



Government of Jammu and Kashmir
Services Selection Board
Sehkari Bhawan Rail Head Complex, Jammu
(www.jkssb.nic.in)

NOTICE

It is notified for the information of the concerned candidates who have applied for the posts advertised vide Advertisement Notification Nos 01, 02, 03, 04 and 05 of 2019, that the item wise syllabi for the posts detailed below is given as annexure "A" to "K" to this notice.

Item No/Advt No	Name of the post	Syllabus Annexed
024 of 01, 02, 03, 04 and 05 of 2019	Artist Modeller	Annexure "A"
022 of 01, 02, 03, 04 and 05 of 2019	Technician for Animal Operation Room	Annexure "B"
025 of 01, 02, 03, 04 and 05 of 2019	Audio-visual Technician/ Technician in Audio-visual Aids, Photograph and Artist	Annexure "C"
038 of 01, 02, 03, 04 and 05 of 2019	Telephone Supervisor	Annexure "C"
041 of 01, 02, 03, 04 and 05 of 2019	Electrician/Line Man	Annexure "D"
028 of 01, 02, 03, 04 and 05 of 2019	Junior Receptionist-cum-clerk	Annexure "E"
037 of 01, 02, 03, 04 and 05 of 2019	Manager (Hostel)	Annexure "E"
023 of 01, 02, 03, 04 and 05 of 2019	Junior Photographer	Annexure "F"
004 of 01, 02, 03, 04 and 05 of 2019	Health Inspector	Annexure "G"
003 of 01, 02, 03, 04 and 05 of 2019	Health Inspector/ Health Assistant (Male) (Department of Rural Training)	Annexure "G"
033 of 01, 02, 03, 04 and 05 of 2019	Storekeeper -cum-clerk-cum Computer Operator/Storekeeper-cum-Record Clerk/Record keeper-cum-computer operator/Storekeeper/Record Clerk/Storekeeper-cum-clerk/Coding Clerk-cum-Computer Operator	Annexure "G"
039 of 01, 02, 03, 04 and 05 of 2019	Sports Assistant	Annexure "H"
006 of 01, 02, 03, 04 and 05 of 2019	Psychiatric Social Worker	Annexure "I"

031 of 01, 02, 03, 04 and 05 of 2019	Vocational Counsellor/ Medico Social Worker Medical Social Worker/ Social Worker	Annexure "I"
020 of 01, 02, 03, 04 and 05 of 2019	Multi-Rehabilitation worker(MRW)/Technician Therapist	Annexure "J"
015 of 01, 02, 03, 04 and 05 of 2019	Physiotherapist	Annexure "J"
016 of 01, 02, 03, 04 and 05 of 2019	Occupational therapist	Annexure "K"

The candidates are also intimated that there shall be negative marking for wrong answers (-0.25 for each wrong answer) attempted in the said examination.

(Ranjeet Singh) KAS
Secretary
Services Selection Board
Jammu

No. SSB/Secy/Sel/2019/2512-16

Dated: 16 .04.2019

Copy to the:-

1. Principal Secretary, Health and Medical Education Department, Civil Sectt. for information.
2. Director Information, J&K Government, Jammu with the request to get the said notification published in at least three leading local newspaper of Jammu/Srinagar on three consecutive dates.
3. Private Secretary to the Ld. Chairman for information to Chairman.
4. I/c Web site.
5. Syllabus file.

Annexure "A"

*Time: 02 Hrs.
Marks: 120*

APTITUDE SYLLABUS

GENERAL ENGLISH

- Articles
- Clauses
- Pronouns
- Homonyms/ homophones
- Tenses
- Clauses
- Punctuation
- Synonyms and antonyms
- Analogies
- Idioms and phrases
- Uses of Prepositions

GENERAL KNOWLEDGE AND CURRENT AFFAIRS (INDIA)

- Important dates in Indian History / Freedom struggle, different dates and events
- First in world (Adventure, Sports, Discoveries).
First in India (Adventure, Sports, Discoveries)
- Popular names of Personalities (Religion, Politics, Scientific discoveries, Geographical, Sports, History)
- The Newspaper world – (Current Dailies & Weeklies of India)
- Books & Authors – General
- Languages
- Capitals & Currencies
- United Nations Organizations –
Veto Powers

No. of Countries as its Members

Principal organs and their functions
- SAARC, ASEAN
- Everyday Science
- World famous Awards - (1. in Science)
(2. in Literature)
(3. in Sports)
- National Awards - (1. in Science)
(2. in Literature)
(3. in Sports)

- The world of Sports
- Climate & Crops in India
- Democratic institutions
- Forms of Government
- Political & Physical divisions of world & India
- Important rivers & Lakes in India
- Current Events of National and International Level
- Role of Mathematics in Economics
- Agriculture in economic development; Industrialization and economic development
- Indian Foreign Trade
- New economic reforms and growth of foreign trade
- Inflation – Concept and types; Causes and consequences

GENERAL KNOWLEDGE WITH SPECIAL REFERENCE TO J&K

- Abbreviations, Important dates, popular names of personalities and their achievements/Contribution (National and International)
- Constitution of J&K – Formation, Fundamental rights, Directive Principles
- Weather, Climate, Crops, Means of Transport
- Important power projects and their impact on State Economy
- Rivers and Lakes
- Important Tourist Destinations
- History of J&K State
- Historical places of the State and their importance
- RTI Act
- Indus Water Treaty and its impact on State economy

NUMERICAL AND REASONING ABILITY

The candidates will be tested primarily on the fundamental mathematical concepts and application oriented reasoning. The broad areas will include the following;

Basic Arithmetic:

- Number System
- Percentage
- Average
- Profit & Loss
- Ratio & Proportion
- Speed, Distance and Time
- Mathematical reasoning

Reasoning ability:

- Number series
- Letter series
- Coding decoding
- Direction sense
- Blood relations
- Statements and conclusions
- Logical Reasoning
- Mental Reasoning

BASIC CONCEPTS OF COMPUTERS

The candidates' understanding of the concepts of computers and its application will be tested and it will broadly cover the following:

- Computer terminology
- Hardware and Software
- Storage and Operating systems
- Safety and Security
- E-mail and Internet Usage

TECHNICAL SYLLABUS

- History and Appreciation of Art
- Visual Elements and Principles
- Aesthetics
- Clay Modelling

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Annexure "B"

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Marks: 120*

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TECHNICAL SYLLABUS

- Physics (10+2 Level)
- Chemistry (10+2 Level)
- Biology (10+2 Level)
- Elements of Animal Body function
- Veterinary First Aid and disease Prevention
- Outline of Animal Body function

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Annexure "C"

Time: 02 Hrs.

Marks: 120

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TECHNICAL SYLLABUS

- Fundamentals of Electrical Engineering
- Basics of Information Technology
- Engineering Drawing
- Electronic Components and Materials
- Basic Electronics
- General Engineering
- Electronic Devices and Circuits
- Electronic Instruments and Measurements
- Principles of Communication Engineering
- Digital Electronics
- Electronic Drawing, Design and Fabrication Techniques
- Computer Programming and Applications
- Electrical Machines
- Communication Systems
- Network Filters and Transmission Lines
- Microprocessors and Applications
- Fundamentals of Electronic Instrumentation
- Microwave and Radar Engineering
- Troubleshooting of Electronic Equipment
- Power Electronics
- Advanced Microprocessors
- Consumer Electronics
- Micro controllers and Embedded Systems
- Digital and Data Communication

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Annexure "D"

	Time= 2.00 Hours. Total Marks=120
Topics	
<p>Ohm's Law - Simple electrical circuits and problems. Resistors -Law of Resistance. Series and parallel circuits. Kirchoff's Laws and applications. Wheatstone bridge principle and its applications . Common Electrical Accessories, their specifications-Explanation of switches lamp holders, plugs and sockets .Developments of domestic ckts, Alarm & switches, lamp, fan with individual switches, Two way switch .</p>	
<p>Chemical effect of electric current-Principle of electrolysis. Faraday's Law of electrolysis. Basic principles of Electro-plating and Electro chemical equivalents. Explanation of Anodes and cathodes. Lead acid cell-description, methods of charging-Precautions to be taken & testing equipment, Ni-cadmium & Lithium cell, Cathodic protection. Electroplating, Anodising Rechargeable dry cell, description advantages and disadvantages. Care and maintenance of cells Grouping of cells of specified voltage & current, Sealed Maintenance free Batteries, Solar cell. Lead Acid cell, general defects & remedies. Nickel Alkali Cell-description charging. Power & capacity of cells. Efficiency of cells</p>	
<p>Magnetism - classification of magnets, methods of magnetising, magnetic materials. Properties, care & maintenance, methods of magnetising magnetic materials. Para & Diamagnetism and Ferro magnetic materials. Principle of electro-magnetism, Maxwell's corkscrew rule, Fleming's left & right hand rules, Magnetic field of current carrying conductors, loop & solenoid. MMF, Flux density, reluctance. B.H. curve, Hysteresis, Eddy current. Principle of electro-magnetic Induction, Faraday's Law, Lenz's Law. Electrostatics - Capacitor- Different types, functions & uses Resistance- Different Types of resistors used in electrical ckts. Specification of resistance and tolerance. Effect of variation of temperature on resistance. Different methods of measuring the values of resistance Working principles and circuits of common domestic equipments & appliances</p>	
<p>D.C. Machines - General concept of Electrical Machines. Principle of D.C. generator. Use of Armature, Field Coil, Yoke, and Commutator, slip ring Brushes, Laminated core. Explanation of D.C. Generators-types –parts. E.M.F. equation-self excitation and separately excited Generators-Practical uses. Brief description of series, shunt and compound generators. Expl. Of Armature reaction, interpoles and their uses, connection of interpoles, commutation.</p>	

DC Motors - Terms used in D.C. motor-Torque, speed, Back-e.m.f. etc. their relations practical application. Related problems
Types, characteristics and practical application of D.C. motors.
Special precaution to be taken in DC Series motors.
Starters used in D.C. motors
Types of speed control of DC motors in industry Word-Leonard control, Thyristor/electronic controls.
Insulating materials – properties common insulating materials, classifications

Electric wirings, importance, I.E.E. rules. Types of wirings both domestic & industrial -
Specifications for wiring – Grading of cables and current ratings. Principle of laying out in domestic wiring-testing by meggar

Wiring system - Using casing

capping, P.V.C., concealed system.

-Maintenance & Repairing data sheet preparation..

Specifications, standards for conduits & accessories

Earthing - Principle of different methods of earthing. Importance of Earthing.

-Earth Leakage Relay.

Alternating Current -Comparison D.C& A.C. , Advantages of A.C. Alternating current & related terms frequency Instantaneous value, R.M.S. value Average value, Peak factor , form factor. Generation of sine wave, phase and phase difference. Inductive & Capacitive reactance X_L & X_c , Impedance (Z), power factor,(P.f) ; Vector diagram. Active and Reactive power,
Simple problems on A.C. circuits, single phase & three-phase system etc.
Problems on A.C. ckts. Both series & parallel power consumption P.F. etc.
Concept three-phase Star & Delta connection Line voltage & phase voltage, current & power in a 3 ph ckt, with balanced and unbalanced load.

TRANSFORMERS

Working principle of Transformer, classification C.T., P.T. Instrument and Auto Transformer/Variac
Construction, Single phase and Poly phase.

E.M.F. equation, parallel operation of transformer, their connections. Regulation and efficiency, Cooling of transformer, protective devices.

Specifications, simple problems on e.m.f. Equation, turn ratio, regulations and efficiency. Special transformers.

Transformer - construction cores winding shielding, auxiliary parts breather, conservator buckholtz relay, other protective devices cooling of transformer

Transformer oil testing and Tap changing off load and on load.

Transformer bushings and termination.

ALTERNATOR –

Explanation of alternator, prime mover, types, regulations, phase sequence, specification of alternators and brushless alternator.

Automatic Voltage Regulator.

Electrical measuring Instruments -

-types

Deflecting torque, Controlling torque & Damping torque ,

-Moving coil permanent magnet

-Moving iron

-Range extension

-Multimeter

-Wattmeter

- P.F. meter

-Intergrading type, Digital Energy meter – megger.

-Energy meter

-Frequency meter

- Tri vector meter

-Max Demand meter
-Phase Sequence indicator

-Multimeter –Analog and Digital - C.R.O,
Explanation of light

White light-illumination factors, intensity of light –importance of light, human eye factor units.

Types illumination & lamps

-Neon sign Halogen, Mercury vapour, sodium vapour, Fluorescent tube CFL, Solar lamp applications,
Concept of Energy

-Characters watt ages, fixing places. Types of lighting.

Decoration lighting Drum Switches, Direct & indirect lighting-efficiency in lumens per watt, colour available. Thumb rule calculations of lumens.

Estimating placement of lights and fans and ratings.

TRANSFORMER – winding ,

Principle of different winding techniques

D.C. m/c Winding-- pole pitch, coil pitch, back pitch, front pitch , Lap & Wave winding , Progressive and retrogressive winding.

SYNCHRONOUS MOTOR -

Working principle, effect of change of excitation and load. Application in industry in power factor improvement.

Induction motor – Working principle, Squirrel Cage Induction motor , Slip-ring induction motor-
Construction and characteristics, starting and speed control.

D.O.L Starter, Star /Delta starter, Autotransformer starter.

Single phase induction motor-

Working principle, different method of starting and running (capacitor start/capacitor run, shaded pole technique). FHP motors.

A.C. m/c Winding-- Armature winding terms, coil side, end coil and grouping of coils. Connection to adjacent poles, connected armature winding, alternate pole connection, armature winding.

Universal motor-advantages Principle, characteristics, applications in domestic appliances and industry, Fault Location and Rectification.

Converter-inverter, M.G.Set-description-Characteristics, specifications-running and maintenance.

Techniques, procedures of Layout of conduit wiring as per I.S-732-1963. Use of flame proof and explosion proof, Installation of P.V.C. conduct switches.

Fuse / cut out / kit Kat – function, characteristics, and materials.

H.R.C Fuses – application.

Contactors – Miniature circuit breakers.

Relays – Thermal, Electromagnetic, solid state relays,

Control Relays and Protective Relays.

Industrial wiring. Code of practice & relevant span. Wiring of electric motors, control panel, etc.

Types, specifications, advantages of different types of circuit brackets construction and maintenance.

I.E.E. rules for overhead service lines, study of U.G.Cables and laying techniques.

Working principle and construction of domestic and agricultural appliances-their maintenance

Corona, Lightning arrestor/lighting conductor, Horn gap.

Introduction to **Basic electronics**- Semiconductor energy level atomic structure. 'P' & 'N' type of materials –P-N-junction. Diode-classification of Diodes – Reversed Bias and Forward Bias , Heat sink.

Specification of Diode – PIV rating.

Explanation and importance of D.C. Rectifier ckt. Half wave, Full wave and Bridge ckt. L.E.D. and Solar cells.

Filter ckts-passive filter. Working principle and uses of an oscilloscope

Explanation of principle of working of a transistor- Types of transistors Characters of a transistors

Biasing of transistors. Mode of use of transistor.

Specification and rating of transistors
Explanation of transistor Amplifiers,
Amplifiers. – class A,B & C
Power amplifier
Explanation of oscillator-working principle
Explanation of stages and types.
Multivibrator – applications.
OP-AMP – Working principles and applications. Timer I.C.555
Explanation. and working principle and practical applications of U.J.T., F.E.T., S.C.R. Diac, Triac,
power MOSFET, G.T.O & I.G.B.T.
D.C/A.C Power control using power transistor, thyristor. Voltage stabilizer, U.P.S. DC/AC motor drives
using transistor/thyristor.
Power Supply Stabilizer, Ferro resistant circuit. DC/AC motor drives using Thyristor/Transistor control

Digital Electronics -Binary numbers, logic gates and combinational ckts, Flip Flops, Counter, Register
& Timer.
Complete House-wiring layout. Circuit splitting load wire.
I.E.E. Rules.
Multistoried system.
Fault finding and trouble shooting of domestic electrical appliances.
Decorative lighting -
Fault finding techniques in Decoration lighting.

(Ranjeet Singh) KAS
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Annexure "E"

*Time: 02 Hrs.
Marks: 120*

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GENERAL ENGLISH

- Articles
- Clauses
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- Homonyms/ homophones
- Tenses
- Clauses
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- Synonyms and antonyms
- Analogies
- Idioms and phrases
- Uses of Prepositions

GENERAL KNOWLEDGE AND CURRENT AFFAIRS (INDIA)

- Important dates in Indian History / Freedom struggle, different dates and events
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Veto Powers

No. of Countries as its Members

Principal organs and their functions
- SAARC, ASEAN
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TECHNICAL SYLLABUS

- Front office operation
- Basic food production
- Basic food and beverage service
- Nutrition food science
- Health hygiene
- Accommodation operation
- Quantity food production
- Food and beverage management
- Quality food production
- Beverage operations
- Principles of management
- Principles of accounting
- Hotel maintenance
- Environmental studies
- Advanced food production
- Marketing sales management
- Advance beverage services
- Facility planning
- Hotel law
- Hotel financial management

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TECHNICAL SYLLABUS

- Basics of Photography
- Know your camera
- Principles of Design and composition
- Studio lighting
- Fashion Photography
- People and Portrait Photography
- Photojournalism
- Landscape, wildlife and travel photography
- Commercial, Industrial and Architectural Photography
- Table tops and Food photography

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Annexure “G”

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Unit-I GENERAL ENGLISH

- (I) Tenses
- (II) Rearranging of jumbled sentences.
- (III) Narration
- (IV) Models
- (V) Articles
- (VI) Comprehension with blanks to be filled in with Phrases, Pronouns, Homonyms / homophones.
- (VII) Clauses
- (VIII) Synonyms and antonyms
- (IX) Pairs of words and their use in meaningful sentences.
- (X) Idioms and phrases.
- (XI) Uses of Prepositions.

Unit-II GENERAL KNOWLEDGE AND CURRENT AFFAIRS

- (I) Important dates in Indian History / Freedom struggle, different dates and events.
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First in India (Adventure, Sports, Discoveries).
- (III) Popular names of Personalities (Religion, Politics, Scientific discoveries, Geographical, Sports, History)
- (IV) The Newspaper world – (Current Dailies & Weeklies of India).
- (V) Books & Authors – General
- (VI) Languages.
- (VII) Capitals & Currencies.
- (VIII) United Nations Organisations – Veto Powers
No. of Countries as its Members.
Principal organs and their functions.
- (IX) SAARC, ASEAN.
- (X) Everyday Science
- (XI) World famous Awards - (1. in Science)
(2. in Literature)
(3. in Sports)
- (XII) National Awards- (1. in Science)
(2. in Literature)
(3. in Sports)
- (XIII) The world of Sports
- (XIV) Climate & Crops in India.
- (XV) Democratic institutions
- (XVI) Forms of Government
- (XVII) Political & Physical divisions of world & India
- (XVIII) Important rivers & Lakes in India.
- (XIX) Current Events of National and International Level.
- (XX) Role of Mathematics in Economics.
- (XXI) Agriculture in economic development; Industrialization and economic development.
- (XXII) Indian Foreign Trade
- (XXIII) New economic reforms and growth of foreign trade.
- (XXIV) Inflation – Concept and types; Causes and consequences

UNIT-III GENERAL KNOWLEDGE WITH SPECIAL REFERENCE TO J&K

- (I) Abbreviations, Important dates, popular names of personalities and their achievements/ Contribution (National and International).
- (II) Constitution of J&K – Formation, Fundamental rights, Directive Principles.
- (III) Weather, Climate, Crops, Means of Transport.
- (IV) Important power projects and their impact on State Economy.
- (V) Rivers and Lakes.
- (VI) Important Tourist Destinations.
- (VII) History of J&K State.
- (VIII) Historical places of the State and their importance.
- (IX) RTI Act.
- (X) Indus Water Treaty and its impact on State economy.

Unit-VI GENERAL SCIENCE

- (i) Various sources of energy; conventional sources of energy; improvement in technology for using conventional source of energy (Biomass and wind energy)
- (ii) Non-conventional sources of energy (Solar energy, Tidal energy).
- (iii) Mechanics, Rest, motion, Velocities, acceleration, Newton Laws of motion,
- (iv) Voltage, Current, Resistance, Power, D.C Batteries
- (v) Waves, light as a wave, Sound waves, Transverse and longitudinal waves.
- (vi) Structure of Atom
- (vii) Solids, Liquids and Gases(Basics)
- (viii) Life processes: Nutrition and its types, Respiration, Transportation of water, food and minerals in plants.
- (ix) Vitamins- Diseases related to vitamin deficiency.
- (x) Environmental pollution.
- (xi) Ecosystem – Its components, Food chains and Food webs.
- (xii) Ozone layer, its depletion, Green House Effect.
- (xiii) Importance of water in life

Unit-V MENTAL ABILITY TEST

- (I) Number series.
- (II) Letter series.
- (III) Coding decoding.
- (IV) Direction sense.
- (V) Blood relations.
- (VI) Mathematical reasoning.
- (VII) Speed, Distance and Time.
- (VIII) Statements and conclusions.
- (IX) Logical Reasoning.
- (X) Mental Reasoning.

Unit-VII Computer Applications

- (I) Fundamentals of computer sciences
- (II) Hardware & Software
- (III) Input and output devices
- (IV) Operating system
- (V) M.S Word, M.S Excel, M.S Access and Powerpoint Presentation
- (VI) E_mail & Internet

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Annexure "H"

Marks :-120
Time :- 2.00 Hours

Foundation of Physical Education:

- Concept of Physical Education.
- Aims and objectives of Physical Education. Scope of Physical Education in modern Era.
- Explain Cognitive domain, psychomotor domain, Affective domain.
- Relationship between Physical Education and General Education.
- Nature, meaning and scope of Philosophy in Physical Education.
- Major components of Philosophy.
- Philosophies of Physical Education (Idealism, Naturalism, Pragmatism, Realism & Existentialism).

Historical Perspective:

- Physical education in Ancient and Modern India
- Physical Education in Greece, USA, Germany, British and Rome.
- Ancient and Modern Olympic Games
- Asian and Common Wealth Games.
- South Asian Federation (S.A.F) Games
- National sports awards (Arjuna award, Dronacharya award, Rajiv Gandhi khel Ratna Award, Maulana Abul Kalam Azad (MAKA) Trophy.
- Famous sports Personalities in India.

Officiating and Coaching:

- Concept of Officiating and Coaching
- Moderns Trends in Coaching
- Duties of Officials
- Layout of standard track.
- Dimension and marking for track and field events.
- Rules and their interpretation of track and field events.
- Rules and regulations of different games (Football, Volley Ball, Hockey, Basket Ball, Cricket, Kho Kho, Kabaddi and Badminton).

Psychological Foundations:

- Sports Psychology and factors effecting sports performance.
- Elements of learning, individual differences in learning, Learning Curve
- Theories of learning, Nature of motor skill learning.

- Transfer of training.
- Personality, Dimensions of personality.
- Growth and Development at different stages.
- Heredity and Environment.

Sociological Foundation:

- Socialization bases of Physical Education,
- Sports as cultural Heritage of Man Kind
- Cooperation and competition, social recognition.
- Social Institutions, Social Development.
- Group Dynamics, Leadership and its importance.
- Media in Sports, Politics in Sports
- National / International integration through Sports

Kinesiology:

- Historical Development of kinesiology, its need and scope in Physical Education & Sports.
- Axes and planes of movements, line of pull.
- Structure, Classification of the muscles and Joints.
- Origin Insertion and action of major muscles.
- Meaning of Biomechanics, role of biomechanics in Physical Education.
- Motion, types of motion, Newton's laws of motion.
- Equilibrium, Stability and its principles. Lever and its types. Spin, Projectile and Impulse,

Training Methods:

- Characteristics and principle of sports training
- Different methods of sports training.(Interval training, Weight Training Circuit training, Fartlek training and Plyometric Training).
- Development of Different Motor Abilities.
- Vital capacity, Second wind, Fatigue, Oxygen debt.
- Effect of training on muscular system, Respiratory system and Circulatory System.
- Technical and tactical preparation of Sports
- Warm-up, its types and values.

Management:

- Introduction, Meaning and Definition of management.
- Management techniques and financial management.
- Meaning of Organization and Administration.
- Organization of Physical Education and sports at different levels.
- Supervision and Evaluation in physical education and sports.
- Concept of teaching and Learning and Methods of Teaching.
- Lesson plan, Importance and need of lesson plan.

Planning:

- Meaning, Importance and Principles of Planning.
- Short term & Long Term Planning.
- Intra-mural and Extra mural tournaments.
- Talent Identification & Classification of students
- Sports meet and Sports day.
- Education technology and Teaching aids.
- Criteria for the selection of Players.

First aid:

- Concept, Meaning of first aid and its types.
- Principles of First Aid.
- Sports injuries, types of injuries, causes of injuries and their Treatment in various cases (Sprain, Strain, Dislocation, Fracture, Burns, abrasions, & Cuts).
- Definition and concept of Rehabilitation.
- Goals and principles of Rehabilitation.
- Massage Manipulation & therapeutic Exercises.
- Doping in Sports.

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Annexure “I”

Marks:120
Time:-2:00 hours

Unit 1

1. Society, Community, Association.
2. Social Stratification: Caste, Class and Social Stratification in India.
3. Social Institutions: Norms, Values, Folkways and Mores
4. Marriage, Kinship and Family

Unit 2

1. Gender inequality and Issues.
2. Stages and Theories of Human Development (Freud, Erikson,)
3. Socialization and its Theories
4. Anxiety Disorders: Phobia, OCD, GAD, Panic Disorder, PTSD

Unit 3

1. Theories of Economic Development
2. Indicators of Social Development
3. Population Growth Issues and Challenges
4. Rural Development Programmes (1990 onwards)

Unit 4

1. United Nations Organization: Structure and function
2. Non Alignment Movement and its Genesis
3. Fundamental rights, Fundamental duties and Directive principle of State Policy
4. Democracy, Liberty, Equality and Justice

Unit 5

1. Panchayati Raj System
2. Social Networking and its Impact
3. Basic Computer Applications (Elementary knowledge)
4. Macdonalisation and its effect

Unit 6

1. Concept of social work: Philanthropy and Charity
2. Social work and its Relation with other Disciplines

3. Socil Religious Movements

Unit 7

1. Hindu Reform Movement
2. Land Reform Movement in Kashmir
3. Major Peasant and Tribal Movements
4. Spread of Modern Education.

Unit 8

1. Human rights: Concept and Evolution
2. Universal Declaration of Human rights
3. Women Rights
4. Child Rights

Unit 9

1. Poverty and Unemployment
2. Population Explosion, Global Warming and Climate Change
3. Drug Addiction ,Child Abuse, Delinquency
4. Trafficking, Beggary, Corruption.

Unit 10

1. Female foeticide and infanticide
2. Child and Women Welfare Schemes
3. Old age and Disability Schemes.
4. Health and Family Welfare Programmes

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Annexure “J”

Marks :-120
Time :- 2.00 Hours

1. A) Anatomy :

- I. Histology-cell tissue of the body, epithelium, connective tissue, cartilage, bone, blood, lymph, muscles, nervous system.
- II. Osteology- formation, classifications, functions, growth and repair of bones.
- III. Embryology- Ovum, Spermatozoa, Fertilization, organogenesis, Development of various systems.
- IV. Blood Vascular system –arteries, capillaries, veins, lymphatic system.
- V. Respiratory System –anatomy of larynx, trachea and bronchi, the pleura, the lungs.
- VI. Digestive system
- VII. Urogenital system
- VIII. Surface Anatomy.

B) Neuro- anatomy: Microscopic and gross study of :

- I. Peripheral Nerves
- II. Neuromuscular Junction
- III. Sensory Organs
- IV. Spine Cord- Segment & Areas
- V. Brainstem
- VI. Cerebellum
- VII. Inferior colliculi
- VIII. Superior Colliculi
- IX. Diencephalon
- X. The Hypothalamus
- XI. The Hypothalamus
- XII. The thalamus
- XIII. The Cerebral Hemispheres
- XIV. The Corpus Striatum
- XV. The Rhinencephalon
- XVI. The Lateral Ventricles
- XVII. The Meninges
- XVIII. The Blood supply of the Brain

2. HUMAN PHYSIOLOGY

- I. Structure of Human Cell
- II. Elementary tissues of Body
- III. Blood , composition, function , Grouping Blood Disorders.
- IV. CVS(Cardio Vascular System) Structure of Heart, Cardiac cycle, Hypertension Cardiac disorders reference to Physiology.
- V. Digestive System –Physiology anatomy, Process of digestion, organs of digestion and disorders.
- VI. Respiratory system –structural Physiology process of respiration
- VII. Excretory system; detailed structure of kidney , function, disorders,

- VIII. Elementary knowledge of structure and function of organ of taste, smell, eye and skin.
- IX. Endocrinology ; All the endocrine glands in detail
- X. Reproductive system; physiology /Anatomy
- XI. Introduction to pathology
- XII. Repair and inflammation
- XIII. Pathological terms
- XIV. Pathology of various organs
- XV. Role of pathology in physiotherapy
- XVI. Review of pathology changes of various organs and their treatment
- XVII. Drugs action on central nervous system. Anesthetics, alkaloids , narcotics, analgesics, antipyretics, sedatives, anticonvulsants,
- XVIII. Drugs action on cardiovascular System, neuromuscular system, respiratory system.
- XIX. Drugs acting with Peripheral Nervous system
- XX. Chemotherapy
- XXI. Hormones and drugs effecting Endocrine functions
- XXII. Vitamins
- XXIII. Metallic and other Inorganic compounds
- XXIV. Immunological agents
- XXV. Diagnostics.

3. EXERCISE THERAPY & MASSAGE

- I. Mechanical anatomy of motion and posture
- II. Exercise of the shoulder and hip and evaluation
- III. Exercise of the Foot and Hand evaluation
- IV. Exercise of the Knee and elbow and evaluation
- V. Vicarious motion
- VI. Joint motion assessment
- VII. Manual muscle examination
- VIII. The therapeutic gymnasium
- IX. Exercise based on Neuro Physiological Principles
- X. Crutch and cane exercises
- XI. Gait training
- XII. Principles of therapeutic exercise
- XIII. Postures
- XIV. Exercises for healthy persons
- XV. Activities of daily living
- XVI. Exercise of spine
- XVII. Massage
- XVIII. Suspension therapy
- XIX. Neuro muscular co-ordination
- XX. Starting postions
- XXI. Cryotherapy.

4. ELECTRO THERAPY & ACTINO THERAPY

A) Medical Electronics

- I. Electrical fundamentals
- II. Electron tubes
- III. Power supplies

- IV. Amplifiers
- V. Oscillators
- VI. Cathode ray tubes
- VII. Transistors
- VIII. Recorders
- IX. Transducers
- X. Radiation
- XI. Principles of designs and circuits of infrared and ultra violet generators, shortwave diathermy, microwaves, ultrasonics and electrical stimulators
- XII. Signal processes
- XIII. Display devices and indicators
- XIV. Magnetic tape recorders
- XV. Data transmission and processing

B)

- I. Physics of heat
- II. Thermometry
- III. Biophysics of diathermy
- IV. Physiology of heat and cold
- V. Thermal radiation, pain and injury
- VI. General principle of thermotherapy
- VII. Conducting heating
- VIII. Luminous and infra-red heating
- IX. High frequency instrumentation
- X. Short wave diathermy
- XI. Microwaves
- XII. Ultrasound therapy
- XIII. Instrumentation of electrotherapy
- XIV. Therapeutic electro stimulation
- XV. Iontophoresis
- XVI. Electro-sleep Therapy and anaesthesia
- XVII. Instrumentation for ultraviolet therapy
- XVIII. Physiological affects of Ultraviolet radiation
- XIX. Low frequency currents
- XX. T.N.S.
- XXI. Interferential therapy
- XXII. Wax Therapy

C) ELECTRO –PHYSIOLOGY

- I. Bio-Electricity
- II. Electric potential generated by cell
- III. Electrogenic membrane response
- IV. Chemo responsive electrogenic system
- V. Propagation of nerve impulse
- VI. Neuromuscular Junction
- VII. Synapse
- VIII. Muscle Electronic
- IX. Electrophysiology of CNS
- X. Chronaxy
- XI. Strength duration curves
- XII. Electromyography
- XIII. Electrical duration curves

- XIV. Nerve conduction studies
- XV. Microneurography
- XVI. Reflex Physiology Monosynaptic and Polysynaptic reflexes
- XVII. Spinograms
- XVIII. Cerebral evoked potentials.

5. PSYCHOLOGY

- I. Definition and scope of psychology in relation to occupational therapy Physiotherapy.
- II. Methods of studies in Psychology.
- III. Psychological Development of human individual from conception to birth to old age.
- IV. Special needs, characteristics and problems of the various groups of Handicapped.
- V. Learning, factors affecting learning, disabilities techniques to deal with implications of various handicaps in the learning process. Principles of learning for various handicapped groups, Techniques of motivating the handicapped children.
- VI. Adjustment, criteria of mental health, adjustment problems faced by handicapped children, counseling and guidance with special reference to the physically and mentally handicapped.
- VII. Interaction with the family, community and peer groups Communication pattern, specific problems faced by handicapped, development of social skills and sensitivity training.
- VIII. Role of Psychologist in Rehabilitation of the handicapped.

6. MEDICINE

General Medicine including Respiratory Diseases

- I. Infection and antibacterial agents.
- II. Infections and Diseases
- III. Poisons and Venoms
- IV. Chemical and Physical agents carrying diseases
- V. Diseases of Metabolism.
- VI. Deficiency Diseases
- VII. Diseases of Endocrine Glands.
- VIII. Diseases of Digestive System.
- IX. Diseases of Lymphatic System
- X. Diseases of Blood
- XI. Diseases of Cardio-vascular system, Circulatory failure, Ischemic heart disease, Hypertension Pulmonary Heart Diseases, Congenital heart Disease, Peripheral vascular diseases, Embolism and Thrombosis, Collagen diseases.
- XII. Diseases of the Respiratory System-the trachea, the bronchi, the lungs, the diaphragm, the pleura.
- XIII. Diseases of the Kidney
- XIV. Diseases of the Skin sensory disorders, Pigmentary Anemias, vasomotor, Disorders, Dermatitis, Coccal Infections, Fungus Infections, Cutaneous, Tuberculosis, Virus infection, Parasitic infections, Erythematous conditions, Scleroderma of the Hand, Tropical skin diseases.
- XV. Psychiatry:
 - Definition and introduction to Psychiatry in relation to OT & PT
 - Concept of normal and abnormal

- Behavior disorders:- Causes & management
 - a) Psychoneurotic disorders
 - b) Psychotic disorders
 - c) Psychosomatic disorder
- Techniques of Therapy
 - Psycho Therapy:
 - a) Group Therapy
 - b) Psychodrama
 - c) Behaviour modification

7. SURGERY

A) General surgery and cardio-vascular and thoracic surgery.

- I. Surgical wounds, haemorrhage, shock, water and Electrolyte Balances, Burns.
- II. Surgery of head and neck, alimentary systems and genitor-urinary system
- III. Neuro Surgery
- IV. Cardio-Vascular and Thoracic surgery
- V. Gynaecology and obstetrics: pelvic inflammatory conditions, complications during and following pregnancy prolapsed uterus.
- VI. ENT

B) ORTHOPAEDICS

- I. Postural defects anteroposterior and lateral curve of the spine, the feet genu valgum genu varum.
- II. Back pain
- III. The spine, the intervertebral disease, osteoporosis, Ankylosing spondylitis, spina bifida, torticollis, tuberculosis of the spine and sacro- iliac joints Osteomyelitis, Tumours.
- IV. The Hip congenital dislocation, coxa vara, tuberculous bursitis
- V. The knee- injuries to medial ligament, lateral ligament, Semilunar cartilages, cruciate ligament, chronic strain, chondromalacia patella, locking rheumatoid Arthritis
- VI. The Foot and ankle painful feet, pesavus, halux, valus gout, painful heel, the ligaments of the ankle tuberculosis,
- VII. The foot and ankle painful feet, pesavcus hallux valgus Gout painful heel the ligaments of the ankle, Tuberculosis, stress fracture
- VIII. The shoulder girdle pain the shoulder, cervical spondylosis, carpal Tunnel syndrome, cervico Brachial Junction Recurrent dislocation of the shoulder, Tuberculosis.
- IX. The elbow tennis elbow, myositis ossificans, ulnar palsy, tuberculosis.
- X. The wrist and hand tenosynovitis, tuberculosis ganglion, rupture of tendons contractures.
- XI. Pyogenic infection
- XII. Tuberculosis
- XIII. Chronic arthritis rheumatoid and osteoarthritis
- XIV. Diseases of nervous system, poliomyelitis, cerebral Palsy
- XV. Common fractures of spine and extremities.
 - Trauma Therapy
 - Physiotherapy
 - Drug Therapy
 - E.C. T.

The role of psychiatrist in dealing with the problems of mental health

- XVI. Paediatrics.
- XVII. Geriatrics
- XVIII. Nursing and Bandaging

C)

- I. Disorders of functions in the context of Pathophysiology & Anatomy
- II. The Cranial Nerves
- III. Infections of the Nervous System
- IV. Disorders of the Cerebral Circulation
- V. Demyelinating diseases of the nervous system
- VI. Extropyramidal syndrome
- VII. Tumours and the nervous system
- VIII. Conventional and degenerative disorders
- IX. Disorders of the spinal Cord and Cauda Equina
- X. Toxic disorders
- XI. Metabolic disorders
- XII. Deficiency disorders
- XIII. Disorders of the peripheral nerves
- XIV. Disorders of the Muscles
- XV. Disorders of autonomic nervous system
- XVI. Psychological aspects of neurology.

8. PHYSICAL THERAPY IN MEDICAL CONDITIONS

A) PHYSICAL THERAPY IN NEUROLOGICAL CONDITIONS

- I. Examination of Neurological disorder and principles of treatment
- II. Hemiplegia, paraplegia, cerebral palsy, Tabes dorsalis, cerebellar ataxia, extra pyramidal lesions.
- III. Disseminated sclerosis, muscular atrophy, amyotrophic lateral sclerosis, progressive muscular atrophy, syringomyelia, sub acute combined degeneration of cord
- IV. Peripheral Nerves lesions
- V. Neuritis and Neuralgia Brachial sciatica and facial palsy
- VI. Infections-Poliomyelitis, Meningitis, Encephalitis, Polyneuritis
- VII. Myopathies
- VIII. Paediatrics and Geriatrics

B)

- I. Pathological conditions:
 - i. Review of pathological changes and principles of the treatment by physiotherapy of: Inflammation, acute, chronic and suppurative.
 - ii. Oedema Traumatic, Obstructive, Paralytic, Oedema due to poor muscle and laxity of the fascia.
- II. Arthritis and Allied conditions:
 - i. Osteoarthritis generalized, degenerative and traumatic, spondylosis and disorders
 - ii. Rheumatoid arthritis, Still's disease, infective arthritis
 - iii. Spondylitis, Ankylosing spondylitis
 - iv. Non articular Rheumatism Fibrositis, Myalgia, Bursitis, Peri-arthritis etc
- III. Diseases of the Reproductive System:

- i. Mechanism of Respiration
 - ii. Examination of chest of patient and principles of physiotherapy treatment.
 - iii. Bronchitis, Asthama, Lung Abscess, Bronchiectasis, Emphsema
 - iv. Pleurisy and Empyemam, Pneumonia
 - v. Bacterial Disease-Tuberculosis
 - vi. Tumors
- IV. Common conditions of Skin:
Ane, Psoriasis, alopecia, Leucodema, Leprosy etc.
- V. Common Cardiac Discords:
Thrombosis, Embolism, Burger's disease, Arterisclerosis, Thrombophlebitis, Phlebitis, Gangrene, Congestive Cardiac failure, Hypertension, Rheumatic fever etc.
- VI. Deficiency Diseases:
Rickets, Osteomalacia etc.

9. Physical Therapy in Surgical Conditions

A)

- I. Orthopaedic and fractures
- i. Fractures and dislocations
 - ii. Types of displacement
 - iii. Classification
 - iv. Immediate , late signs and symptoms
 - v. Changes at fracture site and its surrounding tissues
 - vi. Reasons for union, non-union , delayed union
 - vii. Healing of fractures and factors influencing it
 - viii. Common fractures of upper and lower extremity and their complications
 - ix. Methods of reduction and fixation
 - x. Corrective surgery
 - xi. Arthroplasty, Arthodesis, Osteotomy, Tendon, Transplant, Soft Tissue release, Grafting.
 - xii. Phsiotherapy treatment as applicable to above conditions.
- II. INJURIES
- i. Soft tissue injuries: synovitis, Capsulitis Volkmann's ischemic contracture etc
 - ii. Crush injuries
 - iii. Repair of injured tendon and nerves
 - iv. Injuries of semilunar cartilage and cruiate ligaments knee: Physicala Therapy treatment as applicable to above conditions.
- III. Deformities:
- i. Congenital, torticollis, Cartilage and cruiate ligaments knee: Physicala Therapy Treatment as applicable to above conditions
 - ii. Acquired: Scoliosis, Kyphosis, Lordosis, coxa vara, Genu Valgum, Genu varum and pervurvatum, Planus and other common deformities.
 - iii. Other miscellaneous Orthopaedic conditions commonly treated by Physiotherapy.
 - iv. Physical therapy treatment related to above conditions.
- IV. Amputations:
- i. Traumatic, elective, common sites of amputation in Upper & Lower extremities Advantages and disadvantages physical Therapy treatment as applicable to care of prosthetic training with emphasis on Lower extremity.

B)

- I. Complications common to all operations: pre and post operative physiotherapy.

- II. Wounds, local infections, ulcers Surgical porocedures related to peripheral vascular disease.
- III. Burns –Degree, Grafting of skin.
- IV. General abdominal surgery and obstertrics and Gyneaecology.
 - a) Thoracis Surgery
 - i. Thoracis incisions pre and post operative treatment and later rehabitlitation of the patent.
 - ii. Lobectomy, pneumonectomy, Thoracotomy, Thoracoplasty
 - iii. Operations on Chest Walls
 - iv. Common complications with emphasis to altectasis Peneumothorax, bronchopulmonary fistula, pre and post operative physiotherapy related to Cardio thoracic surgery
 - v. Operations on Precardium and Heart, Chronic Constructive pericarditis, valvular in competence and Stasis, mitral, valvotomy, tetrology of Fallot.
 - b) Ear, Nose and thorat conditions:
 - c) Neuro surgery otitis simusites vaso motor, Rhimorrhoea, tonsillitis physiotherapy it above conditions.
 - i. Cranial Surgery:
 - ii. Head Injury, intra cranial abscess, Intracranial Tumours.
 - iii. Surgery of spinal Cord and Couda Equina, spina Bifida and its complications, infections of the spine , Epidural Abscess, Tuberculosis, pre and post operative physiotherapy laminctomy, treatment related to above conditions.
 - iv. Surgery of peripgheral Nerves , peripheral nerve injuries , pre and post operative physictherpy treatment related to above conditions.
 - d) Pre and Post Operative Physiotherapy, related to Plastic Surgery:
 - i. Tendon transplantation in Leprosy, Polio etc. Pre and Post operative Physic therapy treatment related to above conditions.

10. Bio-Mechanics and Kinesiology

- I. General Principles
- II. Force, axis, planes, center of gravity levers
- III. Classification of force systems
- IV. The linear force system resultant force equilibrium
- V. Parallel forces in one plane
- VI. Concurrent and genral force system
- VII. Friction
- VIII. The fundamental principles of motion
- IX. Locomotion.

11. Disability prevention and Prehabilitation

- I. Introduction
- II. Definition concerned in the phase of disability process
- III. Definitions concerned with cause of impairment, factional limitation and disability
- IV. Rehabilitation and disability prevention
- V. Present rehabilitations services
- VI. Reseration & Legislation for rehabilitation services for the disabled
- VII. Community and Rehabilitation
- VIII. Basic principles of Administration, Budget, Approach Personnel and Space etc.
- IX. Contribution of Social worker towards rehabilitation
- X. Vocational evaluation and goals for disabled.

- XI. Rural rehabilitation in-corporated with PHC's
- XII. Principles of Orthotics & Prosthetics:
- Lower Extremity orthotics/Upper extremity; orthosis
 - Spinal Orthotics
 - Upper extremity prosthetics
 - Lower Ectremity Prosthetics
- XIII. Principle of Communiation: Impariment
- Speech Production
 - Communication disorders secondary to Brain damage
 - Aphasia and its treatment
 - Dysarthria and its treatment
 - Non- aphasic language disorders
- XIV. Code and Conduct
- XV. Ethics and Management:
- a) Principles in Management of Social Problems:
 - Social needs of the patient
 - Rehabilitation centre Environment
 - The Social worker as a Member of the Rehabilitation Team
 - Community Resources
 - b) Principles in Management of Vocational Problems:
 - Vocational Evaluation
 - Vocational goals for the disabled
- XVI. Mental Subnormality:
- Identification and assessment of the mentally subnormal
 - Classification of the Mentally subnormal
 - Common characteristics of different categories of the mentally subnormal
 - Training of the mentally subnormal
- XVII. Definition Scope and importance of A. D. L.
- XVIII. Goals of Self Help Devices
- XIX. Teaching A. D. L. in the following areas:-
- Wheel Chair Activities
 - Bed Activities
 - Self Care Activites
 - Toilet, Eating Dressing, Miscellaneous Hand Activities.
- XX. Principles of design materials used
- XXI. A. D.L Form
- XXII. A. D. L. Room
- XXIII. Relationship of ADL to occupational Therapy and Physiotherapy
- XXIV. National Health Programmes
- XXV. Bio-Medical Waste.

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Annexure “K”

ANATOMY

➤ General Introduction

- ✓ **Histology**
- ✓ **Osteology**
- ✓ **General Embryology**

➤ Systems of the Human body

- ✓ **Blood Vascular System**
- ✓ **Respiratory System**
- ✓ **Digestive System**
- ✓ **Urogenital System**
- ✓ **Endocrine System**
- ✓ **Integumentary System**
- ✓ **Surface Anatomy**

➤ Neuroanatomy

➤ Muscular Skeletal System

- ✓ **Myology**
- ✓ **Osteology & Arthrology**
- ✓ **Radiological Anatomy**

PHYSIOLOGY

➤ General Introduction

- ✓ **Cell Introduction**
- ✓ **Skin**
- ✓ **Blood and Lymph**

➤ Physiology of the Systems of the body

- ✓ **Digestion**
- ✓ **Circulation**
- ✓ **Excretion**
- ✓ **Respiration**
- ✓ **Endocrine System**
- ✓ **General Metabolism**
- ✓ **Neurophysiology**
- ✓ **Muscle Physiology**
- ✓ **Physiology of exercise and work**

PATHOLOGY AND MICROBIOLOGY

○ **Pathology**

- ✓ Introduction
- ✓ Bacterial , viral and Parasitic Infections
- ✓ Inflammation and repair, degeneration, necrosis, and Gangrene
- ✓ Haemorrhage, shock, embolism, thrombosis
- ✓ Tuberculosis
- ✓ Tumours
- ✓ Blood

○ **Microbiology**

- ✓ Introduction and History of microbiology
- ✓ Microorganisms
- ✓ Disinfection and Antiseptics
- ✓ Sterilization and asepsis
- ✓ Non-specific immunity
- ✓ Outline of common pathogenic bacteria and diseases produced by them. Treatment and prevention

PHARMACOLOGY AND BIOCHEMISTRY

○ **Pharmacology**

- ✓ General action of drugs
- ✓ Drug allergy and idiosyncrasy
- ✓ Drug toxicity
- ✓ Methods of administration
- ✓ Immunologic agents
- ✓ Diagnostic agents

○ **Biochemistry**

- ✓ Biochemical characteristics of living matter
- ✓ Biochemistry morphology of cell
- ✓ Nucleic acids
- ✓ Proteins
- ✓ The enzymes
- ✓ Metabolism
- ✓ Harmones
- ✓ Common procedures used in biochemistry

SOCIOLOGY

- ✓ Introduction
- ✓ Sociology and Health

- ✓ **Socialization**
- ✓ **Social Groups**
- ✓ **Family**
- ✓ **Community**
- ✓ **Culture**
- ✓ **Caste System**
- ✓ **Social Change**
- ✓ **Social Control**
- ✓ **Social problems of the disabled**
- ✓ **Social Security**
- ✓ **Social Worker**

GENERAL AND HEALTH PSYCHOLOGY

○ **General and Health Psychology**

- ✓ **Definition of Psychology**
- ✓ **Heredity and environment**
- ✓ **Development and Growth behavior**
- ✓ **Intelligence**
- ✓ **Motivation**
- ✓ **Emotions**
- ✓ **Personality**
- ✓ **Learning**
- ✓ **Thinking**
- ✓ **Frustration**
- ✓ **Sensation, Attention and Perception**
- ✓ **Democratic and authoritarian leadership**
- ✓ **Defence mechanisms of the EGO**

○ **Health Psychology**

- ✓ **Psychological reactions of a patient**
- ✓ **Reactions to loss**
- ✓ **Stress**
- ✓ **Communications**
- ✓ **Compliance**
- ✓ **Emotional needs**
- ✓ **Geriatric Psychology**
- ✓ **Paediatric Psychology**
- ✓ **Behaviour Modification**
- ✓ **Substance abuse**
- ✓ **Personality styles**

ORTHOPAEDICS

- ✓ Introduction to orthopaedics
- ✓ Principles of operative treatment
- ✓ Sprains and muscle strains
- ✓ Sports injuries
- ✓ Fractures & Dislocations
- ✓ Upperlimb fractures & Dislocations
- ✓ Lower Limb Fractures & Dislocations
- ✓ Spinal Fractures and Dislocations
- ✓ Recurrent Dislocations
- ✓ Amputations
- ✓ Bone & Joint infections
- ✓ Bone joint Tumours
- ✓ Chronic Arthritis
- ✓ Spinal Deformities
- ✓ Poliomyelitis
- ✓ Congenital Deformities
- ✓ Peripheral nerve injuries
- ✓ Hand injuries
- ✓ Leprosy

BIOMECHANICS & KINESIOLOGY

- ✓ Mechanics
- ✓ Joint structure and function
- ✓ Muscle structure and functions
- ✓ Posture & gait

FUNDAMENTAL OF OCCUPATIONAL THERAPY

- ✓ General Objectives
- ✓ Specific objectives of the Course
- ✓ Various definition and functions of occupational therapy
- ✓ Therapeutic activities
- ✓ Occupational therapy as diagnostic and Prognostic Procedure
- ✓ Dosage in occupational therapy
- ✓ Importance of interest in occupational therapy
- ✓ Occupational Therapist
- ✓ Different types of evaluations and their importance
- ✓ Co-ordination
- ✓ Contracture & Deformities
- ✓ Fatigue
- ✓ Neurological disorders

THERAPEUTIC ACTIVITY MODALITIES

- ✓ **Classification of therapeutic activities**
- ✓ **Knowledge of different machines and equipments used in occupational therapy**
- ✓ **Handicrafts in relation to occupational therapy**
- ✓ **Definitions materials, equipments and Therapeutic values of the following activities modalities.**

GENERAL MEDICINE

- ✓ **Introduction**
- ✓ **Bacterial Diseases**
- ✓ **Viral Diseases**
- ✓ **Metabolic and Deficiency Diseases**
- ✓ **Diseases of Respiratory System**
- ✓ **Diseases of Circulatory System**
- ✓ **Diseases of Digestive System**
- ✓ **Disease of liver**
- ✓ **Diseases of Kidney**
- ✓ **Diseases of skin**
- ✓ **Psychiatry**
- ✓ **Mental retardation**
- ✓ **Therapies**

GENERAL SURGERY

- ✓ **Introduction**
- ✓ **Shock**
- ✓ **Haemorrhage**
- ✓ **Blood Transfusion**
- ✓ **Anesthesia**
- ✓ **Wounds**
- ✓ **Wound Infections**
- ✓ **Tumours and Ulcers**
- ✓ **Burns**
- ✓ **Skin Grafting**
- ✓ **Hand Infections**
- ✓ **General Injuries**
- ✓ **Complications of surgery**
- ✓ **Abdominal Surgery**
- ✓ **Thoracic and Cardiac Surgery**

- ✓ **Obstetrics and Gynecology**
- ✓ **Ophthalmology**
- ✓ **Ear, Nose, Throat (ENT)**

PAEDIATRICS AND GERIATRICS

○ **Paediatrics**

- ✓ **Review normal foetal development & Child birth, including assessment of a neonate**
- ✓ **Congenital & acquired Cardio-pulmonary disorders**
- ✓ **Congenital & acquired neurological disorders**
- ✓ **Hereditary disorders**

○ **Geriatrics**

- ✓ **Normal aging**
- ✓ **The examination & assessment of a geriatric patient**
- ✓ **Musculo skeletal disorders**
- ✓ **Cardio pulmonary disorders**
- ✓ **Neurological disorders**
- ✓ **Diet & Nutritional requirement of the elderly**
- ✓ **Dementia**

FUNDAMENTALS OF OCCUPATIONAL THERAPY

- ✓ **Posture**
- ✓ **Dynamic & Realistic approach to occupational therapy**
- ✓ **Ward & Bed side Occupations**
- ✓ **Establishment of occupational therapy, Deptt in a Hospital inclusive of organizations and administration of Deptt.**
- ✓ **Wheel Chair**
- ✓ **Orthopedic appliances**
- ✓ **Contraction**
- ✓ **Mobility and Limitations**
- ✓ **Goniometry or Arthorometry**
- ✓ **Muscle weakness**
- ✓ **Motivation in occupational Therapy**
- ✓ **Assistive apparatus for U.E & L.E**
- ✓ **Occupational Therapy as a supportive measure in General Hospital**
- ✓ **Motivation in Occupational Therapy**

- ✓ Occupational Therapy as a supportive measure in General Hospital
- ✓ Definition, Scope, Importance of A.D.L, Goals of self Help Devices, teaching A.D.L in the following areas
 - Wheel Chair activities
 - Bed Activities
 - Self Care Activities

OCCUPATIONAL THERAPY IN ENVIRONMENT AND OCCUPATIONAL HEALTH

○ Environment

- ✓ Definition
- ✓ Cultural and religious thought of environment
- ✓ Increasing population
- ✓ Land, Water, Air and sound pollution
- ✓ Causes of Environment Pollution
- ✓ Contamination of environment and basic rights
- ✓ Environment Education and Preservation of forests, environment
- ✓ Family pollution & its prevention
- ✓ Curbing measures in Occupational Therapy in population

○ Occupational Health

- ✓ Definition
- ✓ O.T measures in work and health
- ✓ Social context of occupational Health
- ✓ Epidemiology & Occupational Hygiene
- ✓ Occupational safety as applied to O.T
- ✓ Prevention of accidents and overt trauma
- ✓ Occupational ergonomics through work designs
- ✓ Ethics in occupational Health
- ✓ Hazardous work place exposures

NEUROLOGY

- ✓ Degenerative disorders
- ✓ Infections
- ✓ Diseases of the Muscle
- ✓ Peripheral nerve disorders
- ✓ Epilepsy
- ✓ Myasthenia Gravis
- ✓ Intracranial Tumours
- ✓ Motor neuron disease

- ✓ Cranial nerve
- ✓ Introduction to neuropsychology

RESEARCH METHODOLOGY AND BIostatISTICS

- ✓ Introduction
- ✓ Ethical issues in research, elements of informed consent
- ✓ Structure of a research proposal
- ✓ Research Question including literature review
- ✓ Measurement : Principles of measurement reliability and validity
- ✓ Experimental sampling and design
- ✓ Descriptive research
 - Biostatistics
- ✓ Descriptive statistics
- ✓ Comparison of means, t-tests
- ✓ Analysis of variance
- ✓ Multiple comparisons
- ✓ Non-parametric statistics
- ✓ Correlation

OCCUPATIONAL THERAPY IN MEDICAL AND SURGICAL CONDITIONS

- ✓ Occupational Therapy in pediatrics
- ✓ Occupational Therapy in geriatrics
- ✓ Occupational Therapy in Hemiplegia
- ✓ Occupational Therapy in Arthritic conditions and Burns
- ✓ Occupational Therapy in Myopathies & Muscular Disorders
- ✓ Occupational Therapy in Poliomyelitis
- ✓ Occupational Therapy in Cerebral Palsy
- ✓ Occupational Therapy in Visually Handicapped.
- ✓ Occupational Therapy in Extra Pyramidal Disorders
- ✓ Occupational Therapy in communication Disorders

OCCUPATIONAL THERAPY IN MENTALLY DISADVANTAGED & MENTAL HEALTH

REHABILITATION ORGANIZATION AND ADMINISTRATION

COMPUTER APPLICATION IN OCCUPATIONAL THERAPY.

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