopoly, Monopolistic Competition and Oligopoly – Characteristics of a good economy - Types of Economy: Features of Capitalist, Socialist and Mixed Economy- Growth and Development- Issues in Economic Development: Causes of Poverty, Unemployment and Inequality – Basic concepts of National income: GNP, GDP, NNP and PI – Functions of Money – Basic concepts: CRR and SLR, Repo rate, Surplus and Deficit Budget (18 Hours).

#### BOOKS FOR STUDY

1. Pindyck, R. S., Rubinfeld, D. L., & Mehta, P. L. (1995). Microeconomics (Vol. 4). Englewood Cliffs, NJ: Prentice Hall.
2. Rangaraj & Dholakia, (2001), Principles of Macro Economics, McGrawHill Education

Marks including choice: 30	
Maximum marks: 20	
Module	Marks
1	15
2	15

**GENERIC ELECTIVE COURSE IV**

**हिन्दी में अनुवाद (HINDI MEIM ANUVAD)**

SEMESTER	COURSE CODE	HOURS PER WEEK	CREDIT	EXAM HRS
V	5 D 04 HIN	2	2	2

**COURSE OUTCOME**

**CO 1: Understand the importance of translation.**

**CO2: Understand the types of translations and the challenges of the translator.**

**CO3: Understanding English idioms and proverbs in hindi.**

**CO4: Developing translation skill from English to hindi.**

**Unit I :**

अनुवाद का अर्थ  
अनुवाद का महत्व एवं प्रासंगिकता।

**( 9 Hrs)**

**Unit II :**

अनुवाद के प्रकार – अनुवादक के गुण – अनुवाद की सीमाएँ।

**( 9 Hrs)**

**Unit III:**

अंग्रेज़ी मुहावरों और लोकोक्तियों के हिन्दी प्रतिरूप - मीडिया संबंधी प्रमुख शब्दावली।

**( 9 Hrs)**

**Unit IV:**

अनुवाद व्यवहार (From English to Hindi) Ask questions only from prescribed books.

**( 9 Hrs)**

**GENERIC ELECTIVE COURSE 01**

**Social Reform Movements in Kerala**

Semester	Course Code	Hours Per Week	Credit	Exam. Hours
V	5D01 HIS	2	2	2

**Course Outcomes:** students should be able to:

1. Understand the role of Western education, missionary activities and indigenous reform movements in the making of modern Kerala
2. Evaluate the ideas, programmes and tactics of social reformers
3. Promote critical thinking about various social and religious issues in Kerala
4. Analyze and explain secular foundations of Kerala society

**UNIT I: Reflections of Westernization**

Concept of Colonial Modernity - Introduction of English education – Missionary Contributions -

**UNIT II: Kerala Renaissance**

Sree Narayana Guru - Chattampi Swamikal- Ayyankali - Vakkom Abdul Khader Moulavi- Vagbhadanandan- Brahmananda Sivayogi - Ananda Teerthan - V.T.Bhatathirpad - Sahodaran Ayyapan - C. Krishnan- Growth of caste organizations: SNDP, NSS, Yogashema Sabha

**UNIT III: Reform Movements and their Impact**

Agitations against untouchability: Vaikom and Guruvayoor Stayagrahas - Temple entry proclamation - Impact of the reform movements - New trends in literature - Vallathol- Uloor- Kumaran Asan-

**Essential Readings:**

A Sreedhara Menon, *Survey of Kerala History*

-----, *Kerala History and its Makers*

P. Govinda Pillai, *Keralathile Samuhyam Navodhana Prasthanam*

M.K.Sanoor, *Sree Narayana guru*

P.K.Velayudhan, *SNDP YOGAM charitam*

T.K.Ravindran, *Asan and social revolutions in Kerala*

-----, *Vaikom Satyagraha and Gandhi*

P.J. Cherian, *Perspectives on Kerala History*

P.Govinda Pillai, *Keralathile samuhyam Navodhana Prasthanam*

P K. Gopalakrishnan, *Keralathinte samskarika Charithram*

EMS Namboothiripad, *Keralacharithram Marxist Veekshanathil*

PK Balakrishnan, *Jathivyavasthayam Keralacharithravum*

**Marks including choice: 30**

**Maximum marks: 20**

Unit	Marks
I	6
II	12
III	12



**GENERIC ELECTIVE COURSE I: BASIC ACCOUNTING**

<b>SEMESTER</b>	<b>COURSE CODE</b>	<b>HOURS PER WEEK</b>	<b>CREDIT</b>	<b>EXAM HRS</b>
<b>V</b>	<b>5D01 COM</b>	<b>2</b>	<b>2</b>	<b>2</b>

**COURSE OUTCOME**

After studying the course, students shall be able to;

CO 1: describe the basic accounting concepts

CO 2: record the business transactions in the proper books of accounts

CO 3: prepare financial statements of a sole trading concern

**Unit I**

**Introduction** :Basic Accounting concepts - Kinds of Accounts – Double Entry Book Keeping – Rules of Debit and Credit.

[6 Hours]

**Unit II**

**Recording of Transactions:** – Preparation of Journal and Ledger Accounts- Simple problems .

[8 Hours]

**Unit III**

**Subsidiary books** - cash book – types of cash book – problems(single column and two column only) -purchase book - sales book - sales return - purchase return books –Journal proper

[6 Hours]

**Unit IV**

**Trial balance** – Meaning and purpose-Preparation of trial balance

[6 Hours]

**Unit V**

**Financial Statements** –Trading and Profit & Loss Account – Balance sheet (of sole trading concern) – Simple Problems

[10 Hour

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**(Theory and problems may be in the ratio of 30% and 70% respectively)**

**GENERIC ELECTIVE COURSE 2:  
QUANTITATIVE ARITHMETIC AND REASONING**

SEMESTER	COURSE CODE	HOURS PER WEEK	CREDIT	EXAM HOURS	MARKS		
					END SEM EXAM	INTERNAL	TOTAL
V	5D02 MAT	2	2	2	20	5	25

**COURSE OUTCOMES**

CO1	Understand average, Problems on ages, Profit and loss and solves problems
CO2	Understand Profit and loss, Ratio and proportion, Chain rule
CO3	Comprehend Time and work, Time and distance and solves problems
CO4	Comprehend Problems on trains, Boats and streams, Calendar, Clocks

**5D02 MAT: Quantitative Arithmetic and Reasoning**

**Unit I** **(18 hours)**  
Average, Problems on ages, Profit and loss, Ratio and proportion, Chain rule (Chapters 6, 8, 11, 12, 14 of the Text).

**Unit II** **(18 hours)**  
Time and work, Time and distance, Problems on trains, Boats and streams, Calendar, Clocks (Chapters 15, 17, 18, 19, 27, 28 of the Text).

**Text**  
R.S. Aggarwal, Quantitative Aptitude for Competitive Examinations, S. Chand.

**Marks including choice**

Unit	Marks In End Semester Examination	
	Aggregate Marks	Maximum Marks
I	17	20
II	16	
Total	33	

**Pattern of Question Paper**

- Part A - Short answer** (5 questions x Mark 1 each = 5)  
 • Answer any 4 questions (4 questions x Mark 1 each = 4)
- Part B - Short Essay** (10 questions x Marks 2 each = 20)  
 • Answer any 6 questions (6 questions x Marks 2 each = 12)
- Part C - Essay** (2 questions x Marks 4 each = 8)  
 • Answer any 1 question (1 question x Marks 4 each = 4)

- Use of Calculators shall not be permitted for this course.

### 5 D 04 PHY:JOY OF STAR WATCHING

SEMESTER	COURSE CODE	HOURS PER WEEK	CREDIT	EXAM HRS
V	5 D 04 PHY	2	2	2

#### COURSE OUTCOME

**CO 1: Understand Our Universe and its origin**

**CO2:Understand simple constellations**

**CO3:Explain the stars in Kerala culture**

**CO4:Understand the techniques of star watching**

#### **UnitI: Astrophysics**

**12Hrs**

The study of the Universe - Problems and prospects. The Universe - its origin-  
\_Galaxies\_\_Milkyway. A star is born. The death of a star. The comets–The pole star

**(Book 1)**

#### **Unit II: The constellations**

**2 Hrs**

Orion- Canis major-Taurus—Leo

**(Book 2)**

#### **Unit III Stars in Kerala culture**

**10Hrs**

The origin and expansion of Astrology -Stars and constellations in Kerala culture-

**(Book 2)**

#### **Unit IV: Star watching**

**8 Hrs**

How to experience star watching — For a better view

**(Book 2)**

#### **Books for study:**

1. The Great Universe- G.K.Sasidharan- S.Chand
2. Joy of star watching – BimanBasu- National Book Trust , India.

#### **Book for reference:**

1. Jyothishavum Jyothisasthravum- K. Pappootty-K.S.S.P

### MARKS INCLUDING CHOICE:

Unit	Marks
I	8
II	5
III	8
IV	9

### PATTERN OF QUESTIONS

<b>Part A</b>	<b>Short answer</b>	(6 questions x Mark 1 = 6)
	Answer all questions	(6 questions x Mark 1 = 6)
<b>Part B</b>	<b>Short Essay</b>	(6 questions x Marks 2 each =12)
	Answer any 6 questions	(4questions x Marks 2 each=8)
<b>Part C</b>	<b>Essay</b>	(2questions x Marks 6 each =12)
	Answer any 4 questions	( 1question x Marks 6 each=6)
<ul style="list-style-type: none"><li>• <b>Total marks including choice -30</b></li><li>• <b>Maximum marks of the course-20</b></li></ul>		



**GENERIC ELECTIVE COURSE**

**Environmental Studies**

<b>SEMESTER</b>	<b>COURSE CODE</b>	<b>HOURS PER WEEK</b>	<b>CREDIT</b>	<b>EXAM HRS</b>
<b>V</b>	<b>5D03CHE/PCH</b>	<b>2</b>	<b>2</b>	<b>2</b>

**Contact hours:36Hrs**

**Course Outcome**

**On successful completion of this course, students should be able to**

CO 1) Differentiate the environmental segments and understand the importance of environmental segments

CO 2) Identify the types of environmental pollution and the various sources of the pollution

CO 3) Understand the consequences of environmental pollutions

CO 4) Explain the measures of control of environmental pollution

CO 5) Recognise various sustainable energy sources

**UNIT1. Environmental segments**

**6 Hours**

Environmental segments – Lithosphere: soil formation – components of soils. Hydrosphere: Hydrological cycle- Biosphere - Atmosphere- Structure and composition

**UNIT 2. Air Pollution**

**9 Hours**

Types of pollutants

Air pollution –Sources – pollutants –CO, NOx, Sox, Hydrocarbons, Particulates. Effect on ecosystem., Ozone layer –importance, Ozone depletion-Control measures- Acid rain-control of acid rain- Green house effect-global warming,-photochemical smog(Eqns not needed)- effect pollution on plants and human beings. Control of air pollution Noise Pollution – physiological response to noise – biological effects- carbon foot print

**UNIT 3. Water Pollution 7 Hours**

Water Pollution – Sources –Industrial effluents- agriculture discharge - oil spills- heavy metal -pesticides-biomagnifications and bioaccumulations

[Type text]

Dissolved oxygen in water, chemical oxygen demand (COD) and biochemical oxygen demand (BOD) (Definition only)- control of water pollution- ISI/BIS standards of drinking water

**UNIT 4. Soil Pollution** 8 Hours

Soil Pollution - Sources by industrial and urban wastes, radioactive pollutants, plastics heavy metals. Poisoning by heavy metals – Minamata & Itai-Itai diseases.

Control of soil pollution.- Solid waste Management -Thermal pollution definition-sources of thermal pollution, harmful effect of thermal pollution prevention of thermal pollution.

**UNIT 5. Sustainable Energy Sources & Technology** 6 Hours

Green energy Sources- Wind-water-solar- use of solar energy in space-

Production of electricity using solar energy- Tidal, Biomass and geothermal energy

References:

1. Text book of Environmental Studies for under graduate courses – Erach Bhar
2. Essential Environmental studies- S. P. Misra – S. N. Pandey
3. Environmental chemistry and pollution control – S.S Dara (2<sup>nd</sup> Edition)
4. Environmental chemistry- Peter O' Neill
5. Environmental chemistry – B.K. Sharma
6. Fundamental concepts of environmental chemistry – G.S Sodhi
7. Environmental Chemistry. A.K De



**B. Sc. DEGREE PROGRAMME (Theory)**  
**ZOOLOGY**  
**Generic Elective Course**  
**APICULTURE**  
**CODE : 5 D 02 ZLG**  
**Credit:2; Hours:2/week; Total Hours:36**

**Course outcomes**

**CO 1** :Develop self-employment capabilities.

**CO 2** : Acquires scientific knowledge of profitable farming.

**UNIT I (8 Hrs)**

Definition, Scope, Classification of bees, Rock bee, Indian bee, Little bee and Dammer bee- their identification and habits, choice of species in Apiculture. Bee colony-Distinctive features (social organization), Identification and Functions of queen, drones and workers, Structure and functions of Legs, mouth parts and sting of worker bee. Development of Honey bee-egg, larva and pupa. Food of the bee- honey and pollen-royal jelly. Artificial feeding. Behaviour of bees-dances.

**UNIT II (8 Hrs)**

Principles of apiculture, Arranging an apiary, position-space-direction,acquiring bees-care of newly captured colonies-handling the bees. The bee comb and its architecture-Different kinds of cells. Different types of Modern hives (Newton, Langstroth) – Architecture. Appliances used in Apiaries.

**UNIT III (8 Hrs)**

Swarming-Prevention and control.Uniting stocks-Different methods Queen rearing. Requeening. Feeding methods. Apiary management. Inter-relationships of plants and bees.

**UNIT IV (8 Hrs)**

Honey bee products. Honey- Collection and Extraction, Preservation and storage –Physical properties,Chemical composition,nutritive value, medicinal values-honey as daily food. Bee wax- Production , method of extraction-characteristics and uses. Bee venom-method of collection - composition of venom- its uses.

**UNIT V (4 Hrs)**

Enemies of bees- Mites, Greater wax moth, lesser wax moth, ants, wasps, beetles, birds and their management. Diseases of bees-adult and brood diseases- Bacterial, Fungal, Viral & Protozoan; Prevention and Control measures.

**REFERENCES:**

1. Bee Keeping in India – Sardar Singh- KAR,Delhi.

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2. Bee keeping in South India – Cherian M.C. & Ramachandran, Govt.Press,Chennai.
  3. Handbook of bee keeping – Sharma P.L. & Singh S.,Chandigarh.
  4. Apiculture – J. Johnson and Jeyachandra, Marthandam, TamilNadu.

FIFTH SEMESTER DEGREE PROGRAMME  
**GEC IN BOTANY-1- 5D01BOT - MUSHROOM CULTIVATION**

**Module 1. Mycology. 5hrs**

Five kingdom classification of organisms. Kingdom fungi. General characters of form, function, reproduction and relationship with other organisms. Importance of fungi in human welfare.

**Module 2. Mushroom Biology 10hrs**

Morphology (range of form, macro-morphology, micro-morphology), life cycle of a typical mushroom and biological function. Edible, non-edible and poisonous species. Domestication of mushroom. Importance of mushroom in human nutrition, sustainable livelihood, ecosystem function and quality of the environment.

**Module 3, Applied Mushroom Biology.12 hrs**

Mushroom cultivation and production. Lab scale, pilot plant and large scale cultivation of commercial species. Crop cycle- spawn, substrate, substrate processing, spawning, spawn run, cropping, harvesting, environment requirement, post harvest practices, shelf life, preservation, storage, transport and marketing. Value-added products of mushroom. Constraints and environment management. Economics of mushroom cultivation. Designs of mushroom facility.

Economics of mushroom cultivation and marketing.

**Module 4. Mushroom Biotechnology. 9 hrs**

Concept. Preparation of flavours, appetizers, nutraceuticals, dietary supplements and cosmetics. Mushroom bioremediation. Cleaning of polluted sites. Utilization of mushroom mycelium or enzymes in recycling biological materials. Mycofiltration and applications of the process. Mycorrhiza applications. Biopulping, biobleaching and biotransformations. Biodetergents.

**References.**

1. Harandar Singh 1991. Mushrooms: the art of Cultivation. Sterling Publishers.
  2. Kaul, T.N.2001. Biology and conservation of Mushrooms. Oxford and IBH Publishing Company.
  3. Tripathi, M. Mushroom Cultivation. Oxford and IBH Publishing Company.
  4. Suman B.C.and Sharma V P.2007. Mushroom Cultivation in India. Eastern Book Corporation.
- R.Singh and U.C.Singh 2205. Modern Mushroom Cultivation. Agrobios.



**GENERIC ELECTIVE COURSE I: HEALTH AND PHYSICAL EDUCATION**

<b>SEMESTER</b>	<b>COURSE CODE</b>	<b>HOURS PER WEEK</b>	<b>CREDIT</b>	<b>EXAM HRS</b>
<b>V</b>	<b>5 D 01 PED</b>	<b>2</b>	<b>2</b>	<b>2</b>

**COURSE OUTCOME**

- CO - 1 Familiarize the concept of health and physical education.*
- CO - 2 Create awareness among the basic nutrition, hypo kinetic and life style diseases.*
- CO - 3 Acquire the ability to apply life saving techniques of first aids during emergencies*
- CO - 4 Familiarized to modalities of fitness development and maintenance.*
- CO - 5 Execute Common fitness test and evaluation*
- CO - 6 Examine the posture and postural deformities and prescribe necessary corrective measures*
- CO - 7 Demonstrate five yogasanas and its therapeutic effect leading to wellness*

9

**Unit I : Physical Education**

- 1.1 Physical Education- Meaning,
- 1.2 Need and Importance of Physical Education. Concept of Sports
- 1.3 Major and Minor games, Mass Sports and Recreational games.
- 1.4 Intramural and Extramural competitions
- 1.5 Career opportunities in Sports

(9 Hrs)

**Unit II : Health and Fitness**

- 2.1 Meaning and factors affecting Health.
- 2.2 Health Related Physical Fitness.
- 2.3 Test, evaluation and development of physical fitness (AAHPER Youth Physical fitness test, BMI and One-star standard test)
- 2.4 Health benefits of Physical Exercise, Benefits of Yoga practice -stress management.
- 2.5 Aerobic and anaerobic exercise.
- 2.6 Effect of exercise on Circulatory, Respiratory and Muscular system

(9 Hrs)

**Unit III: Nutrition and Life Style diseases**

- 3.1 Nutrition and health
- 3.2 Balanced diet and mal nutrition.
- 3.3 Drug abuse and side effect
- 3.4 Hypo kinetic Diseases- Dietary and Exercise Interventions

**(9 Hrs)****Unit IV: First Aid and Posture**

- 4.1 First Aid – Definition, Aims and principles, ABC in first Aid and CPR.
- 4.2 Management of fracture Dislocation, Wounds, Sprain, Strain, Cramps, Fainting,
- 4.3 First aid for Burns, Bleeding, Electric shock, Chocking and Fainting
- 4.4 Posture - Congenital and acquired postural deformity.
- 4.5 Corrective measures/interventions

**(9 Hrs)****Books for Study & Reference:**

1. Bucher, C.A., (1979). Foundation of Physical education (5th ed.). Missouri: C.V.Mosby co.
2. Fox, Boulders. Foss, The Physiological basis of Physical education and athletics
3. B K Iyengar, Lights on yoga ;India today group.
4. Milinda j Flagel, Sports first aid; Human kinetics.
5. Barrow, H.M. (1983). Man and Movement: Principles and Physical Education. Phi: Lea and Febiger
6. Corbin, Charles B.et.al, C.A., (2004). Concepts of Fitness and Wellness , Boston: McGraw Hill
7. Kretchmar, R.S. (1994). Practical Philosophy of Sport. IL: Human Kinetics.
8. Shekhar, K.C. (2004). Principles & History of P.E. Delhi: Khel Sahitya Kendra.
9. Frank, A.M. (2003). Sports & education. CA: ABC-CLIO
10. Kamlesh, M.L. (2006). Educational Sport Psychology. New Delhi: Friend's Publication
11. Puri, K, Chandra., S.S, (2005). Health and Physical Education. New Delhi: Surjeet Publications
12. Siedentop, D,(1994) Introduction to Physical Education and Sports (2<sup>nd</sup> ed.).California :Mayfield Publishing Company
13. William, J.E. (1964). Principles of Physical Education:, Com. Philadelphia: W.B.Sounders
14. Ziegler, E.F. (2007). An introduction to Sports & Phy.Edu. Philosophy. Delhi: Sp.Educational Technology.
15. ACSM's "*Health related physical fitness assessment manual* Lippincott Williams and Wilkins USA, 2005