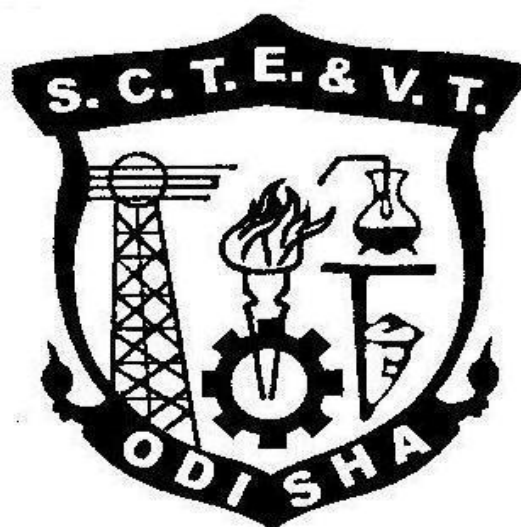


CURRICULLUM OF 1ST SEMESTER
FOR
DIPLOMA IN MODERN OFFICE MANAGEMENT
EFFECTIVE FROM 2024-25 SESSIONS



STATE COUNCIL FOR TECHNICAL EDUCATION
&
VOCATIONAL TRAINING, ODISHA, BHUBANESWAR

STATE COUNCIL FOR TECHNICAL EDUCATION AND VOCATIONAL TRAINING, ODISHA

TEACHING AND EVALUATION SCHEME FOR 1ST SEMESTER (Modern Office Management) (W.e.f 2024-25)

Sl. No	Code No.	Course Title	Hours perweek		Total contact hrs/ week	Credits	Evaluation Scheme			
			L	P			Internal Assessment/ Sessional	End Sem Exams	Exam (Hours)	Total
1	Th 1 (b)	Introduction to IT Systems	3	-	3	3	30	70	3	100
2	TH 2	Financial Accounting	4	-	4	4	30	70	3	100
3	TH 3	Business Studies	4	-	4	4	30	70	3	100
4	TH 4	Fundamentals of Economics	4	-	4	4	30	70	3	100
5	TH 5	Environmental Science	4	-	4	4	30	70	3	100
		TOTAL	19	-	19	19	150	350	---	500
6	PR 1	Introduction to IT Systems Lab	-	4	4	2	25	--	---	25
7	PR 2	Computer Typing English I	-	4	4	2	25	25	1	50
8	PR 3	Short Hand English I	-	2	2	1	50	25	3	75
9	PR 4	Seminar & GD	-	2	2	1	25	50	3	75
10	PR 5	Sports and Yoga	-	2	2	1	25		--	25
			-	14	14	7	150	100		
		TOTAL	19	14	33	26	300	450	---	750

Abbreviations: L-Lecturer, P-Practical. Each class is of 1 Hour duration Minimum Pass Mark in each Theory subject is 35% and in each Practical subject is 50% and in Aggregate is 40%

There shall be Induction Program before beginning of 1st Semester and Internships at the end of 2nd Semester Classes as per AICTE norm. The best of 2 IA conducted in a subject out of 20 marks to be considered. Assignment/ quiz etc. of 10 marks to be treated as part of IA. Besides this ,Monthly Test to be conducted for each subject. Sessional Marks shall be totalof the performance of individual different jobs/ experiments in a subject throughout the semester. Club/Innovation/ Idea Tinkering Activities etc. shall be encouraged to be performed by students beyond the above stipulated hours.

Introduction to IT Systems
Course Code- TH 1(b) (Common
to 1st & 2nd sem)

Period per week:	3	IA:	30 Marks
Total Period:	45	End Sem Exam:	70 Marks
Timing of End Exam:	3 Hours	No. Of Credit:	3

Course outcomes:

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

- ✓ Develop the skill to handle & operate computer and access the internet.
- ✓ Assemble the PC, install & configure OS and other software/Hardware.
- ✓ Design & develop the website using mark up language.
- ✓ Create and work with various office tools.
- ✓ Enhance the skill to protect the system and its information from cyber attacks.

Course Content:

UNIT 1:

Basic Internet skills: Understanding browser, efficient use of search engines, awareness about Digital India portals (state and national portals) and college portals.

General understanding of various computer hardware components – CPU, Memory, Display, Key- board, Mouse, HDD and other Peripheral Devices.

UNIT 2:

OS Installation (Linux and MS Windows), Unix Shell and Commands, vi editor.

UNIT 3:

HTML4, CSS, making basic personal webpage.

UNIT 4:

Office Tools: OpenOffice Writer, OpenOffice Spreadsheet (Calc), OpenOffice Impress.

UNIT 5: Information security best practices.

Class lectures will only introduce the topic or demonstrate the tool, actual learning will take place in the Lab by practicing regularly.

Suggested Lab Work:

This is a skill course. Topics/concepts taught in the class should be practiced in the Lab same week and practiced regularly during the semester till student becomes confident about it. This course is all about some theory and a lot of practice.

References:

1. Introduction to IT Systems (English) by Prof. Prashant Joshi (Download from

<https://ekumbh.aicte-india.org/dbook.php>)

2. R.S. Salaria, Computer Fundamentals, Khanna Publishing House
3. Ramesh Bangia, PC Software Made Easy – The PC Course Kit, Khanna Publishing House
4. Online Resources, Linux man pages, Wikipedia
5. Mastering Linux Shell Scripting: A practical guide to Linux command-line, Bash scripting, and Shell programming, by Mokhtar Ebrahim, Andrew Mallett

FINANCIAL ACCOUNTING
Course Code Th 2

Period per week	4	IA	30 Marks
Total Period:	60	End Sem Exam	70 Marks
Timing of End Exam	3 Hours	No. of Credit	4

Course Outcomes:

- The course structure of this paper would equip the students to get in-depth knowledge of financial accounting along with its practical application.
- It will give an opportunity to gain easy access to this competitive business world.

Course Content

Unit – I: Basics of Accounting

i. Accounting as the language of business and an information system, the users of financial accounting information and their needs. Qualitative characteristics of accounting information, Functions, advantages and limitations of accounting. Branches of accounting. Bases of accounting: cash basis and accrual basis.

ii. The nature of financial accounting principles – Basic concepts and conventions: entity, money measurement, going concern, cost, realization, accruals, periodicity, consistency, prudence (conservatism), materiality and full disclosures and Accounting Equation.

Unit – II: Accounting Process

From recording of business transactions to the preparation of trial balance including adjustments: journal, sub-division of journal, ledger accounts, trial balance

Unit-III: Depreciation Accounting

The accounting concept of depreciation. Factors in the measurement of depreciation. Methods of computing depreciation: straight line method and diminishing balance method.

Unit – IV: Final Accounts

Capital and revenue expenditures and receipts, Preparation of financial statements of Sole Trade and Partnership Business with adjustments.

Unit- V: Accounting for Partnership Firm: Accounting of Admission of partner , Retirement and Death of partner and Dissolution of the Partnership Firm Including Insolvency of partners

Text Books Recommended

1. Financial Accounting I and Financial Accounting II: Mukherjee, Oxford University Press
2. Jain, S.P. and K.L. Narang. Financial Accounting, Kalyani Publishers, New Delhi
3. Bal Ranjan Kumar, Financial Accounting – S. Chand
4. Maheshwari, S.N. and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi

BUSINESS STUDIES
Course Code Th 3

Period per week	04	IA	30 Marks
Total Period:	60	End Sem Exam	70 Marks
Timing of End Exam	3 Hours	No. of Credit	4

Course outcome:

On completion of the course on student will be able to

- Identify and evaluate ethical, social and environmental impacts in business
- Articulate ideas persuasively and logically and collaborate with others toward a common goal.
- Utilize analytical skills to devise innovative and creative solutions to problems.

Course Content:

UNIT-I Nature and Scope of Business

Nature and Scope of Business, Classification of Business activities
Forms of Business Organization and its features: Sole Proprietorship, Partnership, Joint Stock Company, Co-operative Society, Public Enterprise, MNCs

UNIT-2 Company Formation and Promotion as per Companies Act 2013

Concepts of Promotion, Stages in Promotion. Types of Joint Stock Companies, Memorandum of Association, Clauses of MOA, Articles of Association, Prospectus, its contents, Statement in lieu of prospectus

UNIT- 3 Foreign Trade

Concept, Types of Foreign Trade, Need and importance of Foreign Trade, Procedures of Import and Export Trade, Various documents used in Foreign Trade

UNIT-4 Stock Exchange

Stock Exchange: Meaning, features, Role, functions, objectives, Participants in Stock

Exchange, Major Stock Exchange in India: NSE, BSE

Unit-5 Financial Institutions

Financial Institution: Concept, its role, Functions of Financial Institutions, Types of FIs: RBI, Commercial Banks, NABARD, SIDBI, IDBI, IFCI, ICICI, SFC, LIC, UTI, GIC, Mutual Fund.

References Books:

1. Business Organization and Management, M. C. Sahoo , S. Chand & Co. New Delhi
2. Business Organization and Financial Institutions, R. K. Sharma, Sashi K. Gupta, Kalyani Publishers
3. Modern Business Organisation and Management: Sherlekhar & Sherlekhar, Himalya Publication

FUNDAMENTALS OF ECONOMICS
Course Code Th 4

Period per week	04	IA	30 Marks
Total Period:	60	End Sem Exam	70 Marks
Timing of End Exam	3 Hours	No. of Credit	4

Learning Outcomes:

On completion of the course on Fundamentals of Economics, student will be able to

- explain the various terms of economics.
- describe various types of markets.
- identify various law of economics.

Unit: I Introduction to Economics

Definitions of Economics- Nature & Scope , Economy: Types, problems & functions, Basic terms & concepts of Goods, Wealth, Welfare, Utility, Value, Price, Income, National Income, Consumption, Employment, Demand & Supply etc.

Unit: II Consumption

Characteristics & classification of Human Want , Law of Diminishing Marginal Utility , Consumer's surplus

Unit: III Production

Factors of Production, Labour & its Characteristics, Efficiency of Labour , Law of Demand & Supply.

Unit IV Market

Definition of Market, Classification of Market-Perfect competition ,Monopoly ,Oligopoly, Monopolistic Competition.

Unit: V Rent and Profit

Economic Rent & contract rent , Ricardian theory of rent , Basic Idea of profit – Gross and Net profit

Suggested Readings:

1. Managerial Economics - Mehta P.L., Sultan Chand & Sons
2. Elementary Economic Theory - K.K. Dewett & J.D. Verma, S. Chand & Sons
3. Ahuja, H.L, Micro Economics, S.Chand
4. Micro Economics-T.R. Jain , B.D. Majhi, V.K. Global
5. Dwivedi, D.N. Micro Economics, Vikash Publication

Environmental Science
Course Code Th 5
(Common to 1st semester)

Period per week:	4	IA:	30 Marks
Total Period:	60	End Sem Exam:	70 Marks
Timing of End Exam:	3 Hours	No. Of Credit:	4

Course outcomes

At the end of the course student will be able to

1. Understand the ecosystem and terminology and solve various engineering problems applying ecosystem knowledge to produce eco-friendly products.
2. Understand the suitable air, extent of noise pollution, and control measures and acts.
3. Understand the water and soil pollution, and control measures and acts.
4. Understand different renewable energy resources and efficient process of harvesting.
5. Understand solid Waste Management, ISO 14000 & Environmental Management

Course Content:

Unit-1 Ecosystem

Structure of ecosystem, Biotic & Abiotic components Food chain and food web
Aquatic (Lentic and Lotic) and terrestrial ecosystem Carbon, Nitrogen, Sulphur, Phosphorus cycle.
Global warming -Causes, effects, process, Green House Effect, Ozone depletion

Unit– 2 Air and, Noise Pollution

Definition of pollution and pollutant, Natural and man made sources of air pollution (Refrigerants, I.C., Boiler)
Air Pollutants: Types, Particulate Pollutants: Effects and control (Bag filter, Cyclone separator, Electrostatic Precipitator)
Gaseous Pollution Control: Absorber, Catalytic Converter, Effects of air pollution due to Refrigerants, I.C., Boiler
Noise pollution: sources of pollution, measurement of pollution level, Effects of Noise pollution, Noise pollution (Regulation and Control) Rules, 2000

Unit- 3 Water and Soil Pollution

Sources of water pollution, Types of water pollutants, Characteristics of water pollutants
Turbidity, pH, total suspended solids, total solids BOD and COD: Definition, calculation

Waste Water Treatment: Primary methods: sedimentation, froth floatation, Secondary methods: Activated sludge treatment, Trickling filter, Bioreactor, Tertiary Method: Membrane separation technology, RO (reverse osmosis).

Causes, Effects and Preventive measures of Soil Pollution: Causes-Excessive use of Fertilizers, Pesticides and Insecticides, Irrigation, E-Waste.

Unit– 4 Renewable sources of Energy

Solar Energy: Basics of Solar energy. Flat plate collector (Liquid & Air). Theory of flat plate collector. Importance of coating. Advanced collector. Solar pond. Solar water heater, solar dryer. Solar stills.

Biomass: Overview of biomass as energy source. Thermal characteristics of biomass as fuel. Anaerobic digestion. Biogas production mechanism. Utilization and storage of biogas.

Wind energy: Current status and future prospects of wind energy. Wind energy in India. Environmental benefits and problem of wind energy.

New Energy Sources: Need of new sources. Different types new energy sources. Applications of (Hydrogen energy, Ocean energy resources, Tidal energy conversion.) Concept, origin and power plants of geothermal energy

Unit-5 Solid Waste Management, ISO 14000 & Environmental Management 06 hours

Solid waste generation- Sources and characteristics of : Municipal solid waste, E- waste, bio-medical waste.

Metallic wastes and Non-Metallic wastes (lubricants, plastics, rubber) from industries.

Collection and disposal: MSW (3R, principles, energy recovery, sanitary landfill), Hazardous waste.

Air quality act 2004, air pollution control act 1981 and water pollution and control act 1996. Structure and role

of Central and state pollution control board.

Concept of Carbon Credit, Carbon Footprint. Environmental management in fabrication industry. ISO14000: Implementation in industries, Benefits.

References:

(a) Suggested Learning Resources:

Books:

1. Environmental Science (English) by Dr. Subrat Roy (Download from <https://ekumbh.aicte-india.org/dbook.php>)

2. S.C. Sharma & M.P. Poonia, Environmental Studies, Khanna Publishing House, New Delhi

3. C.N. R. Rao, Understanding Chemistry, Universities Press (India) Pvt. Ltd., 2011.
4. Arceivala, Soli Asolekar, Shyam, Waste Water Treatment for Pollution Control and Reuse, Mc-Graw Hill Education India Pvt. Ltd., New York, 2007, ISBN:978-07-062099-062099-
5. Nazaroff, William, Cohen, Lisa, Environmental Engineering Science, Willy, NewYork, 2000, ISBN 10: 0471144940.
6. O.P. Gupta, Elements of Environmental Pollution Control, Khanna Publishing House, New Delhi
7. Rao, C. S., Environmental Pollution Control and Engineering, New Age International Publication, 2007, ISBN: 81-224-1835-X.
8. Rao, M. N. Rao, H.V.N, Air Pollution, Tata Mc-Graw Hill Publication, New delhi, 1988, ISBN: 0-07- 451871-8.
9. Frank Kreith, Jan F Kreider, Principles of Solar Engineering, McGraw-Hill, New York ;1978, ISBN: 9780070354760.
10. Aldo Vieira, Da Rosa, Fundamentals of renewable energy processes, Academic Press Oxford, UK; 2013. ISBN: 9780123978257.
11. Patvardhan, A.D, Industrial Solid Waste, Teri Press, New Delhi, 2013, ISBN:978-81-7993-502-6
12. Metcalf & Eddy, Waste Water Engineering, Mc-Graw Hill, New York, 2013, ISBN:077441206.
13. Keshav Kant, Air Pollution & Control, Khanna Publishing House, New Delhi (Edition 2018)

(b) Open source software and website address:

- 1) www.eco-prayer.org
- 2) www.teriin.org
- 3) www.cpcp.nic.in
- 4) www.cpcp.gov.in
- 5) www.indiaenvironmentportal.org.in
- 6) www.whatis.techtarget.com
- 7) www.sustainabledevelopment.un.org
- 8) www.conserve-energy-future.com

Teachers should use the following strategies to achieve the various outcomes of the course.

- Different methods of teaching and media to be used to attain classroom attention.

- Massive open online courses (MOOCs) may be used to teach various topics/sub topics.
- 15-20% of the topics which are relatively simpler or descriptive in nature should be given to the students for self-learning and assess the development of competency through classroom presentations.
- Micro-projects may be given to group of students for hand-on experiences.
- Encouraging students to visit to sites such as Railway station and research establishment around the institution.

Introduction to IT System Lab

Course Code- PR 1(b) (Common
to 1st & 2nd sem)

Period per week:	4	Sessional:	25 Marks
Total Period:	60	End Sem Exam:	---
Timing of End Exam:	---	No. Of Credit:	2

Course outcomes:

At the end of the course students will be able to:

- 1) Analyze the components of computer hardware such as ports, interfaces, cables etc. and assemble them.
- 2) Install & configure Linux/Windows Operating System and explore the security features/tools of OS.
- 3) Create & work with various Office Tools.
- 4) Apply the knowledge to access browsers, search engines, Web Pages and understand the features of government sites/portals by accessing the services offered by them.
- 5) Design & Develop the Web Pages by using mark-up language /scripts.

Course Content:

S.No.	Topics for Practice
1	Browser features, browsing, using various search engines, writing search queries
2	Visit various e-governance/Digital India portals, understand their features, services offered
3	Read Wikipedia pages on computer hardware components, look at those components in lab, identify them, recognize various ports/interfaces and related cables, etc.
4	Install Linux and Windows operating system on identified lab machines, explore various options, do it multiple times.
5	Connect various peripherals (printer, scanner, etc.) to computer, explore various features of peripheral and their device driver software.
6	Practice HTML commands, try them with various values, make your own Webpage
7	Explore features of Open Office tools, create documents using these features, do it multiple times.
8	Explore security features of Operating Systems and Tools, try using them and see what happens.

This is a skill course. More you practice, better it will be.

References:

- 1) Introduction to IT Systems (English) by Prof. Prashant Joshi (Download from <https://ekumbh.aicte-india.org/dbook.php>)
- 2) Online resources, Linux man pages, Wikipedia.
- 3) R.S. Salaria, Computer Fundamentals, Khanna Publishing House.
- 4) Ramesh Bangia, PC Software Made Easy – The PC Course Kit, Khanna Publishing House.
- 5) Mastering Linux Shell Scripting: A practical guide to Linux command-line, Bash scripting, and Shell programming, by Mokhtar Ebrahim, Andrew Mallett.
- 6) IT Essentials PC Hardware and Software Companion Guide, Davis Anfinson and Ken Quamme, CISC Press, Pearson Education.
- 7) PC Hardware and A+ Handbook, Kate J. Chase PHI (Microsoft).

COMPUTER TYPING ENGLISH –I

Course Code Pr-2

Period per week:	4	Sessional:	25 Marks
Total Period:	30	End Sem Exam:	25 Marks
Timing of End Exam:	1 Hour	No. Of Credit:	2

LEARNING OUTCOMES

After the completion of this course the students will be conversant with computer and achieve certain comfort level with the computer .

Course Content:

1. Basic knowledge of computer and its parts.
2. Practical Demonstration and practical with the following acquaintance with computer.
3. Its correct position sitting posture, name of essential parts, and uses , Insertion and removal of paper, Margin adjustment etc.
4. Practice of the keyboard Home row keys, upper row keys and bottom row keys.
5. Practice of words and simple sentence by touch system. Mastery of typing the top row (Figures and symbols) and other printing keys.
6. Use of shortcut keys and other non printing keys. Typing from exercises.

REFERENCE BOOKS –

- 1- Type writer & Computer Typing by Vikas Aggarwal
- 2- Proficiency in typing writing English by ISBN Publication

SHORT HAND ENGLISH I

Course Code Pr-3

Period per week:	2	Sessional:	50 Marks
Total Period:	30	End Sem Exam:	25Marks
Timing of End Exam:	3 Hours	No. Of Credit:	1

LEARNING OUTCOMES:

On completion of this paper students will be able take dictation and transcript it into sentences and preapare letters and reports.

Course Content:

1. Practice of consonants from the workbook on Shorthand.
2. Use and practice of Vowels- Long vowels (Heavy Dot and Dash), Short Vowel (Light Dot and Light Dash), Intervening Vowels.
3. Practice of Diphthongs from exercises of the Text Book and Workbook on Shorthand
Diphthong, Triphones.
- 4 Class work: Dictation & reading : Home work : Reading & copying work daily from
Workbook.
5. Practice of phrases from Textbook Grammalogues, Logograms.
6. Dictation and reading from Workbook and Transcription.

SEMINAR & GD
Course Code PR 4

Period per week:	2	Sessional:	25 Marks
Total Period:	30	End Sem Exam:	50 Marks
Timing of End Exam:	3 Hours	No. Of Credit:	1

Learning Outcome:

On completion of the course students will be able to improve their communication skill, gain expert knowledge and renew motivation and confidence.

The students shall present seminar on different topics on Economy, Finance, Politics and General issues in the entire class. There shall not be any grouping of students. The students shall present the seminar topic to the whole class/section. All other students should be allowed and encouraged to put questions to the presenter student, who shall answer the questions. A student has to present seminar on at least 3 topics in a semester. He/she has to submit seminar report for each topic separately, to the teacher concerned, which shall be preserved for verification by the authorities. The students should be encouraged to refer to the magazines, journals, e-materials etc. for preparing for seminar topic. Attendance of all students other than the presenters should be ensured, so that seminar shall be more participative and knowledge of students shall improve by listening to many topics presented.

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Sports and Yoga

Course Code- PR 5

Period per week:	2	Sessional:	25 Marks
Total Period:	30	End Sem Exam:	---
Timing of End Exam:	--	No. Of Credit:	1

Course Outcomes:

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

- (i) Practice Physical activities and Hatha Yoga focusing on yoga for strength, flexibility, and relaxation.
- (ii) Learn techniques for increasing concentration and decreasing anxiety which leads to stronger academic performance.
- (iii) Learn breathing exercises and healthy fitness activities
- (iv) Understand basic skills associated with yoga and physical activities including strength and flexibility, balance and coordination.
- (v) Perform yoga movements in various combination and forms.
- (vi) Assess current personal fitness levels.
- (vii) Identify opportunities for participation in yoga and sports activities.
- (viii) Develop understanding of health-related fitness components: cardiorespiratory endurance, flexibility and body composition etc.
- (ix) Improve personal fitness through participation in sports and yogic activities.
- (x) Develop understanding of psychological problems associated with the age and lifestyle.
- (xi) Demonstrate an understanding of sound nutritional practices as related to health and physical performance.
- (xii) Assess yoga activities in terms of fitness value.
- (xiii) Identify and apply injury prevention principles related to yoga and physical fitness activities.
- (xiv) Understand and correctly apply bio-mechanical and physiological principles related to exercise and training.

Course Content:

- **Introduction to Physical Education**
 - Meaning & definition of Physical Education
 - Aims & Objectives of Physical Education
 - Changing trends in Physical Education

- **Olympic Movement**

- Ancient & Modern Olympics (Summer & Winter)

Olympic Symbols, Ideals, Objectives & Values Awards and Honours in the field of Sports in India (Dronacharya Award, Arjuna Award, Dhayanchand Award, Rajiv Gandhi Khel Ratna Award Physical Fitness, Wellness & Lifestyle

- Meaning & Importance of Physical Fitness & Wellness
- Components of Physical fitness
- Components of Health related fitness
- Components of wellness
- Preventing Health Threats through Lifestyle Change
- Concept of Positive Lifestyle

- **Fundamentals of Anatomy & Physiology in Physical Education, Sports and Yoga**

- Define Anatomy, Physiology & Its Importance
- Effect of exercise on the functioning of Various Body Systems. (Circulatory System, Respi- ratory System, Neuro-Muscular System etc.)

- **Kinesiology, Biomechanics & Sports**

- Meaning & Importance of Kinesiology & Biomechanics in Physical Edu. & Sports
- Newton's Law of Motion & its application in sports.
- Friction and its effects in Sports.

- **Postures**

- Meaning and Concept of Postures.
- Causes of Bad Posture.
- Advantages & disadvantages of weight training.
- Concept & advantages of Correct Posture.
- Common Postural Deformities – Knock Knee; Flat Foot; Round Shoulders; Lordosis, Ky- phosis, Bow Legs and Scoliosis.
- Corrective Measures for Postural Deformities

- **Yoga**

- Meaning & Importance of Yoga
- Elements of Yoga
- Introduction - Asanas, Pranayama, Meditation & Yogic Kriyas
- Yoga for concentration & related Asanas (Sukhasana; Tadasana;

Padmasana& Sha- shankasana)

- Relaxation Techniques for improving concentration - Yog-nidra

- **Yoga & Lifestyle**

- Asanas as preventive measures.
- Hypertension: Tadasana, Vajrasana, Pavan Muktasana, Ardha Chakrasana, Bhujangasana, Shavasana.
- Obesity: Procedure, Benefits & contraindications for Vajrasana, Hastasana, Trikonasana, Ardha Matsyendrasana.
- Back Pain: Tadasana, Ardha Matsyendrasana, Vakrasana, Shalabhasana, Bhujangasana.
- Diabetes: Procedure, Benefits & contraindications for Bhujangasana, Paschimottasana, Pavan Muktasana, Ardha Matsyendrasana.
- Asthma: Procedure, Benefits & contraindications for Sukhasana, Chakrasana, Gomukhasana, Parvatasana, Bhujangasana, Paschimottasana, Matsyasana.

- **Training and Planning in Sports**

- Meaning of Training
- Warming up and limbering down
- Skill, Technique & Style
- Meaning and Objectives of Planning.
- Tournament – Knock-Out, League/Round Robin & Combination.

- **Psychology & Sports**

- Definition & Importance of Psychology in Physical Edu. & Sports
- Define & Differentiate Between Growth & Development
- Adolescent Problems & Their Management
- Emotion: Concept, Type & Controlling of emotions
- Meaning, Concept & Types of Aggressions in Sports.
- Psychological benefits of exercise.
- Anxiety & Fear and its effects on Sports Performance.
- Motivation, its type & techniques.
- Understanding Stress & Coping Strategies.

- **Doping**

- Meaning and Concept of Doping
- Prohibited Substances & Methods

- Side Effects of Prohibited Substances
- **Sports Medicine**
 - First Aid – Definition, Aims & Objectives.
 - Sports injuries: Classification, Causes & Prevention.
 - Management of Injuries: Soft Tissue Injuries and Bone & Joint Injuries

- **Sports / Games**

Following sub topics related to any one Game/Sport of choice of student out of: Athletics, Badminton, Basketball, Chess, Cricket, Kabaddi, Lawn Tennis, Swimming, Table Tennis, Volleyball, Yoga etc.

- History of the Game/Sport.
- Latest General Rules of the Game/Sport.
- Specifications of Play Fields and Related Sports Equipment.
- Important Tournaments and Venues.
- Sports Personalities.
- Proper Sports Gear and its Importance.

References:

1. Modern Trends and Physical Education by Prof. Ajmer Singh.
2. Light On Yoga By B.K.S. Iyengar.
3. Health and Physical Education – NCERT (11th and 12th Classes)