# राजस्थान लोक सेवा आयोग, अजमेर —: प्रेस—नोट :—

दिनांक :- 17.12.2024

अभ्यर्थियों को सूचित किया जाता है कि आयोग द्वारा आयोजित की जाने वाली प्राध्यापक एवं कोच (स्कूल शिक्षा) (विभिन्न विषय), प्रतियोगी परीक्षा, 2024 माध्यमिक शिक्षा विभाग का पाठ्यक्रम आयोग की वेबसाइट पर प्रसारित कर दिया गया है।

पाठ्यक्रम आयोग की वेबसाइट <u>https://rpsc.rajasthan.gov.in</u> पर प्राध्यापक एवं कोच (स्कूल शिक्षा) (विभिन्न विषय), प्रतियोगी परीक्षा, 2024 के नाम से उपलब्ध है।

> (आशुतोष गुप्ता) मुख्य परीक्षा नियंत्रक

# SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) PAPER – I

#### **General Awareness and General Studies**

- 1. History of Rajasthan and Indian History with special emphasis on Indian National Movement
  - Development of Literature, Art and Architecture during Gupta and Mughal Period.
  - Freedom Struggle of 1857. Prominent Leaders of National Movement, V.D. Savarkar, Bankim Chandra, Lal, Bal, Pal, Chandra Shekhar Azad, Bhagat Singh, Sukhdev, Ras Behari Bose, Subhash Chandra Bose, Social and Religious Renaissance- Raja Ram Mohan Roy, Dayanand Saraswati and Vivekanand.
  - National movement with special reference to Mahatma Gandhi, Jawahar Lal Nehru, Vallabhbhai Patel, Maulana Azad and B.R.Ambedkar.
  - Ancient Culture & Civilization of Rajasthan- Kalibangan, Ahar, Ganeshwar, Bairath.
  - History of Rajasthan from 8<sup>th</sup> to 18<sup>th</sup> Century-

Gurjar Pratihars, Chauhans of Ajmer, Relations with Delhi Sultanate– Mewar, Ranthambore and Jalore, Rajasthan and Mughals – Rana Sanga, Maharana Pratap, Mansingh of Amer, Chandrasen, Rai Singh of Bikaner, Raj Singh of Mewar.

• History of Freedom Struggle in Rajasthan-

Revolution of 1857, Political Awakening, Prajamandal Movements, Peasants and Tribal Movements.

- Integration of Rajasthan.
- Society and Religion-

Lok Devta and Devian, Saints of Rajasthan, Architecture – Temples, Forts and Palaces, Paintings – Various Schools, Fairs and Festivals, Customs, Dresses and Ornaments, Folk Music and Dance, Language and Literature.

#### 2. Mental Ability Test:

Analogy, series completion, coding-decoding, blood relations, logical venn diagrams, alphabetical test, number ranking and time sequence test, mathematical operations, arithmetical reasoning, data interpretation, data sufficiency, cubes and dice.

## **Statistics (Secondary Level):**

Collection of data, presentation of data, graphical representation of data, measures of central tendency, mean, mode, median of ungrouped and grouped data.

## Mathematics (Secondary Level):

Natural, rational and irrational numbers, real numbers and their decimal expansions, operations on real numbers, laws of exponents for real numbers, rational numbers and their decimal expansions. Zeroes of a polynomial. Relationship between zeroes and coefficients of a polynomial. Division algorithm for polynomials. Algebraic methods of solution of pair of linear equations in two variables.

## Mensuration:

Surface area of a cuboid and a cube, right circular cylinder, right circular cone, sphere. Volume of a cuboid, cylinder, right circular cone and sphere, Surface area and volume of a combination of solids conversion of solid from shape to another.

#### Language Ability Test: Hindi सामान्य हिन्दी

- संधि, संधि विच्छेद
- उपसर्ग, प्रत्यय
- अनेकार्थक शब्द, विलोम शब्द, समश्रुत भिन्नार्थक शब्द
- शब्द–शुद्धि, वाक्य– शुद्धि
- अँगरेजी के पारिभाषिक (तकनीकी) शब्दों के समानार्थक हिन्दी शब्द (केवल प्रशासनिक शब्द)

# **General English:**

- Tenses/Sequence of Tenses
- Voice: Active and Passive
- Narration: Direct and Indirect
- Use of Articles and Determiners
- Use of Prepositions
- Correction of sentences including Subject-Verb Agreement, Degrees of Adjectives, Connectives
- Glossary of Official and Technical Terms (with their Hindi Versions)
- Antonyms and Synonyms
- Forming New Words by using Prefixes and Suffixes
- Words often Confused

## 3. Current Affairs:

Census of India and Rajasthan 2011, Current Programmes of development in India with special reference to Rajasthan, Schemes of Women Empowerment in India with special reference to Rajasthan, Skill Development Programmes, Renewable Energy Resources and their potential in India. Health and Hygiene Schemes of Rajasthan, Pandemic and it's Management. Space Programmes of India, Atomic Energy Programmes, India and the world events of importance, Persons and places of India in current issues, Contemporary events in Science and Technology in India, National and International Awards and Prizes, Latest Books and Authors of India, Sports and Games.

# 4. General Science:

Atoms and molecules, Chemical reactions and equations, Carbon and its compounds, Force and Laws of motion, Work and energy, Tissues, Control and coordination, Heredity and evolution, Management of natural resources, Protection of environment, Biodiversity and sustainable development.

# **Indian Polity**:

- Salient features of the Constitution of India, Indian Executive, Legislature, and Judiciary Organization, Theory and Practice, Elections in India. The President of India, Election and Emergency Powers of the President.
- Cabinet, Prime Minister and his powers.
- Parliament, Speaker and his functions.
- Supreme Court Organization and powers, Commissions and Boards at-National level.

# **Geography of Rajasthan:**

Location, extent, shape, size, physical features, drainage, climate, demographic characteristics, agriculture, livestock, mineral resources, energy resources. Tourism and transport. Industries and trade.

#### 5. Educational Management, Educational Scenario in Rajasthan, Right of Children to Free and Compulsory Education Act, 2009

• Educational Management:- Concept, Functions and Principles. Total Quality Management in Education, Educational Supervision & Inspection, Institutional Planning, Leadership Styles in Educational Management.

## • Educational Scenario in Rajasthan

Organization and Functions of following at Primary and Secondary Education in Rajasthan; SCERT, BSER, IASE, DIET, Rajasthan State Open School, Rajasthan State Text Book Board, State Initiative for Quality Education. DIKSHA-RISE, SMILE, Shiksha Darshan, Shiksha Vani, Samgra Shiksha Abhiyan.

• Provisions of Right of Children to Free and Compulsory Education Act, 2009.

For the competitive examination for the post of School Lecturer:-

- 1. The question paper will carry maximum 150 marks.
- 2. Duration of question paper will be 01 Hours 30 Minutes.
- 3. The question paper will carry 75 questions of multiple choices.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects :-
  - (i) History of Rajasthan and Indian History with special emphasis on Indian National Movement
  - (ii) Mental Ability Test, Statistics (Secondary Level), Mathematics (Secondary Level), Language Ability Test:- Hindi, English
  - (iii)Current affairs
  - (iv)General Science, Indian Polity, Geography of Rajasthan
  - (v) Educational Management, Educational Scenario in Rajasthan, Right of Children to free and Compulsory Education Act, 2009

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# SYLLABUS FOR EXAMINATION FOR THE POST OF COACH (SCHOOL EDUCATION) PAPER – I

#### **General Studies**

- 1. History of Rajasthan and Indian History with special emphasis on Indian National Movement
  - Development of Literature, Art and Architecture during Gupta and Mughal Period.
  - Freedom Struggle of 1857. Prominent Leaders of National Movement, V.D. Savarkar, Bankim Chandra, Lal, Bal, Pal, Chandra Shekhar Azad, Bhagat Singh, Sukhdev, Ras Behari Bose, Subhash Chandra Bose, Social and Religious Renaissance- Raja Ram Mohan Roy, Dayanand Saraswati and Vivekanand.
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  - Ancient Culture & Civilization of Rajasthan- Kalibangan, Ahar, Ganeshwar, Bairath.
  - History of Rajasthan from 8<sup>th</sup> to 18<sup>th</sup> Century-

Gurjar Pratihars, Chauhans of Ajmer, Relations with Delhi Sultanate– Mewar, Ranthambore and Jalore, Rajasthan and Mughals – Rana Sanga, Maharana Pratap, Mansingh of Amer, Chandrasen, Rai Singh of Bikaner, Raj Singh of Mewar.

- History of Freedom Struggle in Rajasthan-Revolution of 1857, Political Awakening, Prajamandal Movements, Peasants and Tribal Movements.
- Integration of Rajasthan.
- Society and Religion-

Lok Devta and Devian, Saints of Rajasthan, Architecture – Temples, Forts and Palaces, Paintings – Various Schools, Fairs and Festivals, Customs, Dresses and Ornaments, Folk Music and Dance, Language and Literature.

#### 2. Mental Ability Test:

Analogy, series completion, coding-decoding, blood relations, logical venn diagrams, alphabetical test, number ranking and time sequence test, mathematical operations, arithmetical reasoning, data interpretation, data sufficiency, cubes and dice.

## **Statistics (Secondary Level):**

Collection of data, presentation of data, graphical representation of data, measures of central tendency, mean, mode, median of ungrouped and grouped data.

## Mathematics (Secondary Level):

Natural, rational and irrational numbers, real numbers and their decimal expansions, operations on real numbers, laws of exponents for real numbers, rational numbers and their decimal expansions. Zeroes of a polynomial. Relationship between zeroes and coefficients of a polynomial. Division algorithm for polynomials. Algebraic methods of solution of pair of linear equations in two variables.

# **Mensuration:**

Surface area of a cuboid and a cube, right circular cylinder, right circular cone, sphere. Volume of a cuboid, cylinder, right circular cone and sphere, Surface area and volume of a combination of solids conversion of solid from shape to another.

#### Language Ability Test: Hindi सामान्य हिन्दी

- संधि, संधि विच्छेद
- उपसर्ग, प्रत्यय
- अनेकार्थक शब्द, विलोम शब्द, समश्रुत भिन्नार्थक शब्द
- शब्द–शुद्धि, वाक्य– शुद्धि
- अँगरेजी के पारिभाषिक (तकनीकी) शब्दों के समानार्थक हिन्दी शब्द (केवल प्रशासनिक शब्द)

# **General English:**

- Tenses/Sequence of Tenses
- Voice: Active and Passive
- Narration: Direct and Indirect
- Use of Articles and Determiners
- Use of Prepositions
- Correction of sentences including Subject-Verb Agreement, Degrees of Adjectives, Connectives
- Glossary of Official and Technical Terms (with their Hindi Versions)
- Antonyms and Synonyms
- Forming New Words by using Prefixes and Suffixes
- Words often Confused

## 3. Current Affairs:

Census of India and Rajasthan 2011, Current Programmes of development in India with special reference to Rajasthan, Schemes of Women Empowerment in India with special reference to Rajasthan, Skill Development Programmes, Renewable Energy Resources and their potential in India. Health and Hygiene Schemes of Rajasthan, Pandemic and it's Management. Space Programmes of India, Atomic Energy Programmes, India and the world events of importance, Persons and places of India in current issues, Contemporary events in Science and Technology in India, National and International Awards and Prizes, Latest Books and Authors of India, Sports and Games.

#### 4. General Science:

Atoms and molecules, Chemical reactions and equations, Carbon and its compounds, Force and Laws of motion, Work and energy, Tissues, Control and coordination, Heredity and evolution, Management of natural resources, Protection of environment, Biodiversity and sustainable development.

# **Indian Polity**:

- Salient features of the Constitution of India, Indian Executive, Legislature, and Judiciary Organization, Theory and Practice, Elections in India. The President of India, Election and Emergency Powers of the President.
- Cabinet, Prime Minister and his powers.
- Parliament, Speaker and his functions.
- Supreme Court Organization and powers, Commissions and Boards at-National level.

# **Geography of Rajasthan:**

Location, extent, shape, size, physical features, drainage, climate, demographic characteristics, agriculture, livestock, mineral resources, energy resources. Tourism and transport. Industries and trade.

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For the competitive examination for the post of School Lecturer:-

- 1. The question paper will carry maximum 150 marks.
- 2. Duration of question paper will be 01 Hours 30 Minutes.
- 3. The question paper will carry 75 questions of multiple choices.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects: -
  - (i) History of Rajasthan and Indian History with special emphasis on Indian National Movement
  - (ii) Mental Ability Test, Statistics (Secondary Level), Mathematics (Secondary Level), Language Ability Test: Hindi, English
  - (iii) Current Affairs
  - (iv) General Science, Indian Polity, Geography of Rajasthan.

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## SYLLABUS FOR EXAMINATION FOR THE POST OF COACH (SCHOOL EDUCATION) (WRESTLING/KHO-KHO/HOCKEY/FOOTBALL)

# PAPER – II

#### Part-I: Knowledge of Physical Education & Sports: -Section A

- Physical Education: Introduction, Definition, Aims, Objectives, Scope, Need, Importance and other terms Wellness, Health education and Recreation.
- Misconceptions about Physical Education and Modern Concepts of Physical Education.
- Biological Foundation: Heredity and Environment, Chronological, Anatomical, Physiological and Mental Ages, Body Types/Classification.
- Psychological Foundation: Play and their Theories, Growth and Development, Principles of Motor Skill Acquisition, Transfer of Training Effects.
- Sociological Foundation: Traditions, Leadership, Group Dynamics, Socialization and Social Interaction, Competition and Cooperation, Sports as Cultural Heritage, Women and Sports.
- Media and Sports, Spectators and Administrators.
- Philosophical Foundation: Idealism, Pragmatism, Naturalism and Realism.
- Physical Fitness, Health related Fitness: Warming up, Limbering down, Aerobic and Anaerobic Activities, Calisthenics and Rhythmic Exercises.

#### Section **B**

- Exercise programme for the Development of the Following Muscles of the Body: Chest, Abdomen, Back, Neck, Arm, Shoulder, Thigh and Calf.
- Kinesiology and Bio-Mechanics.
- Law of Motion, Lever, Force, Center of Gravity, Equilibrium and their relationship with Sports, Body Composition, Body-Mass Index.
- Posture and Common Postural Deviations/deformities.
- Therapeutic Modalities in Rehabilitations.
- Sports Massage: History, Approach, Effect and Types of Massage Manipulations.
- Olympic Movement: Historical development of ancient and modern Olympic Games and Para-Olympics.
- Pre and Post Independence History of Physical Education in India.
- SAI and NSNIS and other Coaching Institutes of India.

# Section C

Organization, Administration and Management in Physical Education and Sports:

- Qualification and Responsibility of Physical Education Teacher/Coach. Budget, Record and register.
- Organization Structure of Athletic Meet and Planning of Intra Mural and Extra Mural of Tournament.
- National Fitness Corps.

#### Part-II: Sports Sciences: -Section A

- Physiology of Muscular Activity, Neurotransmission and Movement Mechanism.
- Types of Muscle Fibres.
- Physiology of Respiration and Blood Circulation
- Bioenergetics and Recovery Process.
- Ergogenic Aids and Doping.
- Second Wind, Oxygen-Debt, VO<sub>2</sub> max and Kinesthetic Sense.

#### Section B

- Joints and their Movements- Planes and Axes.
- Mechanical Analysis of Fundamental Movements: Running, Jumping, Throwing, Pulling & Pushing.
- Learning Process Theories and Laws of Learning.
- Motivation, Theories and Dynamics of Motivation in Sports.
- Personality, its Dimensions, Theories, Personality and Performance.
- Psychological factors affecting Sports Performance viz., Stress, Anxiety, Aggression and Goal setting.
- Psychological Preparation in Sports.

## Part-III: General Theory and Method of Training: -

#### Section A

- Sports Training: Aims, Objectives, Principles and Characteristics.
- Training-Means and Methods.
- Training- load, Adaptation and Recovery.
- Periodisation.
- Motor Fitness: Meaning, Types, Principles and Methods of Developing.
- Technical and Tactical Preparation for Sports.

## Section B

- Short and long term training plans.
- Sports talent identification process.
- Preparation for competition: build up competition, main competition, competition frequency.
- Coaching and Officiating: Meaning, Importance and Principles.
- Lead-up games activities.
- Evaluation of physical fitness test.

# Part-IV: Specific Knowledge of Games/Sports and its current affairs: (Choose one Game/Sport From the following part of your Coaching/Specialization)

#### (a) Wrestling (b) Kho-Kho (c) Hockey (d) Football Section A

- History of respective Games/Sports (National and international level).
- Latest Rules and their Interpretations of above Games/Sports.
- Tactics and Strategy of above Games/Sports.
- Fitness (AAHPER Test, Motor Fitness Test, Indiana Test, JCR test, Cooper Test)
- Skill tests of respective Games/Sports.

- Factors influencing Performance in sports.
- Coaching Practice.
- Types of tournament and its organizational Structure:-Knock-out, League or Round Robin and Combination Tournament, Challenge Tournament.
- Tournament Preparation and analysis of technologies.
- Organization and Management of Competition of above Games/Sports.
- Mechanics of Officiating of above Games/Sports.

#### Section B

- Measurement of Play Fields and Specifications of Sports Equipment of above Games/ Sports.
- Fundamental Skills of above Games/Sports.
- Related sports terminologies of above Games/Sports.
- First Aid, Sports Injuries related to Games.
- Important tournaments and Venues of above Games/Sports.
- Sports Personalities of above Games/Sports.
- Sports Awards of above Games/Sports.
- Sports Associations or Federations of above Games/Sports.

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For the competitive examination for the post of Coach:-

- 1. The question paper will carry maximum **300 marks**.
- 2. Duration of question paper will be **Three Hours**.
- 3. The question paper will carry **150 questions** of multiple choices out of which, a candidate has to choose only **one Game/ Sports** of his specialization from **Part IV**.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects:-
  - (i) Knowledge of Physical Education & Sports.
  - (ii) Sports Sciences.
  - (iii) General Theory and Method of Training.
  - (iv) Specific Knowledge of Games/Sports and its current affairs.

# SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) PHYSICAL EDUCATION

## PAPER- I

# I. Geographical, Historical, Cultural and General Knowledge of Rajasthan: -

- Physical features, climate, drainage, vegetation, agriculture, livestock, dairy development, population distribution, growth, literacy, sex ratio, tribes, industries and major tourist centres.
- Ancient Culture & Civilisation of Rajasthan, Kalibangan, Ahar, Ganeshwar, Bairath.
- History of Rajasthan from 8<sup>th</sup> to 18<sup>th</sup> Century
  - Gurjar Pratihars
  - Chauhans of Ajmer
  - Relations with Delhi Sultanate Mewar, Ranthambore and Jalore.
  - Rajasthan and Mughals Sanga, Pratap, Mansingh of Amer, Chandrasen, Rai Singh of Bikaner, Raj Singh of Mewar.

# • History of Freedom Struggle in Rajasthan

- Revolution of 1857.
- Political Awakening.
- Prajamandal Movements.
- Peasants and Tribal Movements.
- Integration of Rajasthan
- Society and Religion
  - Lok Devta and Devian.
  - Saints of Rajasthan.
  - Architecture Temples, Forts and Palaces.
  - Paintings Various Schools.
  - Fairs and Festivals.
  - Customs, Dresses and Ornaments.
  - Folk Music and Dance.
  - Language and Literature.

# Political and Administrative System of Rajasthan: -

- Office of Governor; Role and Functions.
- Chief Minister and Cabinet (State council of Ministers).
- State Secretariat and Chief Secretary.
- Organisation and Role of the Rajasthan Public Service Commission.
- State Human Rights Commission.

- Panchayati Raj (Local Self Govt. Administration).
- State Legislative Assembly in Rajasthan.

# II. Current Affairs of Rajasthan :-

• Major current issues and happenings at state level related to socio-economic, political, games and sports aspects.

# III. General Knowledge of World & India: -

- Continents, Oceans and their characteristics, global wind system, environmental issues and strategies, globalization and its impacts, population distribution and migration.
- India: Physical features, monsoonal system, drainage, vegetation and energy resources.

# **Indian Economy:-**

• Growth and Development in Agriculture, Industry and Service Sector in India. Foreign Trade of India: Trends, Composition and Direction.

# Indian Constitution, Political System and Foreign Policy: -

- Constitutional History of India with special reference to Government of India Acts of 1919 and 1935.
- Indian Constitution- Role of Ambedkar, making of Constitution, salient features, Fundamental Rights, Fundamental Duties, Directive Principles of State Policy.
- Offices of the Indian President and Prime Minister.
- Political Parties and Pressure Groups.
- Principles of India's Foreign Policy and Nehru's contribution in its making.
- India and U.N.O., emerging trends in International Politics with special reference to Globalization.

# IV. Educational Psychology :--

- Educational Psychology its meaning, scope and implications for teacher in classroom situations.
- **Development of Learner** concept of growth and development, physical, emotional, cognitive, moral and social development.
- Learning its meaning and types, different theories of learning and implications for a teacher, transfer of learning, factors affecting learning, constructivist learning.
- **Personality** meaning, theories and measurement, adjustment and its mechanism, maladjustment.
- Intelligence and Creativity meaning, theories and measurement, role in learning, emotional intelligence- concept and practices.

- Motivation meaning and role in the process of learning, achievement motivation.
- **Individual Differences** meaning and sources, education of children with special needs Gifted, slow learners and delinquent.
- **Concept and Implications in Education of** Self concept, attitudes, interest & habits, aptitude and social skills.

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For the competitive examination for the post of School Lecturer:-

- 1. The question paper will carry maximum 200 marks.
- 2. Duration of question paper will be **two hours.**
- 3. The question paper will carry 100 questions of multiple choices.
- 4. Paper shall include following subjects:-
  - (i) Geographical, Historical, Cultural and General Knowledge of Rajasthan
  - (ii) Current Affairs of Rajasthan
  - (iii) General Knowledge of World and India
  - (iv) Educational Psychology
- 5. Negative marking shall be applicable in the evaluation of answer. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.

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## SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) PHYSICAL EDUCATION

# PAPER – II

# 1. General Knowledge of Physical Education of Secondary and Senior Secondary Standard:

• Physical Education: Meaning, Aims, Objectives, Scope, Need and Importance. Misconceptions about Physical Education and Modern Concept of Physical Education.

Biological Foundation: Heredity and Environment, Chronological, Anatomical, Physiological and Mental ages. Body types/Classification, Second Wind, Oxygendebt and Kinesthetic Sense and  $VO_2$  Max.

Psychological Foundation: Learning, Personality, Instinct, Emotions, Motives and Motivation.

Sociological Foundation: Traditions, Leadership, Group Dynamics, Socialization and Social Interaction.

Philosophical Foundation: Idealism, Pragmatism, Naturalism, Realism, Existentialism and Humanism.

Physical Fitness, Wellness and Lifestyle: Warming up, Limbering down, Aerobic and Anaerobic Activities, Calisthenics and Rhythmic Exercises.
 Changing Trends and Career Options in Physical Education.
 Exercise Programme for the Development of Whole Body.
 Physical and Health related Fitness Test.
 Sports Biomechanics, Kinesiology, Test and Measurement and Evaluation in Sports.

Women Participations in Sports.
 Games and Sports as Cultural Heritage.
 Posture and Common Postural Deformities.
 Therapeutic Modalities in Rehabilitations.
 Ergogenic Aids and Doping in Sports.
 Sports Massage: History, Approach, Effect and Types of Massage Manipulations.
 Prevention and First Aid for Common Sports Injuries.

## 2. General Knowledge of Sports, Physical Education and its Current Affairs:

Games/Sports: Athletics, Basketball, Badminton, Chess, Cricket, Football, Gymnastic, Handball, Hockey, Judo, Kabaddi, Kho-Kho, Tennis, Swimming, Table Tennis, Volleyball and Wrestling, Weight-Lifting, Softball, Boxing, Wushu.

• History of respective Game/Sports at International and National level.

Latest General Rules and Skill Test of above Games & Sports.

Measurement of Play Fields and Specifications of Sports Equipment of above Game / Sports.

Fundamental Skills of above Games / Sports and their Strategies and Tactics. Related sports terminologies of above Games / Sports.

 Proper Sports Gear of above Games/sports, Competition/ Tournament, Specific Sports Programme: Sports Day. Sports Personalities and Awards.

Adventure Sports- Rock Climbing, Trekking, Mountaineering, River Rafting. Sports Associations and Federations.

Ancient and Modern Olympic Games and Para-Olympics.

• Research Methodology and Information Communication Technology: Research- Meaning, Definition, selection of Problem, Statistical Techniques (F test, T Test, Z Test, ANOVA, SPSS).

Information Communication Technology- Communication and Classroom Introduction, Teaching Learning Process (MS Office/ Excel).

# **3.** Theories, Definitions and History of Physical Education:

- History of Physical Education in India: Pre and Post Independence period. Physical Education in the City/States of Greece and other Countries.
- Contribution to the Growth of Physical Education by Leaders and Movements of following Leaders: Baren P. Coubertin, John Basedow, Guts Muths, H. C. Buck, G. D. Sondhi, Dr. P. M. Joseph, Prof. D. G. Wakharkar, Prof. Karan Singh and Prof. Ajmer Singh.
- SAI, SNIPES, NSNIS and other Prestigious Institutes of India. Rajasthan State Sports Council.

# 4. Education and Games Psychology:

- Sports Psychology: Meaning, Definitions, Nature and Scope. Growth and Development Stress, Anxiety, Aggression and their Management.
- Psycho-Physical Unity, Motivation, Personality. Coping strategies, Self-Esteem and Body Images. Psychological Benefits of Exercise. Sports Ethics, Morality and Moral Values.

# 5. Methods, Supervisions and Organizations of Physical Education:

• Types of Teaching Methods, Principles of Teaching, Presentation Technique, Class Management of Physical Education, Inspection, Budget, Time Table, National Fitness Corps, Infrastructure. Lesson Planning: types of Lesson, objectives and parts of lessons, Teaching Aids.

 Planning, Records and Register.
 Organization and Conduct of Competitions and Tournaments: Knock-Out, League, Combination and challenge or perennial type tournament.
 Public relation: meaning, importance in physical education and sports.

#### 6. Theories of Training & Decisions:

- Sports: Principles, Characteristics and Methods. Training Load Adaptation and Periodization; Importance, Objective, Types, Concepts of Different Periods. Motor Fitness components
- Training Plans
- Coaching: Meaning, Techniques, Tactics and Lead-up Games Activities.
- Officiating: Meaning, Importance and Principles. Official/ Officials.
- Qualities, Qualifications & Responsibilities of Administrators/ Officials.

#### 7. Science of Basic Physical Anatomy, Function and Health Education:

• Anatomy: Meaning, Concept, Need and Importance in Physical Education & Sports.

Cell, Tissue and Organ System, Physiology of Sports.

Bones and Joints: Definition, Classification and Terminology of Movement around Joints.

Muscles: Types, Structure and Functional Classification, General Characteristics (Properties). Macro and Micro Structure of Skeletal Muscles, Sliding Filament Theories, Physiology of blood.

Exercise Physiology: Meaning, Need and Importance in Physical Education & Sports. Effects of Exercise on Body Systems, Bio-energetics.

• Health: Dimensions, Ecology, Spectrum, Determinants and Positive health, Hygiene, Community Health and Aspects of School Health Services.

Health Education: Concept, Objectives, Importance and Principles.

Sports, Nutrition, Balance Diet and Diet according to Sports Activities, Weight Management.

Health Problems in India.

Diseases: Communicable, Non-communicable and Hereditary. Effects of Alcohol, Tobacco & Drugs on Sportsperson.

Drugs and Doping, Athletics Care, Rehabilitation.

## 8. Entertainment, Camp and Yoga:

• Recreation: Definition, Types, Scope, Significance, Philosophy and Objectives. Theories of Play.

Agencies Offering Recreation, Facilities, Equipments and their Maintenance, Types of Recreational Activities.

- Camping: Scope, Significance and Types of Camps, Selection and Layout of Camp sites, Organization and Administration of Camps.
- Yoga: Meaning, Types, Stages, Scope, Objective, Significance.
- Patanjali's Philosophy- Chitt, Vrati, Abhyas, Panchkosh, Kriya yog, Asthang yog.
- Hath yoga followed by Hath Pradipika and Gherand Samhita and Shatkarma,
- Assana, Prayanam, Bandhas, Mudras it's Methods, Limitations & their Management.

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#### Paper – II Subject Concerned

- 1. The question paper will carry maximum 260 marks.
- **2.** Duration of question paper will be 2 hours.
- **3.** The question paper will carry 130 questions of multiple choices.
- **4.** Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.

Explanation: Wrong answer shall mean an incorrect answer or multiple answers.

- 5. Paper shall include following subjects –
- (i) General Knowledge of Physical Education of Secondary and Senior Secondary Standard.
- (ii) General knowledge of Sports and Physical Education and its current affairs.
- (iii) Theories, Definitions and History of Physical Education.
- (iv) Education and Games Psychology.
- (v) Methods, Supervisions and Organizations of Physical Education.
- (vi) Theories of Training & Decisions.
- (vii) Science of Basic Anatomy, Function and Health Education.
- (viii) Entertainment, Camp and Yoga.

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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) HINDI

#### PAPER – II

#### खंड—I उच्च माध्यमिक स्तर

(अ)

– संधि, समास, उपसर्ग, प्रत्यय

- पर्यायवाची शब्द, विलोम शब्द, समश्रुत भिन्नार्थक शब्द, अनेकार्थी शब्द, वाक्यांश के लिए सार्थक शब्द
- शब्द शुद्धीकरण एवं वाक्य शुद्धीकरण
- अद्र्धशासकीय पत्र, विज्ञप्ति, परिपत्र, निविदा, ज्ञापन, अधिसूचना
- मुहावरे एवं लोकोक्तियाँ
- अपठित गद्यांश, अपठित पद्यांश
- जनसंचार के प्रमुख माध्यम, तत्सम्बन्धी लेखन एवं पत्रकारिता

– कविता, कहानी, वार्ता, रिपोर्ताज एवं डायरी– लेखन विषयक परिभाषा, तत्त्व आदि

(ब)

शब्द शक्ति – अभिधा, लक्षणा, व्यंजना

- अलंकार यमक, श्लेष, उपमा, रूपक, उत्प्रेक्षा, संदेह, भ्रान्तिमान, दृष्टान्त, उदाहरण
- छंद दोहा, चौपाई, रोला, उल्लाला, गीतिका, हरिगीतिका
- काव्य—गुण माधुर्य, ओज, प्रसाद
- **काव्य–रस** रस का स्वरूप, रसावयव–स्थायीभाव, विभाव, अनुभाव, संचारीभाव, विभिन्न रसों के लक्षण एवं उदाहरण

#### खंड—II स्नातक स्तर

#### हिन्दी साहित्य का इतिहास :--

- i) इतिहास—लेखन की परम्परा, प्रमुख इतिहास—ग्रंथ एवं इतिहास—लेखक, हिन्दी साहित्य का आरम्भ, काल—विभाजन और नामकरण
- ii) **आदिकाल** रचनाओं की प्रमाणिकता, प्रवृत्तियाँ, प्रमुख रचनाकार एवं रचनाओं का परिचय (चंदवरदाई, नरपतिनाल्ह)
- iii)भक्तिकाल- सामान्य परिचय, भक्ति का उद्भव, विकास और दार्शनिक पृष्ठभूमि
  - संत काव्य– विशेषताएँ, प्रमुख कवि एवं रचनाएँ (कबीर, दादू)
  - सूफी काव्य– विशेषताएँ, प्रमुख कवि एवं रचनाएँ (जायसी, मंझन)
  - राम भक्ति काव्य– विशेषताएँ, प्रमुख कवि एवं रचनाएँ (तुलसीदास)
  - कृष्ण भक्ति काव्य– विशेषताएँ, प्रमुख कवि एवं रचनाएँ (सूरदास, मीरां, नंददास)

iv) **रीतिकाल**– रीति से तात्पर्य, रीतिबद्ध, रीतिसिद्ध एवं रीतिमुक्त। तत्कालीन काव्य की सामान्य प्रवृत्तियाँ एवं विशेषताएँ; प्रमुख रचनाकार एवं रचनाओं का परिचय (देव, भूषण, बिहारी, घनानंद)

#### v) आधुनिककाल

पूर्व पीठिका— तत्कालीन परिस्थितियाँ, हिंदी (खड़ी बोली) गद्य का उद्भव, नवजागरण, भारतेंदु एवं समकालीन साहित्यकार, गद्य की विविध विधाओं का उद्भव विविध गद्यविधाओं का विकास— नाटक, एकांकी, निबंध, कहानी, उपन्यास, आत्मकथा, जीवनी, संस्मरण, रेखाचित्र एवं रिपोर्ताज— प्रमुख रचनाकारों एवं उनकी रचनाओं का परिचय काव्य का विकास— भारतेंदु युग, द्विवेदी युग, छायावाद, प्रगतिवाद, प्रयोगवाद, नई कविता एवं समकालीन कविता— प्रमुख रचनाकारों एवं उनकी रचनाओं का परिचय।

#### <u>खंड–III</u> स्नातकोत्तर स्तर

- काव्य– हेतु, लक्षण एवं प्रयोजन
- रसनिष्पत्ति, साधारणीकरण, ध्वनि सिद्धान्त, वक्रोक्ति सिद्धान्त
- अरस्तू का अनुकरण सिद्धान्त, लोंजाइनस का उदात्त तत्त्व, मनोविश्लेषणवाद

#### रचनाएँ :--

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कबीर ग्रंथावली (सं० श्यामसुंदरदास) साखी	– गुरुदेव कौ अंग, <b>पद</b> – प्रारम्भिक 05
रामचरित मानस (तुलसीदास)	– बालकांड
बिहारी रत्नाकर (सं० जगन्नाथदास 'रत्नाकर')	– प्रारम्भिक 25 दोहे
साकेत (मैथिलीशरण गुप्त)	– नवम सर्ग
ध :	-कविता क्या है (चिंतामणि- पहला भाग, रामचंद्र
	शुक्ल), शिरीषं के फूल (कल्पलता– हजारी
	प्रसाद द्विवेदी)
ानियाँ :- कफन (प्रेमचंद), पुरस्कार (जयशंकर	प्रसाद), यही सच <sup>र</sup> है (मन्नू भंडारी)
	कबीर ग्रंथावली (सं० श्यामसुंदरदास) <b>साखी</b> रामचरित मानस (तुलसीदास) बिहारी रत्नाकर (सं० जगन्नाथदास 'रत्नाकर') साकेत (मैथिलीशरण गुप्त) ध :– बिनयाँ :– कफन (प्रेमचंद), पुरस्कार (जयशंकर

हिन्दी भाषा— उद्भव और विकास, बोलियाँ—उपबोलियाँ, राजभाषा और देवनागरी लिपि

## भाग— IV (शैक्षिक मनोविज्ञान, शिक्षा शास्त्र, शिक्षण—अधिगम सामग्री, कम्प्यूटर एवं सूचना तकनीकी का शिक्षण—अधिगम में उपयोग)

## I. शैक्षिक मनोविज्ञान

- शैक्षिक मनोविज्ञान की अवधारणा, क्षेत्र तथा कार्य।
- किशोर अधिगमकर्ता की शारीरिक, संज्ञानात्मक, सामाजिक, संवेगात्मक एवं नैतिक विकासात्मक विशेषताएँ तथा शिक्षण–अधिगम के लिए इसके निहितार्थ।
- अधिगम के व्यवहारवादी, संज्ञानात्मक एवं निर्मितवादी (Constructivist) सिद्धान्त तथा उच्च माध्यमिक स्तर के विद्यार्थियों के लिए इसके निहितार्थ।
- मानसिक स्वास्थ्य एवं समायोजन की अवधारणा तथा समायोजन युक्तियाँ।
- संवेगात्मक बुद्धिमत्ता और शिक्षण–अधिगम में इसके निहितार्थ।

# II. शिक्षा शास्त्र एवं शिक्षण–अधिगम सामग्री (किशोर अधिगमकर्ता हेतु अनुदेशनात्मक व्यूह रचनाएँ)

- सम्प्रेषण कौशल तथा इसका उपयोग।
- शिक्षण प्रतिमान (Teaching Models) अग्रिम व्यवस्थापक, संप्रत्यय सम्प्राप्ति, सूचना प्रक्रिया (Information processing), पृच्छा प्रशिक्षण (Inquiry Training)।
- शिक्षण के दौरान शिक्षण–अधिगम सामग्री तैयार करना तथा उपयोग करना।
- सहकारी अधिगम

III. शिक्षण-अधिगम में कम्प्यूटर एवं सूचना तकनीकी का उपयोग

- आई सी टी (ICT), हार्डवेयर (Hardware) एवं सॉफ्टवेयर (Software) की अवधारणा
- प्रणाली उपागम
- कम्प्यूटर सहाय अधिगम(CAL), कम्प्यूटर सहाय अनुदेशन (CAI)

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For the competitive examination for the post of School Lecturer:-

- 1. The question paper will carry maximum 300 marks.
- 2. Duration of question paper will be Three Hours.
- 3. The question paper will carry 150 questions of multiple choices.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects :-
  - (i) Knowledge of Subject Concerned: Senior Secondary Level
  - (ii) Knowledge of Subject Concerned: Graduation Level.
  - (iii) Knowledge of Subject Concerned: Post Graduation Level.
  - (iv) Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning.

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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) ENGLISH

# PAPER – II

#### Part – I Senior Secondary Level

1. Articles and Determiners

2. Tenses

- 3. Transformations:
  - (i) Direct Indirect
  - (ii) Active Passive
  - (iii) Affirmatives, Negatives, Interrogatives
  - (iv) Simple to Compound and Complex
- 4. Auxiliaries/Modals
- 5. Prepositions
- 6. Phrasal verbs and Idioms
- 7. Reading Comprehension
- 8. Précis writing
- 9. Letter writing
- 10. Report writing

## **Part – II Graduation Level**

## (A) Poetry

- 1. Milton: On His Blindness
- 2. John Donne: Go and Catch a Falling Star
- 3. Wordsworth: Daffodils
- 4. Shelley Ode to the West Wind
- 5. Keats Ode on a Grecian Urn
- 6. Browning My Last Duchess
- 7. Nissim Ezekiel Night of the Scorpion
- 8. Kamla Das Dance of the Eunuchs

## (B) Drama

Shakespeare: Macbeth As You Like It

## (C) Prose

Bacon: Of Studies Lamb: In Praise of Chimney Sweepers

## **(D)** Fiction

Hardy: The Mayor of Casterbridge R.K. Narayan: The Vendor of Sweets

# (E) An Acquaintance with the following Literary Forms:-

Ode, Elegy, Ballad, Sonnet, Epic, Gothic, Allegory.

# (F)An Acquaintance with the following Figures of Speech:-

Simile, Metaphor, Personification, Irony, Hyperbole, Onomatopoeia, Synecdoche, Oxymoron.

# (G) Phonetic Transcription, Word-Stress.

# **Part – III Post Graduation Level**

 (A) T.S. Eliot - The Waste Land Harold Pinter - The Birthday Party Anita Desai - Cry, the Peacock

(B) Varieties of Languages: Creole, Pidgin,

Code - Switching, Code – Mixing.

# Part – IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

# I. Educational Psychology

- Concept, scope and functions of educational psychology.
- Physical, cognitive, social, emotional and moral developmental characteristics of adolescent learner and its implication for teaching-learning.
- Behavioural, cognitive and constructivist principles of learning and its implication for senior secondary students.
- Concept of mental health & adjustment and adjustment mechanism.
- Emotional intelligence and its implication in teaching learning.

# II Pedagogy and Teaching Learning Material (Instructional Strategies for Adolescent Learner)

- Communication skills and its use.
- Teaching models- advance organizer, concept attainment, information processing, inquiry training.
- Preparation and use of teaching-learning material during teaching.
- Cooperative learning.

# III Use of Computers and Information Technology in Teaching Learning

- Concept of ICT, hardware and software.
- System approach.
- Computer assisted learning, computer aided instruction.

For the competitive examination for the post of School Lecturer:-

- 1. The question paper will carry maximum 300 marks.
- 2. Duration of question paper will be **Three Hours**.
- 3. The question paper will carry 150 questions of multiple choices.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects: -
  - (i) Knowledge of Subject Concerned: Senior Secondary Level
  - (ii) Knowledge of Subject Concerned: Graduation Level.
  - (iii) Knowledge of Subject Concerned: Post Graduation Level.
  - (iv) Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning.

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# SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) SANSKRIT

#### PAPER – II

#### खण्ड—I उच्च माध्यमिक स्तर

#### 1. संज्ञाप्रकरणम्—

इत्, लोपः, संयोगः, संहिता, प्रयत्नः(आभ्यन्तर, बाह्य), उच्चारणस्थानानि, पदम्।

- 2. निम्नलिखतसूत्राणामाधारेण स्वर–विसर्ग–सन्धीनां ज्ञानम्, सूत्रानुसारं सन्धिः सन्धिविच्छेदश्च– अच्–सन्धिः– इको यणचि, एचोऽयवायावः, आद्गुणः, वृद्धिरेचि, अकः सवर्णे दीर्घः, एङः पदान्तादति, एङि पररूपम्, ईदूद्द्विवचनं प्रगृह्यम्। हल्–सन्धिः– स्तोः श्चुना श्चुः, ष्टुना ष्टुः, झलां जशोऽन्ते, यरोऽनुनासिकेऽनुनासिको वा तोर्लिः, झयो होऽन्यतरस्याम्, शश्छोऽटि, मोऽनुस्वारः, अनुस्वारस्य ययि परसवर्णः, ङमो ह्रस्वादचि ङमुण् नित्यम्। विसर्ग–सन्धिः – विसर्जनीयस्य सः, स सजुषो रुः, अतो रोरप्लुतादप्लुते, हशि च, भो–भगो–अघो–अपूर्वस्य योऽशि, रो रि द्रलोपे पूर्वस्य दीर्घोऽणः, एतत्तदोः सुलोपोऽकोरनञ्समासे हलि।
- अधोलिखितानाम्-अव्ययानां प्रयोगः रिक्तस्थानपूर्तिश्च– पुनः, उच्चैः, नीचैः, अधः, अद्य, ह्यः, श्वः, सायम्, चिरम् तूष्णीम्, सहसा, मिथ्या, पुरा, खलु, किल, धिक्, विना, सह, अन्तरा ।
- 4. निम्नलिखितानां शब्दरूपाणां ज्ञानम् राम, हरि, पति, गुरु, पितृ, भूभृत्, गच्छत्, आत्मन्, राजन्, भवत्, लता, मति, नदी, धेनु, वधू, मातृ, फल, वारि, दधि, मधू, कर्मन्, जगत्, मनस्, अस्मद, यूष्मद्, सर्व (त्रिष् लिङ्गेषु), तत् (त्रिष् लिङ्गेषु), इदम् (त्रिष् लिङ्गेषु)।
- 5. निम्नलिखातानां धातूनां लट्, लोट्, लृट्, लङ, विधिलिङ—लकारेषु सामान्यप्रश्नाः— परस्मैपदी—भू, पठ्, हस्, लिख्, अस्, हन्, पा, नृत्, शक्, कृ, ज्ञा, चिन्त्, गम्, पच्, दृश्, प्रच्छ्। आत्मनेपदी—सेव्, लभ्, रुच्, याच्।
- 6. निम्नलिखितप्रत्ययानां सामान्यज्ञानम् क्त, क्तवतु, शतृ, शानच्, तुमुन्, तव्यत्, अनीयर्, ण्वुल्, तृच्, यत्, ण्यत्, क्यप्, क्त्वा, ल्यप्, ल्युट्, घञ्, क्तिन्, अच्, इन्, मयट्, मतूप्, तल्, तरप्, तमप्, ईयसून्, इष्ठन्, इमनिच्, टाप्, डीप्।

#### खण्ड—II स्नातकस्तर

- निन्नलिखितानां छन्दसां परिज्ञानम्, लक्षणोदाहरण–सम्बन्धिसामान्य–प्रश्नाश्च अनुष्टुप्, आर्या, इन्द्रवज्रा, उपेन्द्रवज्रा, उपजातिः, वंशस्थम्, द्रुतविलम्बितम्, भुजङगप्रयातम्, वसन्ततिलका, मालिनी, मन्दाक्रान्ता, शिखरिणी, शार्दूलविक्रीडितम्, स्रग्धरा, रथोद्धता, वियोगिनी, शालिनी।
- अधोलिखितानाम् अलंकाराणां परिज्ञानम्, लक्षणोदाहरणसम्बन्धिसामान्यप्रश्नाश्च अनुप्रासः, यमकम्, श्लेषः, स्वभावोक्तिः, उपमा, रूपकम्, उत्प्रेक्षा, व्यतिरेकः, सन्देहः, भ्रान्तिमान्, निदर्शना, दृष्टान्तः, अर्थान्तरन्यासः, दीपकम्, तुल्ययोगिता, समासोक्तिः अतिशयोक्तिः, विभावना, विशेषोक्तिः, वक्रोक्तिः, ।
- **3. अधोलिखितानां समासानां सामान्यपरिचयः, समस्तपदानां समासः समासविग्रहश्च** अव्ययीभावः, तत्पुरुषः, कर्मधारयः, द्विगुः, द्वन्द्वः, बहुव्रीहिः।
- हिन्दीवाक्यानां संस्कृतानुवादः । (कारकाधारेण)
- 5. कारक–प्रत्यय–समास–आधारितवाक्यानाम् अशुद्धिसंशोधनम्।

#### 6. निम्नांकितपुस्तकानां सामान्याध्ययनम्-

कठोपनिषद्–प्रथमोऽध्यायः (प्रथमवल्ली), श्रीमदभागवद्गीता (द्वितीयोऽध्यायः), नीतिशतकम् (भर्तृहरिः), किरातार्जुनीयम्–प्रथमसर्गः (भारविः), मेघदूतम् (कालिदासः) शुकनासोपदेशः (बाणभट्टः), अभिज्ञानशाकुन्तलम् (कालिदासः), स्वप्नवासवदत्तम् (भासः)।

#### 7. निम्नलिखितवैदिकसूक्तेषु सामान्यप्रश्नाः

(क) वरुणसूक्तम् (1.25) पुरुषसूक्तम्(10.90), अग्निसूक्तम्(1.1), विष्णुसूक्तम्(1.154), संज्ञानसूक्तम्(10.191)

#### 8. संस्कृतसाहित्येतिहास-सम्बन्धि-सामान्यपरिचयात्मक-प्रश्नाः-

वैदिकसाहित्यम्– वेद–ब्राह्यण–प्रमुखोपनिषदाम्, याज्ञवल्क्यस्मृतेः आचाराध्यायस्य च सामान्यपरिचयः।

लौकिकसाहित्यम्—

(क) वीरकाव्यम्— रामायाणम्, महाभारतम्।
 (ख)महाकाव्यकवयः— कालिदासः, अश्वघोषः, भारविः, माघः, श्रीहर्षः।
 (ग)गद्यकाव्यकवयः — बाणभट्टः, दण्डी, सुबन्धुः।
 (घ) दृश्यकाव्यकवयः— भासः, भवभुतिः, शुद्रकः, विशाखादत्तः।

**राजस्थानीयाः अर्वाचीनकवयः, तेषां रचनाश्च—** अम्बिकादत्तव्यासः, देवर्षिकलानाथशास्त्री, भट्टमथुरानाथशास्त्री, पं. पद्मशास्त्री, डॉ. प्रभाकरशास्त्री, प्रो.हरिराम आचार्यः, डॉ. शिवसागरत्रिपाठी, पं. मोहनलालपाण्डेयः।

#### खण्ड—III स्नातकोत्तर—स्तरः

- 1. सिद्धान्तकौमुदी (कारकप्रकरणम्) निम्नलिखितानां सूत्राणां सामान्यपरिचयात्मकप्रश्नाः वाक्यप्रयोगाश्च प्रातिपादिकार्थ लिङ्ग–परिमाण–वचनमात्रे प्रथमा। कर्तुरीप्सिततमं कर्म, कर्मणि द्वितीया, अधिशीङ् स्थासां कर्म, उपान्वध्याङ्वसः, अभितः–परितः–समया–निकषा–हा–प्रतियोगेऽपि, अन्तराऽन्तरेण अकथितं च. यक्ते. कालाध्वनोररत्यन्तसंयोगे। साधकतमं करणम्, कर्तृकरणयोस्तृतीया, प्रकृत्यादिभ्य उपसंख्यानम्, अपवर्गे तृतीया, येनाङ्गविकारः, सहयुक्तेऽप्रधाने, इत्थम्भूतलक्षणे। कॅर्मणा यमभिप्रैति स संप्रदानम्, चतुर्थी सम्प्रदाने, स्पृहेरीप्सितः, रुच्यर्थानां– प्रीयमाणः, धारेरुत्तमर्णः, क्रुंधद्रहेर्ष्यासूयार्थानां यं प्रति कोपः, क्रुधद्रहोरुपसृष्टयोः कर्म, तादर्थ्ये चतुर्थी नमः–स्वस्ति–स्वाहा–स्वधाऽलं–वषट्योगाच्च। ध्रुवमपायेऽपादानम्, अपादाने पंचमी वाच्या. जुगुप्साविरामप्रमादार्थानामुपसंख्यानाम्, भीत्रार्थानां भयहेत्ः, वारणार्थानामीप्सितः, अन्तर्धौ येनादर्शनमिच्छति, ऑख्यातोपयोगे, जनिकर्तुः प्रकृतिः, भुवः प्रभवः, पृथग्विनानानाभिस्तृतीयाऽन्यतरस्याम्। षष्ठी शेषे, षष्ठी हेतुप्रयोगे, सर्वनाम्नस्तृतीया च, अधीगॅर्थदयेशां कर्मणि, कर्तूकर्मणोःकृतिः, षष्ठी चानादारे, कृत्यानां कर्तरिं वा। आधारोऽधिकरणम्, सप्तम्यधिकरणे च, साध्वसाधूप्रयोगे च, निर्मित्तात् कर्मयोगे, यतश्चनिर्धारणम्, यस्य च भावेन भावलक्षणम्।
- 2. भाषाविज्ञानासम्बन्धिप्रश्नाः— भाषा—उत्पत्तेः प्रमुखसिद्वान्ताः, उच्चारणस्थानानि, ध्वनिनियमाः, भाषाणां वर्गीकरणम्।
- **3. निम्नलिखितदर्शनग्रन्थानां सामान्याध्ययनम्** सांख्यकारिका (ईश्वरकृष्णः) तर्कभाषा— प्रामाण्यवादपर्यन्तम् (केशवमिश्रः), चार्वाक—दर्शनम् ।
- 4. अलंकारशास्त्राणां सामान्याध्ययनम्। नाट्यशास्त्रम्– प्रथमः द्वितीयोऽध्यायश्च (भरतमुनिः), काव्यप्रकाशः (मम्मटः), साहित्यदर्पणः– प्रथमः द्वितीयः परिच्छेदश्च, तृतीयपरिच्छेदस्य 1 तः 28 कारिकापर्यन्तम् (विश्वनाथकविराजः), ध्वन्यालोकः (आनन्दवर्धनः)।

भाग— IV (शैक्षिक मनोविज्ञान, शिक्षा शास्त्र, शिक्षण—अधिगम सामग्री, कम्प्यूटर एवं सूचना तकनीकी का शिक्षण—अधिगम में उपयोग)

- I. शैक्षिक मनोविज्ञान
- शैक्षिक मनोविज्ञान की अवधारणा, क्षेत्र तथा कार्य।
- किशोर अधिगमकर्ता की शारीरिक, संज्ञानात्मक, सामाजिक, संवेगात्मक एवं नैतिक विकासात्मक विशेषताएँ तथा शिक्षण–अधिगम के लिए इसके निहितार्थ।

- अधिगम के व्यवहारवादी, संज्ञानात्मक एवं निर्मितवादी (Constructivist) सिद्धान्त तथा उच्च माध्यमिक स्तर के विद्यार्थियों के लिए इसके निहितार्थ।
- मानसिक स्वास्थ्य एवं समायोजन की अवधारणा तथा समायोजन युक्तियाँ।
- संवेगात्मक बुद्धिमत्ता और शिक्षण–अधिगम में इसके निहितार्थ।

# II. शिक्षा शास्त्र एवं शिक्षण–अधिगम सामग्री (किशोर अधिगमकर्ता हेतु अनुदेशनात्मक व्यूह रचनाएँ)

- सम्प्रेषण कौशल तथा इसका उपयोग।
- शिक्षण प्रतिमान (Teaching Models) अग्रिम व्यवस्थापक, संप्रत्यय सम्प्राप्ति, सूचना प्रक्रिया (Information processing), पृच्छा प्रशिक्षण (Inquiry Training)।
- शिक्षण के दौरान शिक्षण–अधिगम सामग्री तैयार करना तथा उपयोग करना।
- सहकारी अधिगम ।

# III. शिक्षण-अधिगम में कम्प्यूटर एवं सूचना तकनीकी का उपयोग

- आई सी टी (ICT), हार्डवेयर (Hardware) एवं सॉफ्टवेयर (Software) की अवधारणा ।
- प्रणाली उपागम ।
- कम्प्यूटर सहाय अधिगम (CAL), कम्प्यूटर सहाय अनुदेशन (CAI) ।

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For the competitive examination for the post of School Lecturer:-

- 1. The question paper will carry maximum 300 marks.
- 2. Duration of question paper will be **Three Hours**.
- 3. The question paper will carry 150 questions of multiple choices.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects :-
  - (i) Knowledge of Subject Concerned: Senior Secondary Level
  - (ii) Knowledge of Subject Concerned: Graduation Level.
  - (iii) Knowledge of Subject Concerned: Post Graduation Level.
  - (iv) Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning.

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# SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) RAJASTHANI

#### PAPER-II

# खण्ड—। (उच्च माध्यमिक स्तर)

#### 1. <u>राजस्थानी भाषा</u> :--

- उद्भव एवं विकास
- राजस्थानी की विभिन्न बोलियाँ (मारवाड़ी, मेवाड़ी, हाड़ौती, बागड़ी, मालवी और मेवाती) का सामान्य परिचय
- राजस्थानी की पहचान के भाषा वैज्ञानिक तत्त्व
- प्रमुख लिपियाँः मुड़ियाँ एवं देवनागरी

#### 2. राजस्थानी भाषा, व्याकरण एवं काव्य-दोष :-

- राजस्थानी वर्णमाला
- संज्ञा, सर्वनाम, क्रिया संरचना
- राजस्थानी भाषा की विशिष्ट ध्वनियाँ, शब्दों के परिवर्तित रूप एवं अर्थ भेद।
- पर्यायवाची शब्दः तलवार, घोड़ा, ऊँट, पानी, वीर, सूर्य, हाथी, कमल, बादल, भूमि।
- अलंकार : वैण-सगाई और उसके भेद
- छंद : दूहा छंद और उसके भेद
- काव्य दोष : अंधदोष, छबकाल, पांगलो, हीन और निनंग
- शब्द शक्तियाँ ः अभिद्या, लक्षणा, व्यंजना।

#### खंड ॥ (स्नातक स्तर)

#### 3. राजस्थानी साहित्य का इतिहास :--

(i) <u>आदिकाल</u> : परिस्थितियाँ, साहित्यिक प्रवृत्तियाँ, प्रमुख रचनाकार एवं उनका सामान्य परिचय : वज्रसेन सूरि, श्रीधर व्यास, शारंगधर, शिवदास गाडण, नरपति नाल्ह।

- (ii) <u>मध्यकाल</u> :--
  - (अ) <u>पूर्वमध्यकाल</u>ः परिस्थितियाँ, साहित्यिक प्रवृत्तियाँ, प्रमुख रचनाकार एवं उनका सामान्य परिचयः ईसरदास, दुरसा आढ़ा, पृथ्वीराज राठौड़, हेमरतन सूरि, माधोदास दधवाड़िया, सायांजी झूला।

- (ब) <u>उत्तरमध्यकाल</u> : परिस्थितियाँ, साहित्यिक प्रवृत्तियाँ, प्रमुख रचनाकार एवं उनका सामान्य परिचयः मीरांबाई, दादूदयाल, सुंदरदास, जांभोजी, जसनाथजी, रामचरणदास, सहजोबाई, गवरीबाई, किसना आढ़ा, मुहणोत नैणसी, नरहरिदास बारहठ, कृपाराम खिड़िया और बाँकीदास।
- (iii) आधुनिक काल परिस्थितियाँ, साहित्यिक प्रवृत्तियाँ, प्रमुख रचनाकार एवं उनका सामान्य परिचयः
- <u>(पद्य)</u> : सूर्यमल्ल मीसण, रामनाथ कविया, शंकरदान सामौर, केसरीसिंह बारहठ, महाराज चतुरसिंह, गणेशीलाल व्यास 'उस्ताद', कन्हैयालाल सेठिया, चन्द्रसिंह 'बिरकाली', नारायणसिंह भाटी, सत्यप्रकाश जोशी, गिरधारी सिंह पड़िहार, चंद्रप्रकाश देवल एवं तेजसिंह जोधा।
- <u>(गद्य)</u> : शिवचन्द्र भरतिया, मुरलीधर व्यास, सूर्यकरण पारीक, गिरधारीलाल शास्त्री, शिवराज छंगाणी, नेमनारायण जोशी, मनोहर शर्मा, नृसिंह राजपुरोहित साँवर दइया, यादवेन्द्र शर्मा 'चन्द्र', गोविन्दलाल माथुर, अन्नाराम सुदामा, लक्ष्मीकुमारी चूंडावत, विजयदान देथा, बैजनाथ पॅवार, करणीदान बारहठ, जहूर खाँ मेहर, अर्जुनदेव चारण।

#### 4. राजस्थानी पद्य एवं गद्यः रूपों का सामान्य परिचयः –

<u>पद्य</u>ः रासो, वेलि, फागु, चौपाई, पवाड़ा, संधि, बारहमासा, विवाहलो, धमाल, चैत्यपरिपाटी, नीसांणी, गीत एवं सतसई।

<u>गद्यः</u> वचनिका, दवावैत, ख्यात, वात, विगत, पाटनामा, वंशावली, गुर्वावली, बालावबोध, टीका एवं टब्बा। आधुनिक विधाएँ – कहानी, उपन्यास, नाटक, एकांकी, निबंध, संस्मरण, रेखाचित्र एवं डायरी।

- 5. राजस्थानी लोक साहित्य एवं संस्कृति :--
  - लोक गीत, लोक कथा, लोक गाथा, लोक नाट्य, लोकोक्ति (कहावतें एवं मुहावरे)
  - लोकदेवी–देवता, लोक उत्सव, (मेले, पर्व एवं तीज त्योहार)

# (खंड–III स्नातकोत्तर स्तर)

<u>राजस्थानी काव्य शास्त्र</u> :--

- काव्य हेतु, लक्षण एवं प्रयोजन
- रस सिद्धांतः रसनिष्पत्ति, साधारणीकरण
- ध्वनि सिद्धांत एवं वक्रोक्ति सिद्धान्त
- रचनाएँ
  - ढोला मारू रा दूहा (सम्पादक : सूर्यकरण पारीक, ठा. रामसिंह एवं नरोत्तम स्वामी) मारवाणी संदेसा (दूहा सं. 110–210)
  - 2. मीरां वृहत् पदावली, भाग–1 (सम्पादक : हरिनारायण पुरोहित) (पद संख्या–01 से 50 तक)
  - 3. बादळी (चंद्रसिंह बिरकाली) (संपूर्ण)
  - अलेखूँ हिटलर– विजयदान देथा, काँच रो चिलको यादवेंद्र शर्मा 'चंद्र' (कहानी), कूदणो बाबो–नेमनारायण जोशी (संस्मरण) एवं मारजा – शिवराज छंगाणी (रेखाचित्र)

भाग— IV (शैक्षिक मनोविज्ञान, शिक्षा शास्त्र, शिक्षण—अधिगम सामग्री, कम्प्यूटर एवं सूचना तकनीकी का शिक्षण—अधिगम में उपयोग)

- I. शैक्षिक मनोविज्ञान
  - शैक्षिक मनोविज्ञान की अवधारणा, क्षेत्र तथा कार्य।
  - किशोर अधिगमकर्ता की शारीरिक, संज्ञानात्मक, सामाजिक, संवेगात्मक एवं नैतिक विकासात्मक विशेषताएँ तथा शिक्षण–अधिगम के लिए इसके निहितार्थ।
  - अधिगम के व्यवहारवादी, संज्ञानात्मक एवं निर्मितवादी (Constructivist) सिद्धान्त तथा उच्च माध्यमिक स्तर के विद्यार्थियों के लिए इसके निहितार्थ।
  - मानसिक स्वास्थ्य एवं समायोजन की अवधारणा तथा समायोजन युक्तियाँ।
  - संवेगात्मक बुद्धिमत्ता और शिक्षण–अधिगम में इसके निहितार्थ।
- II. शिक्षा शास्त्र एवं शिक्षण–अधिगम सामग्री (किशोर अधिगमकर्ता हेतु अनुदेशनात्मक व्यूह रचनाएँ)
  - सम्प्रेषण कौशल तथा इसका उपयोग।
  - शिक्षण प्रतिमान (Teaching Models) अग्रिम व्यवस्थापक, संप्रत्यय सम्प्राप्ति, सूचना प्रक्रिया (Information processing), पृच्छा प्रशिक्षण (Inquiry Training)।
  - शिक्षण के दौरान शिक्षण–अधिगम सामग्री तैयार करना तथा उपयोग करना।
  - सहकारी अधिगम
- III. शिक्षण-अधिगम में कम्प्यूटर एवं सूचना तकनीकी का उपयोग
  - आई सी टी (ICT), हार्डवेयर (Hardware) एवं सॉफ्टवेयर (Software) की अवधारणा
  - प्रणाली उपागम
  - कम्प्यूटर सहाय अधिगम(CAL), कम्प्यूटर सहाय अनुदेशन (CAI)

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#### For the competitive examination for the post of School Lecturer: -

- 1. The question paper will carry maximum 300 marks.
- 2. Duration of question paper will be Three Hours.
- 3. The question paper will carry 150 questions of multiple choices.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects :-
  - (i) Knowledge of Subject Concerned: Senior Secondary Level
  - (ii) Knowledge of Subject Concerned: Graduation Level.
  - (iii) Knowledge of Subject Concerned: Post Graduation Level.
  - (iv)Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning.

SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER IN PUNJABI (SCHOOL EDUCATION)

#### PAPER-II

#### ਭਾਗ ਪਹਿਲਾ(ਸੀਨੀਅਰ ਸੈਕੰਡਰੀ ਪੱਧਰ)

- (ੳ) ਅਣਡਿੱਠਾ ਪੈਰ੍ਹਾ- ਕਾਵਿ-ਅੰਸ਼ ਉੱਪਰ ਆਧਾਰਿਤ ਗਿਆਨ, ਅਰਥ ਤੇ ਭਾਵਮੂਲਕ ਪ੍ਰਸ਼ਨ
- (ਅ) ਅਣਡਿੱਠਾ ਪੈਰ੍ਹਾ- ਵਾਰਤਕ-ਅੰਸ਼ ਉੱਪਰ ਆਧਾਰਿਤ ਸਿਰਲੇਖ, ਵਿਸ਼ਾ-ਵਸਤੂ ਬੋਧ ਅਤੇ ਸ਼ਬਦਾਰਥ ਸੰਬੰਧੀ ਪ੍ਰਸ਼ਨ
  (ੲ) ਵਿਆਕਰਨ-
  - ਭਾਸ਼ਾ ਅਤੇ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀਆਂ ਪ੍ਰਮੁੱਖ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ
  - ਪੰਜਾਬੀ ਦੀਆਂ ਉਪਭਾਸ਼ਾਵਾਂ- ਮਾਝੀ, ਮਲਵਈ, ਦੁਆਬੀ, ਪੁਆਧੀ, ਪੋਠੋਹਾਰੀ, ਮੁਲਤਾਨੀ(ਖੇਤਰ ਅਤੇ ਪ੍ਰਮੁੱਖ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ)
  - ਪੁਨੀ ਬੋਧ- ਪੁਨੀ, ਪੰਜਾਬੀ ਪੁਨੀਆਂ(ਸਵਰ ਤੇ ਵਿਅੰਜਨ)
  - 4. ਲਿਪੀ ਬੋਧ- ਗੁਰਮੁਖੀ ਲਿਪੀ, ਵਰਨਮਾਲਾ, ਅੱਖਰ ਤੇ ਲਗਾਂ, ਲਗਾਖਰ, ਦੁੱਤ ਅੱਖਰ
  - ਵਾਕ ਬੋਧ- ਉਦੇਸ਼ ਤੇ ਵਿਧੇਅ, ਵਾਕ-ਸੰਰਚਨਾ, ਵਾਕ ਪ੍ਰਕਾਰ / ਸ਼੍ਰੇਣੀਆਂ
  - 6. ਅਖਾਣ ਅਤੇ ਮੁਹਾਵਰੇ
  - 7. ਵਿਸ਼ਰਾਮ ਚਿੰਨ੍ਹ

(ਸ) ਮਾਧਮਿਕ ਸਿੱਖਿਆ ਬੋਰਡ ਅਜਮੇਰ ਦੁਆਰਾ ਜਮਾਤ 11ਵੀਂ ਅਤੇ 12ਵੀਂ ਲਈ ਨਿਰਧਾਰਤ ਮੌਜੂਦਾ ਪਾਠਕ੍ਮ ਵਿੱਚ ਸ਼ਾਮਲ ਪਾਠ-ਪੁਸਤਕਾਂ ਉੱਪਰ ਆਧਾਰਿਤ ਜਾਣਕਾਰੀ-ਭਰਪੂਰ ਪ੍ਰਸ਼ਨ

#### ਭਾਗ ਦੂਜਾ (ਗ੍ਰੈਜੂਏਸ਼ਨ ਪੱਧਰ)

(ੳ) ਪੰਜਾਬੀ ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ (ਪੁਰਵ ਨਾਨਕ ਕਾਲ ਤੋਂ ਆਧੁਨਿਕ ਕਾਲ ਤੱਕ)

1. ਨਾਥਾਂ ਜੋਗੀਆਂ ਦਾ ਸਾਹਿਤ

ਸੂਫੀ ਕਾਵਿ ਧਾਰਾ - ਸ਼ੇਖ ਫ਼ਰੀਦ, ਸ਼ਾਹ ਹੂਸੈਨ, ਸੁਲਤਾਨ ਬਾਹੂ, ਬੁੱਲ੍ਹੇ ਸ਼ਾਹ, ਮੀਆਂ ਵਜੀਦ

3. ਗੁਰਮਤਿ ਕਾਵਿ ਧਾਰਾ∽ ਸ਼੍ਰੀ ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਅੰਗਦ ਦੇਵ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਅਮਰਦਾਸ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਰਾਮਦਾਸ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਰਾਮਦਾਸ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਅਰਜਨ ਦੇਵ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ, ਭਾਈ ਗੁਰਦਾਸ ਜੀ

4. ਕਿੱਸਾ ਕਾਵਿ ਧਾਰਾ− ਦਮੋਦਰ, ਪੀਲੂ, ਹਾਫ਼ਿਜ਼ ਬਰਖੁਰਦਾਰ, ਵਾਰਿਸ ਸ਼ਾਹ, ਹਾਸ਼ਮ ਸ਼ਾਹ, ਕਾਦਰਯਾਰ ਅਤੇ ਫ਼ਜ਼ਲ ਸ਼ਾਹ

5. ਬੀਰ ਕਾਵਿ ਧਾਰਾ- ਸ਼੍ਰੀ ਗੁਰੁ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ, ਨਜਾਬਤ, ਸ਼ਾਹ ਮੁਹੰਮਦ

- 6. ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ- ਭਾਈ ਵੀਰ ਸਿੰਘ, ਧਨੀ ਰਾਮ ਚਾਤ੍ਰਿਕ, ਪ੍ਰੋ. ਪੂਰਨ ਸਿੰਘ, ਪ੍ਰੋ. ਮੋਹਨ ਸਿੰਘ, ਅੰਮ੍ਰਿਤਾ ਪ੍ਰੀਤਮ, ਪ੍ਰੀਤਮ ਸਿੰਘ ਸਫੀਰ, ਸ.ਸ. ਮੀਸ਼ਾ, ਡਾ. ਹਰਿਭਜਨ ਸਿੰਘ, ਸ਼ਿਵ ਕੁਮਾਰ ਬਟਾਲਵੀ, ਸੁਰਜੀਤ ਪਾਤਰ
- 7. ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਵਾਰਤਕ
  - ਨਿਬੰਧ- ਸ਼ਰਧਾ ਰਾਮ ਫਿਲੌਰੀ, ਪ੍ਰਿੰ. ਤੇਜਾ ਸਿੰਘ, ਦੇਵਿੰਦਰ ਸਤਿਆਰਥੀ, ਮਹਿੰਦਰ ਸਿੰਘ ਰੰਧਾਵਾ, ਗਿਆਨੀ ਗੁਰਦਿੱਤ ਸਿੰਘ, ਸੋਹਿੰਦਰ ਸਿੰਘ ਵਣਜਾਰਾ ਬੇਦੀ, ਪ੍ਰਿੰ. ਸਰਵਣ ਸਿੰਘ

2) ਸਫਰਨਾਮਾ- ਲਾਲ ਸਿੰਘ ਕਮਲਾ ਅਕਾਲੀ, ਬਲਰਾਜ ਸਾਹਨੀ, ਮਨਮੋਹਨ ਬਾਵਾ

#### ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਗਲਪ

 ਨਾਵਲ- ਨਾਨਕ ਸਿੰਘ, ਸੁਰਿੰਦਰ ਸਿੰਘ ਨਰੂਲਾ, ਜਸਵੰਤ ਸਿੰਘ ਕੰਵਲ, ਗੁਰਦਿਆਲ ਸਿੰਘ, ਰਾਮ ਸਰੂਪ ਅਣਖੀ, ਨਿਰੰਜਨ ਤਸਨੀਮ, ਡਾ. ਦਲੀਪ ਕੌਰ ਟਿਵਾਣਾ

 ਕਹਾਣੀ- ਗੁਰਬਖਸ਼ ਸਿੰਘ ਪ੍ਰੀਤਲੜੀ, ਸੰਤ ਸਿੰਘ ਸੇਖੋਂ, ਕਰਤਾਰ ਸਿੰਘ ਦੁੱਗਲ, ਕੁਲਵੰਤ ਸਿੰਘ ਵਿਰਕ, ਗੁਰਬਚਨ ਸਿੰਘ ਭੁੱਲਰ, ਵਰਿਆਮ ਸਿੰਘ ਸੰਧ, ਅਜੀਤ ਕੌਰ

9. ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਨਾਟਕ ਤੇ ਇਕਾਂਗੀ- ਈਸ਼ਵਰ ਚੰਦਰ ਨੰਦਾ, ਸੰਤ ਸਿੰਘ ਸੇਖੋਂ, ਹਰਚਰਨ ਸਿੰਘ,ਬਲਵੰਤ ਗਾਰਗੀ, ਕਪੂਰ ਸਿੰਘ ਘੁੰਮਣ, ਗੁਰਦਿਆਲ ਸਿੰਘ ਫੁੱਲ, ਗੁਰਸ਼ਰਨ ਸਿੰਘ, ਅਮਰੀਕ ਸਿੰਘ,ਆਤਮਜੀਤ, ਚਰਨਦਾਸ ਸਿੱਧੂ, ਸੁਰਜੀਤ ਸਿੰਘ ਸੇਠੀ ਅਤੇ ਅਜਮੇਰ ਸਿੰਘ ਔਲਖ

10. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ ਦਾ ਨਿਕਾਸ, ਵਿਕਾਸ ਤੇ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ

11. ਸਭਿਆਚਾਰ ਅਤੇ ਲੋਕਧਾਰਾ- ਪਰਿਭਾਸ਼ਾ, ਪ੍ਕਿਰਤੀ ਅਤੇ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ

ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਦੀ ਵਿਲੱਖਣਤਾ ਤੇ ਪਛਾਣ-ਚਿੰਨ੍ਹ

13. ਪੰਜਾਬੀ ਲੋਕ ਸਾਹਿਤ ਰੂਪ- ਢੋਲਾ, ਮਾਹੀਆ, ਟੱਪਾ, ਅਲਾਹੁਣੀ, ਸਿੱਠਣੀ, ਸੁਹਾਗ ਗੀਤ, ਲੰਮੀ ਬੋਲੀ, ਘੋੜੀਆਂ

14. ਪੰਜਾਬੀ ਸਾਹਿਤ ਰੂਪ− ਸ਼ਲੋਕ, ਪਟੀ, ਅਸ਼ਟਪਦੀ, ਬਾਰਾਮਾਹ, ਸਤਵਾਰਾ, ਕਾਫ਼ੀ, ਸੀਹਰਫ਼ੀ, ਮਹਾਂਕਾਵਿ, ਜਨਮਸਾਖੀ

ਭਾਗ ਤੀਜਾ (ਪੋਸਟ ਗ੍ਰੈਜੁਏਸ਼ਨ ਪੱਧਰ)

ਭਾਸ਼ਾ ਵਿਗਿਆਨ- ਪਰਿਭਾਸ਼ਾ, ਪਕਿਰਤੀ ਤੇ ਖੇਤਰ 1.

ਧੁਨੀ ਵਿਗਿਆਨ ਅਤੇ ਧੁਨੀ ਵਿਉਂਤ ਵਿਗਿਆਨ

- 3. ਸੰਰਚਨਾਤਮਕ ਭਾਸ਼ਾ ਵਿਗਿਆਨ- ਪ੍ਰਮੱਖ ਸੰਕਲਪ
  - 1) ਚਿਹਨਕ ਅਤੇ ਚਿਹਨਤ
  - 2) ਲਾਂਗ ਅਤੇ ਪੈਰੋਲ
  - ਇਕਾਲਕ ਅਤੇ ਦੁਕਾਲਕ
  - ਕੜੀਦਾਰ ਅਤੇ ਲੜੀਦਾਰ ਸੰਬੰਧ
- ਨੌਮ ਚੌਮਸਕੀ (ਰੂਪਾਂਤਰੀ ਵਿਆਕਰਨ-ਯੋਗਤਾ ਤੇ ਨਿਭਾਉ, ਗਹਿਨ ਸੰਰਚਨਾ ਤੇ ਸਤਹੀ ਸੰਰਚਨਾ)
- ਭਾਰਤੀ ਕਾਵਿ ਸ਼ਾਸ਼ਤਰ- ਰਸ ਸਿਧਾਂਤ(ਰਸ ਨਿਸ਼ਪੱਤੀ ਅਤੇ ਸਾਧਾਰਨੀਕਰਨ)
- ਅਰਸਤੂ ਦਾ ਅਨੁਕਰਨ, ਵਿਰੇਚਨ ਅਤੇ ਤ੍ਰਾਸਦੀ ਸਿਧਾਂਤ
- 7. ਲੌਂਜਾਈਨਸ ਦਾ ਉੱਦਾਤ ਸੰਕਲਪ- ਪ੍ਰਕਿਰਤੀ, ਸੋਮੇ ਤੇ ਵਿਰੋਧੀ ਤੱਤ
- 8. ਰੁਸੀ ਰੁਪਵਾਦ- ਥੀਮ, ਮੋਟਿਫ, ਵਿਗੋਪਨ, ਫੇਬੁਲਾ, ਸੁਜੇਤ, ਅਜਨਬੀਕਰਨ ਅਤੇ ਕਾਵਿ ਭਾਸ਼ਾ
- ਪਮੱਖ ਪੰਜਾਬੀ ਆਲੋਚਕ- ਸੰਤ ਸਿੰਘ ਸੇਖੋਂ, ਅਤਰ ਸਿੰਘ, ਡਾ. ਹਰਿਭਜਨ ਸਿੰਘ
- 10. ਲੋਕ ਸਾਹਿਤ- ਸਰੂਪ ਅਤੇ ਵਰਗੀਕਰਨ
- 11. ਪੰਜਾਬੀ ਨਾਟਕ ਅਤੇ ਰੰਗਮੰਚ- ਆਰੰਭ, ਵਿਕਾਸ ਅਤੇ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ

# Part- IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

#### I. Educational Psychology

- Concept, scope and functions of educational psychology.
- Physical, cognitive, social, emotional and moral developmental characteristics of adolescent learner and its implication for teaching-learning.
- Behavioural, cognitive and constructivist principles of learning and its implication for senior secondary students.
- Concept of mental health & adjustment and adjustment mechanism.
- Emotional intelligence and its implication in teaching learning.

# II Pedagogy and Teaching Learning Material (Instructional Strategies for Adolescent Learner)

- Communication skills and its use.
- Teaching models- advance organizer, concept attainment, information processing, inquiry training.
- Preparation and use of teaching-learning material during teaching.
- Cooperative learning.

# III Use of Computers and Information Technology in Teaching Learning.

- Concept of ICT, hardware and software.
- System approach.
- Computer assisted learning, computer aided instruction

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For the competitive examination for the post of School Lecturer:-

- 1. The question paper will carry maximum 300 marks.
- 2. Duration of question paper will be **Three Hours**.
- 3. The question paper will carry 150 questions of multiple choices.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects: -
  - (i) Knowledge of Subject Concerned: Senior Secondary Level
  - (ii) Knowledge of Subject Concerned: Graduation Level.
  - (iii) Knowledge of Subject Concerned: Post Graduation Level.
  - (iv) Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning.

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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) URDU

#### PAPER – II

#### Part- I Senior Secondary Level

#### Prose

Drama- Agha Hashr kashmeri: Yahoodi ki Ladki Short Story-

- 1) Quratulain Haider : Photographer
- 2) Balwant Singh : Lamhe
- 3) Surendra Prakash : Bajooka
- 4) Iqbal Majeed : Sukoon Ki Neend

Inshaiyya- Khwaja Hasan Nizami : Machhar

Tangeed- Ehtesham Hussain : Khuji

#### Khaka

- 1) Ahmed Jamal Pasha: Kaleemuddin Ahmed
- 2) Shahid Ahmed Dehlavi: Meer Baqar Ali Dastan go

Rhetorics- Tashbeeh, Isteara, Mubaligha, Tajahul-E- Arifana

#### Various forms of Poetry and Prose:

- Ghazal, Qasida and Marsiya
- Novel, Afsana and Khaka

#### Poetry-

Ghazaliyat:	Wali Dakkani, Meer Taqi Meer and Meer Dard
	Moin Ahsan Jazbi, Nasir Kazmi and Jan Nisar Akhtar
Manzoomat:	Nazeer Akbarabadi and Ismail Merathi
	Akbar Allahabadi and Makhdoom Mohiuddin
	Noon Meem Rashid
Marsiya:	Anees
<b>Rubaiyat:</b>	Jagat Mohan Lal Rawan and Amjad Haiderabadi
Geet :	Akhtar Shirani, Meeraji, Salam Machhli Shehari and Ehsan Danish

#### Part– II Graduation Level

#### Prose

**Drama-** Krishan Chandra : Darwaze Khol Do **Novel-** Prem Chand : Bewa

#### • Short Story

- 1) Premchand : Namak Ka Darogha
- 2) Bedi : Lajwanti
- 3) Minto : Naya Qanoon
- Inshaiyya:
  - 1) Sajjad Haider Yaldaram : Mujhe Mere Doston Se Bachao
  - 2) Farhatullah Baig : Yar bash
  - 3) Sir Syed : Guzra Hua Zamana

• **Rhetorics-** Majaz e Mursal, Laff-o-Nashr, Talmeeh, Tazad, Mubalilgha, Iham, Husn-e-Taleel, Tanseequs-Sifat, Ishtiqaq, Muraatun-Nazeer

#### Various Forms of Prose and Poetry

- Poetry-Masnavi, Rubai, Qita, Muarra Nazm, Azad Nazm
- Prose : Dastan, Reportage, Inshaiya

#### **Poetry:**

- 1) **Ghazaliyat** : Nasikh, Atish, Ghalib, Momin, Aziz (Sheh Pare Published by Allahabad University 1981)
- 2) Manzoomat : Pandit Brij Narayan Chakbast, Iqbal, Josh,( Sheh Pare Published by Allahabad University 1981)
- 3) **Qasida** : Zauq Wah wah kya motadil hai baghe alam ki hawa
- 4) Marsiya : Anees-Namak e khwan e takallum hai fasahat meri

#### Part – III Post Graduation Level

**Prose:** 

- **Dastan-** Meer Amman : Bagh-O-Bahar
- Drama- Imtiyaz Ali Taj : Anarkali
- Novel- Mirza Hadi Ruswa : Umrao Jan Ada
- Afsana:
  - 1) Prem Chand -Wardaat
  - 2) Krishan Chandra : Andata

#### **Poetry:**

#### Ghazaliyat:

- 1) Wali -Mutala-e-Wali- edited by Sharib Radaulvi (Raddef 'Alif') First Ten Ghazaliyat.
- 2) Ghazaliyat, Daagh –Aftab e Dagh Radif Noon First ten Ghazaliyat
- 3) Firaq (First ten Ghazliyat from Gul e Naghma

#### Manzoomat:

- 1) Iqbal- Tule e Islam
- 2) Akhtar Sheerani: Aie Ishq Kaheen Le Chal and O! Des Se Aane Wale Bata, from Muntakhab Nazmain-UP Urdu Academy, 1988

#### History of Urdu Literature:

- Urdu Poetry in Dakkan up to 1700 A.D.
- Urdu Prose and Poetry in North India up to1857
- Contribution of Aligarh Movement in the development of Urdu Prose
- Progressive Movement in Urdu Literature
- Modernism with special reference to Nazm and Afsana

# Part – IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

#### I. Educational Psychology

- Concept, scope and functions of educational psychology.
- Physical, cognitive, social, emotional and moral developmental characteristics of adolescent learner and its implication for teaching-learning.
- Behavioural, cognitive and constructivist principles of learning and its implication for senior secondary students.
- Concept of mental health & adjustment and adjustment mechanism.
- Emotional intelligence and its implication in teaching learning.

# II Pedagogy and Teaching Learning Material (Instructional Strategies for Adolescent Learner)

- Communication skills and its use.
- Teaching models- advance organizer, concept attainment, information processing, inquiry training.
- Preparation and use of teaching-learning material during teaching.
- Cooperative learning.

#### III Use of Computers and Information Technology in Teaching Learning

- Concept of ICT, hardware and software.
- System approach.
- Computer assisted learning, computer aided instruction.

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  - (ii) Knowledge of Subject Concerned: Graduation Level.
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  - (iv) Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning.

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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) HISTORY

# PAPER – II

#### Part I- Senior Secondary Level

- 1. Sources of Ancient India: Literary, Archeological, Foreign Traveler Account.
- 2. Saraswati-Sindhu Civilization (Harappan Civilization): Origin, Expansion, Decline, Archeological Sites.
- 3. Age of Mahajanpada, Rise of Magadh: Harayank, Shishunag and Nanda Dynasty.
- 4. Maurayan Empire: Establishment, Expansion, Administration, Economy, Art and Architecture.
- 5. Delhi Sultanate: Establishment, Expansion, Administrative System, Military Organization, Land Revenue, Iqta System during Sultanate System.
- 6. Emergence of Regional Powers and Establishment of Colonial Rule in India from 1757 to 1857.
- 7. Growth of British Paramountcy.
- 8. Revolt of 1857: Nature, Events, Importance and Results.
- 9. Renaissance and Reformation in Europe.
- 10. First and Second World War: Causes, Events and Results.
- 11.League of Nation and United Nations.
- 12. Major Archeological Sites of Rajasthan.
- 13.Emergence of Rajput Dynasties of Rajasthan: Guhil, Gurjar-Pratihar, Rathore, Chouhan, Kacchwas.
- 14.Rajput Resistance: Prathiviraj III, Hamir of Ranthambore, Rawal Ratan Singh, Kanhaddev, Sanga, Maldev, Chandrasen and Maharana Pratap.

## **Part- II Graduation Level**

- 1. Pre and Proto History: Paleolithic age, Mesolithic Age, Neolithic Age and Chalcolithic Age.
- 2. Vedic Age: Vedic Literature, Political, Social, Economy, Religion, Philosophy and Rituals.
- 3. Emergence of Jainism and Buddhism.
- 4. Post Mauryan Age: Shunga, Kanva, Indo-Greek, Kushan, Western Kshatrapas.
- 5. Gupta Age: Political and Cultural Achievements. Vardhan Dynasty: Political and Cultural Achievements.
- 6. Indian Culture Abroad in Ancient India: West Asia, Central Asia and South-East Asia.
- 7. Sources of Medieval India.
- 8. Development of Bhakti Movement and Sufism.
- 9. Foundation and Expansion of Mughal Empire and Mughal Policies: Deccan, Religious, Rajput, North-West and Middle Asia Policy.
- 10. Rise of Maratha: Achievements of Shivaji, History of Maratha (1680-1761).

- 11.Indian Constitutional Development (1773-1950).
- 12.Economic Impact of Colonial Rule: Land Revenue Settlements, De-Industrialization, Drain of Wealth.
- 13.Socio-Religious Reforms in 19th and 20th Century.
- 14.Indian Freedom Struggle -1857 1919.
- 15. American War of Independence.
- 16.Industrial Revolution.
- 17. French Revolution of 1789 and Napoleon Bonaparte age.
- 18. The Unification of Italy and Germany.
- 19. Russian Revolution of 1917.
- 20.Role of Rajasthan in the Revolt of 1857.
- 21. Tribal and Peasant Movement in Rajasthan.
- 22.Rajput Cooperation with Mughals: Man Singh, Rai Singh, Mirja Raja Jaisingh and Jaswant Singh.

# **Part- III Post Graduation Level**

- 1. Society, Economy, Culture in Post Mauryan Age.
- 2. Deccan and South India Satvahana, Sangam Age, Chalukyas, Pallavas, Choals, Rashtrakutas.
- 3. Society and Cultural Development during early Medieval India.
- 4. Administrative System of Mughals: Revenue System, Military Administration, Mansabdari and Jagirdari.
- 5. Economic and Socio-Cultural Life in Medieval India.
- 6. Social Reforms and upliftment of Dalit and Women in India.
- 7. Development of Education and Press in 19<sup>th</sup> Century.
- 8. Gandhian Era: Gandhi and National Movement. Role and Contribution of Jawahar Lal Nehru, Subhash Chandra Bose, Maulana Azad, Vallabh Bhai Patel, C. Rajgopalachari, Rajendra Prasad, Bhim Rao Ambedkar in National Movement.
- 9. Rise of Nazism in Germany and Fascism in Italy.
- 10.National Movement in Arab World, Africa and South-East Asia.
- 11. Chinese Revolution of 1949.
- 12. Sources of History of Rajasthan: Archeological, Archival and Literary.
- 13. Awakening in Rajasthan: Social Changes and Political Awakening.
- 14.Integration of Rajasthan: its Various Stages.
- 15. Art, Architecture and Paintings of Rajasthan.

# Part – IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

# I. Educational Psychology

- Concept, scope and functions of educational psychology.
- Physical, cognitive, social, emotional and moral developmental characteristics of adolescent learner and its implication for teaching-learning.
- Behavioural, cognitive and constructivist principles of learning and its implication for senior secondary students.
- Concept of mental health & adjustment and adjustment mechanism.
- Emotional intelligence and its implication in teaching learning.

# II Pedagogy and Teaching Learning Material (Instructional Strategies for Adolescent Learner)

- Communication skills and its use.
- Teaching models- advance organizer, concept attainment, information processing, inquiry training.
- Preparation and use of teaching-learning material during teaching.
- Cooperative learning.

## III Use of Computers and Information Technology in Teaching Learning

- Concept of ICT, hardware and software.
- System approach.
- Computer assisted learning, computer aided instruction.

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  - (iv) Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning.

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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) POLITICAL SCIENCE

# PAPER - II

#### Part – I Senior Secondary Level

- Political Theory: Meaning and its utility.
- Concepts: Rights, Liberty, Equality, Justice, Secularism.
- Indian Constitution: Constituent Assembly, Preamble, Salient features of Constitution, Fundamental Rights, Directive Principles of State Policy.
- Federalism: Theory and Practice in India, Emerging trends in Centre State relationship.
- Union Government: President, Prime Minister & Council of Ministers, Parliament, Supreme Court.
- State Government: Governor, Chief Minister & Council of Ministers, Legislature, High Court.
- Local Government: Panchayati Raj, Urban Local Self-Government.
- Indian Politics: Challenges to Nation Building, Party System, Recent Development in Indian Politics.
- International Politics: Cold war, End of Cold war. American Hegemony in Contemporary World- Scenario, Instruments and Challenges.
- Foreign Policy of India: Objectives, Role of India in UN, India & United States, India & Non Align Movement; Challenges before India's Foreign Policy.

#### **Part – II Graduation Level**

- Political Theory: Traditional and Modern Perspectives.
- State: Nature, Functions, Sovereignty, Pluralism.
- Government: Organs Legislature: Parliament (UK and France), Congress (USA), Federal Assembly (Switzerland). Executive: King and Prime Minister (UK), President (US and France).

Judiciary- Judicial System (UK), Federal Judiciary (USA), Administrative Law and Administrative Courts (France).

- Separation of Powers, Checks & Balances. Types Democracy & Dictatorship, Parliamentary & Presidential, Federal & Unitary.
- Theories of Representation, Political Parties in UK, USA, France and Switzerland. Pressure Groups: UK and USA.
- Political Thought: Plato, Aristotle, Kautilya, Machiavelli, Hobbes, Locke, Rousseau, Bentham, Mill, Marx, Gandhi, Aurbindo, Ambedkar, Nehru, Lohiya.
- Dynamics of Indian Democracy: Party, Caste, Region, New Social Movements.
- India's Relations with Neighbouring Countries.

#### Part – III Post Graduation Level

- Behaviouralism and Post-Behaviouralism.
- Political System, Structural Functionalism, Political Development and Political Culture.
- Elections, Political Participation and Voting Behaviour in India, Civil Society.
- Approaches to the study of International Politics and Concepts of National Power and National Interest.
- International Organisation: United Nations, EU, ASEAN, SAARC & NAM role and relevance.

# Part – IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

#### I. Educational Psychology

- Concept, scope and functions of educational psychology.
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- Behavioural, cognitive and constructivist principles of learning and its implication for senior secondary students.
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- II Pedagogy and Teaching Learning Material (Instructional Strategies for Adolescent Learner)
  - Communication skills and its use.
  - Teaching models- advance organizer, concept attainment, information processing, inquiry training.
  - Preparation and use of teaching-learning material during teaching.
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- Concept of ICT, hardware and software.
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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) ECONOMICS

#### PAPER –II

#### Part- I Senior Secondary Level

Meaning and definition of economics, Central problems of an economy and problem of choice, Economic systems: characteristics and functions.

Demand and Supply, various concepts of elasticity of demand.

Production Function: Law of variable proportions and Returns to scale, Cost concepts and Cost curves.

Revenue and their relationships, Forms of market and their characteristics, determination of price and output under perfect competition and monopoly.

Macroeconomic Variables: Stock and flow variables, National Income- concepts, measurement and their relationships, GNP and Welfare.

Money- Meaning and functions; Money supply and high powered money, functions of Commercial and Central bank, Credit control methods.

Meaning and determinants of economic development, Problems of Indian Economy: poverty, unemployment and inequality in India.

Balance of Payments- Meaning and components.

Measures of Central Tendency- Arithmetic mean, median and mode.

#### **Part-II Graduation Level**

Theory of Consumer Behavior- Marshallian Utility Analysis and Hick's Indifference Curve Analysis. Hick's and Slutsky Price Effect. Consumer and producer's surplus.

Price and output determination under imperfect competition- Oligopoly (Collusive and Non-collusive) and Monopolistic Competition.

Consumption hypotheses. Multiplier, and Accelerator theory, Trade cycle, control of trade cycle.

Quantity Theory of Money, Theories of demand for money, Inflation- Types and Control,

Phillips curve.

Objectives and tools of Monetary and Fiscal Policies.

Free Trade and Protection.

Theories of trade – comparative cost and opportunity cost, Terms of Trade.

Foreign Direct Investment, WTO, World Bank and IMF.

Measurement and Indicators of Development: PQLI, HDI, HPI and GDI, Various measurement of poverty in India.

Measures of Dispersion, Index Number, Correlation- Simple, Rank correlation.

**Economy of Rajasthan -** Main features of Economy of Rajasthan- Forest, water, mineral and livestock resources; Recent major development projects; Major welfare schemes of state Government for SC/ST/Backward Classes/Minorities/Disabled Persons, Destitute, Women, Children, Old Age People, Farmers and Labourers, Main features of agricultural, industrial, service sector and tourism development in Rajasthan. Flagship Programmes of Government of Rajasthan.

# **Part-III Post Graduation Level**

Welfare Economics – Pareto optimality, Market failure and externalities, and New Welfare Economics.

IS-LM Model – Relative effectiveness of Monetary and Fiscal Policy, Mundell-Fleming, SWAN model.

Growth & Development Models – Lewis model, Harrod-Domar, Solow and Kaldor model.

Regression analysis, probability, sampling techniques (only concepts), Methods of data Collection.

Economic Reforms- Liberalization, Privatization and Globalization.

Public and Private goods, GST in India, Concept of deficits in budget.

Foreign Trade: Current foreign trade policy.

Theories of International Trade – Heckscher-Ohlin Theorem, Factor Price Equalization Theorem.

Concept of Sustainable Development. Sustainable Development Goals, Food Security.

Part– IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

# I. Educational Psychology

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- Communication skills and its use.
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# SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) GEOGRAPHY

#### PAPER – II

#### Part- I Senior Secondary Level

- Interior of earth, Rocks, Earthquakes and Volcanoes, Plate tectonics, Work of wind, Running water and Glaciers.
   Structure and Composition of Atmosphere, Insolation and Heat budget, Humidity and Precipitation.
   Relief features of the Oceans, Salinity, Tides and Ocean currents.
- India- Location, Physiographic divisions, Climate, Vegetation, Soils. Population: distribution and density and growth. Disaster Management: Flood, Draught, Landslides. Major crops, Minerals, Iron and Steel Industry, Cotton and Textile Industry. Environment Pollution, Sustainable Development.
- Human Geography- Definition, scope and principles. Primary, Secondary, Tertiary and Quaternary activities. Transportation communication and Trade. Distribution, density and growth of World Population. Human development concept.
- Scales, Maps and Projections, Spatial information technology, Mean, Median, Mode, Standard Deviation, Correlation, Plane table survey.

#### **Part- II Graduation Level**

- **Physical Geography:** Isostasy, Earth movements, Inversion of Temperature, Pressure belts and Wind circulation. Classification of climates of the world: Koppen's, Thornwait. Ocean deposits. Formation of Coral Reefs and Atolls.
- **Human Geography:** Modern school of thought in Human Geography: Possibilism, determinism, neo-determinism. Migration its causes and types. Classification and distribution of races of the world.
- **Economic Geography:** Natural resources and their distribution. Agricultural regions of the world. Industrial regions of the world.

- **Geography of Thought:** Definition, scope, nature and purpose of Geography, contribution of Greek Geographers, Roman Geographers. Works of Humboldt, Ritter, Ratzel, Hartshorne, Huntington, Blache and Carl Saur.
- **Rajasthan:** Physiography, Drainage, Climate, Vegetation, Soils, Irrigation. Major crops, chief minerals, major industries. Population distribution and density. Desertification, Agro-climate regions.

# **Part- III Post Graduation Level**

- **Geography of Thought-** Behavioural geography. Recent trends in geography. Development of geography in India.
- **Geomorphology-** Fundamental concepts, slope evolution. Application of Geomorphic mapping. Environmental geomorphology.
- Economic Geography- Theories of Plant Location: Weber's Least Cost theory. Economic regions of India.
- Urban Geography- Origin and growth of Towns in Ancient, Medieval and Modern period. Umland, Principles of Town Planning.
- Agricultural Geography- Von Thunen's Agricultural Location theory. Green Revolution in India. Agro-forestry importance and its scope in India.
- **Population Geography-** Theories of Population: Malthusian and Optimum. The Population Policy of Government of India.
- **Political Geography-** Development of Political Geography. Concepts of Mackinder. The Unified Field theory of Political Geography by S.B. Jones. Frontiers Boundaries and Buffer zones.

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# SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) SOCIOLOGY

#### PAPER – II

#### Part- I: Senior Secondary Level

- 1. Development of Sociology in West and India.
- 2. Sociology: Meaning, Scope and Subject-Matter.
- 3. Sociology and other Social Sciences.
- 4. Society Meaning, Characteristics, Types of Society.
- 5. Community Meaning, Characteristics.
- 6. Concept of Rural- Urban Continuum.
- 7. Social Group Meaning and Types.
- 8. Family Meaning, Features and Types.
- 9. Concept of Religion and Magic Meaning, Characteristics and Types of Magic.
- 10.Marriage Meaning, Aims, Forms and Types of Hindu Marriage.
- 11.Indian Social Problems Regionalism, Caste Prejudice, Communalism, Corruption.
- 12. Social Change and Mobility– Meaning, Characteristics, Factors and Theories.
- 13.Institution Meaning, Features and Types.
- 14.Association Meaning, Features and Types, Difference between Association and Institution.
- 15.Culture Definition, Characteristics, Elements of Culture.

#### **Part- II: Graduation Level**

- 1. Sociological Perspective Scientific and Humanistic Orientations to Sociological Study.
- 2. Social Structure Meaning and Characteristics.
- 3. Status and Role Definition, Characteristics, Types and Relation between Status and Role.
- 4. Socialization Meaning, Characteristics, Stages and Agencies, Theories (Cooley, Mead, Freud).
- 5. Social Control Meaning, Characteristics, Types and Agencies. Norms and Values.
- 6. Social Stratification-Meaning, Forms and Theories of Stratification.
- 7. Social Process Meaning, Characteristics and Types (Co-operation, Competition and Conflict).
- 8. Kinship Meaning, Features, Kinship Usages.
- 9. Problems of Scheduled Caste, Scheduled Tribes, Women and Minorities.
- 10. Demographic Profiles of India.

- 11. Crime and Juvenile Delinquency Meaning, Types of Crimes, Factors and Consequences.
- 12. Social Research Meaning, Stages and Types.
- 13. Sampling Meaning, Features, Types and Techniques of Sampling.
- 14. Tools of Data Collection Observation, Interview, Schedule and Questionnaire.
- 15. Hypothesis Meaning, Characteristics, Types, Sources.

# Part- III: Post Graduation Level

- 1. Emergence of Social Thought Comte-Positivism, Spencer-Social Darwinism.
- 2. Durkheim Division of Labour, Suicide, Social Fact.
- 3. Max Weber Social Action, Ideal Type, Views on Religion, Bureaucracy.
- 4. Karl Marx Class and Class Conflict, Historical Materialism, Dialectical Materialism.
- 5. Process of Social Change Sanskritization, Westernization, Modernization, Liberalization and Globalization.
- 6. Post Modernism Meaning and Features.
- 7. Indian Social Thinkers: G.S. Ghurye, Radhakamal Mukerjee, M.N. Srinivas, D.P. Mukerji.

# Part – IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

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## SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) HOME SCIENCE

# PAPER – II

### Part I: Senior Secondary Level

Unit I-

- Home Science education- meaning, definition, scope, objectives and history.
- Changing concept of different areas of Home Science.

### Unit II-

- Foods- definition, functions and classification.
- Nutrients- composition, sources and functions.
- Balanced diet.
- Methods of cooking.

# Unit III-

- Home management- definitions and concepts.
- Motivating factors- value, goals and standard.
- Resources- classification and characteristics.
- Income- definition, meaning and types.
- Budget- types and steps of budget planning.
- Saving and Investment.

# Unit IV-

- Fibre- classification and properties.
- Yarn construction.
- Weaving- types.
- General principles of clothing construction.

### Unit V-

- Definition of child /human development.
- Scope of human development.
- Principles of growth and development.
- Role of heredity and environment.
- Life span stages.
- Types of development
- Developmental tasks at different stages of human development.
- Characteristics of different age groups and their physiological and behavioral problems.
- Meaning, concepts and scope of special education and classification of children with special needs.

# **Part II: Graduation Level**

# Unit I-

- Areas of Home Science- objectives and scope of each area.
- Professional organizations and research institutes contributing to different areas of home science.
- Formal, non-formal and informal education.
- Programme planning, implementation and evaluation.
- Government and NGO's development programmes.
- Meaning, definition, principles and basic elements of extension education.
- Extension teaching methods.
- Communication- definition, meaning, process, models, elements and barriers in communication.
- Audio-Visual aids- types, advantages and limitations.

# Unit II-

- Recommended dietary allowances and deficiencies.
- Nutritive value of important cereals, pulses, vegetables, fruits, milk and milk products, eggs, meat and fish.
- Selection, purchase and storage of foods.
- Food spoilage.
- Food preservation- importance, principles and methods.
- Food adulteration- causes, identification, preventive and control measures, food laws and standards, labels, etc.
- Changing trends in food consumption- fast foods, junk foods etc.
- Principles of meal planning.
- Diets of normal individual of different ages, sex, profession and physiological condition.
- Dietary management during different diseases.
- Concept, type and health implication of community health and nutrition.
- Nutrition problems of community.
- Nutritional status, assessment and surveillance.
- Nutrition and health programmes in India.

# Unit III-

- Management process- planning, controlling, evaluation and decision making.
- Management of resources- time, money and energy.
- Work simplification- meaning, importance and its application in various household activities.
- Elements and principles of art and design.
- House planning/space designing: according to various activities and family needs.
- Financial and legal consideration for housing.

- Interior designing.
- Consumer- definition, meaning, rights, aids and Protection Act.
- Wills and trusts.

# Unit IV-

- Early identification, treatment, prevention and rehabilitation of each category of children with special needs.
- Early childhood care and Education- meaning, importance and objectives.
- Different types of early childhood care and education centers.
- Anthropometry measurements of new born in India and neonate reflex actions.
- Adolescence- physical characteristics, stages and problems.
- Marriage- meaning, definition, types, functions and factors of mate selection.
- Family- meaning, definition, types, population education and dynamics.

# Unit V-

- Yarn making, weaving and other methods of fabric construction and their effects on appearance, durability and maintenance of garments.
- Different types of finishes.
- Selection, care and storage of different types of clothes including readymade garments.
- Importance of clothing, social and psychological aspects of clothing.
- Functions of clothing construction drafting and making of paper patterns.
- Body measurement- importance of taking body measurements and its relation to sizes and different types of garments.
- Preparation of fabric cutting- layout, pinning, marking and cutting.
- Wardrobe planning.
- Selection of fabrics and garments for toddler, adolescent, men and women.
- Selection and buying fabrics for various users.
- Elements, principles of design in clothing.
- Traditional textile of India.

# Part III: Post Graduation Level

# Unit I-

- Extension management and administration.
- Adoption and diffusion of homestead technologies.
- Participating extension approaches RRA, PRA and PLA.
- Women empowerment: meaning, importance, ways and schemes.
- Rural development programme in India.
- Entrepreneurship.

# Unit II-

- Different methods of enhancing the nutritive value of foods.
- Inter-relationship of agriculture, food, nutrition, health and population.
- Energy needs, basal metabolism and total energy requirement.
- Digestion, absorption and utilization of major nutrients.

- Genetically modified food, nutraceuticals, organic foods, pre-biotic and probiotic foods
- Nutritional problems in the country with special references to Rajasthan.
- Nutrition Intervention Programmes.
- Immunization schedule.
- Nutrition Policy in India.

# Unit III-

- Different organizations / programmes working for children with special needs.
- Theories of Child Development: Jean Piaget's Theory of Cognitive Development, Frued's Theory of Psycho-Sexual Development.
- Need of guidance and counseling at each life span stage of development.
- Marital adjustment, legal aspects of marriage, role of mother and father in the family, functions (traditional and modern) of the family and factors affecting family functions.
- Meaning and stages of family life-cycle.
- Family welfare organizations (Government and Non- Government) in India.
- Parenting styles and impact of these styles on the children.
- Family planning measures and reproductive health.
- Family disorganization.

# Unit IV-

- Factors influencing residential planning.
- Kitchen types and storage ergonomics.
- Illumination purpose and types. Lightening– types, unit of measurement and glare. Fixtures – types & selection. Color and color schemes.
- Selection and types of furniture and furnishing.
- Work ergonomics meaning & concept.
- Work physiology introduction, definition & types of work static and dynamic.

# Unit V-

- Physiological factors influencing working environment.
- Fashion terminology, sources, fashion cycle and season.
- Factors favouring of fashion cycle and season, consumer demand and fashion marketing and fashion change.
- Paper pattern basic designing.
- Readymade garment's need and selection criteria.
- Future trends in fashion technology.
- Traditional embroideries of India.
- Looms- types and its parts.
- Dyes and their effects.
- CAD.

Part – IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

# I. Educational Psychology-

- Concept, scope and functions of educational psychology.
- Physical, cognitive, social, emotional and moral developmental characteristics of adolescent learner and its implication for teaching-learning.
- Behavioural, cognitive and constructivist principles of learning and its implication for senior secondary students.
- Concept of mental health & adjustment and adjustment mechanism.
- Emotional intelligence and its implication in teaching learning.
- II Pedagogy and Teaching Learning Material (Instructional Strategies for Adolescent Learner)-
  - Communication skills and its use.
  - Teaching models- advance organizer, concept attainment, information processing, inquiry training.
  - Preparation and use of teaching-learning material during teaching.
  - Cooperative learning.

# III Use of Computers and Information Technology in Teaching Learning-

- Concept of ICT, hardware and software.
- System approach.
- Computer assisted learning, computer aided instruction.

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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) CHEMISTRY

### PAPER - II

#### Part – I Senior Secondary Level

#### 1. Atomic Structure:

Fundamental Particles, Modern concept of atomic structure, Quantum numbers, Aufbau principle, Pauli's exclusion principle, Hund's Rules. Electronic configuration of elements, Classification of elements and periodicity in properties, s, p, d and f Block elements.

#### 2. p- Block Elements:

General introduction, Electronic configuration, Occurrence, Oxidation states, Trends in physical and chemical properties.

#### 3. Transition Elements:

Transition elements, Electronic configuration, Oxidation states, Absorption spectra including charge transfer spectra and magnetic properties, Co-ordination compounds (Werner's theory). Nomenclature (IUPAC), Isomerism.

Lanthanides and Actinides: Electronic configuration, Oxidation states, Chemical reactivity, Lanthanide contraction and its consequences.

#### 4. Solid State & Surface Chemistry:

Classification of solids, Calculation of density of unit cell, Packing in solid, Point defects, Band theory of metals, Physical and chemical adsorption, Colloids and emulsions.

#### 5. Solutions:

Types of solutions, Solubility and concentrations, Ideal and non-ideal solutions, Colligative properties and calculations of molar mass, Abnormal molecular mass, Vant Hoff factor.

#### 6. Thermodynamics:

Laws of thermodynamics, Zeroth and first law and their applications, Concept of work and heat, Gibb's energy.

#### 7. Alkanes, Alkenes, Alkynes and Halo-alkanes:

Methods of preparations and chemical reactions of alkanes, alkenes, alkynes and haloalkanes.

#### 8. Alcohols, Aldehydes, Ketones, Carboxylic Acids and their derivatives:

Classification, nomenclature, methods of preparation, Chemical reactions of a alcohols aldehydes, ketones, carboxylic acids and their derivatives.

#### 9. Aromaticity and Arenes:

Aromaticity, Benzene, Alkyl-arenes, Structure of benzene, Electrophilic substitution reactions, orientation of functional groups.

#### 10. Bio-molecules:

Elementary treatment of carbohydrates, proteins, enzymes, vitamins & nucleic acids.

#### **Part – II Graduation Level**

#### 1. Chemical Bonding:

Theories of chemical bonding, VB and MO theories of Diatomic molecules, VSEPR theory, Hydrogen bonding, Quantum mechanics, Schrodinger's wave equation for one electron system.

#### 2. Co-ordination Complexes:

Details of Crystal field theory for weak and strong field complexes. Comparison of VB and CFT theories. Factors affecting 10 Dq. Thermodynamic aspects of Crystal fields, John-Teller effect.

#### 3. Co-ordination Chemistry of Lanthanides and Actinides:

Co-ordination behaviour of Lanthanides and Actinide complexes. Magnetic and spectroscopic properties.

#### 4. Chemical Dynamics:

Rate of reaction, factors affecting rate of reactions. Zero, first and second order reactions. Collision and Transition state theories and their comparison.

#### 5. Electrochemistry:

Electrochemical and Galvanic cells, Theory of strong electrolytes. Debye and Huckel theory of activity coefficient, Nernst equation, Ionic equilibria. Fuel cells, Corrosion.

#### 6. Enthalpy and Entropy:

Enthalpy and its changes at constant pressure and temperature. Entropy as a function of temperature and volume. Hess's Law of constant heat summation, Gibbs and Helmoltz functions.

#### 7. Conformations and Configuration:

Conformation of alkanes (ethane, butane). R/S nomenclature, Configuration of alkenes (E/Z) nomenclature. Conformations of cyclo-hexane.

#### 8. Reactions Intermediates:

Free radicals, carbocations, carbanions, cabenes, benzyne, nitrene.

**Name Reactions:** Nucleophilic Addition reactions and mechanism of Aldol, Cannizzaro, Perkin, Stobbe, Benzoin, Reformatsky, Knovengel, Baeyer–Villiger, Wittig and Mannich reactions.

### 9. Halo, Nitro, Amino-Arenes and Diazonium Salts:

Preparations, Chemical properties of Halo, Nitro, Amino-Arenes and diazonium salts, elimination and addition mechanism and synthetic applications of diazonium salts.

#### 10. Polymers and Drugs:

Polymers, Types of polymerization, Natural and synthetic polymers. Drugs (antacids, anti-histamines, analgesics, antipyretics, antibiotics and antifertility).

### **Part – III Post Graduation Level**

### 1. Molecular Orbital Theory:

M.O. Theory of polyatomic molecules (AX2, AX3 and AX4).

#### 2. Organometallic Compounds:

Organometallic compounds of Li, Mg, Sn and Fe. Structure, bounding and applications.

#### 2. Kinetics and Catalysis:

Kinetics of photo-chemical reactions, Acid-Base and Enzyme catalysis.

#### 3. Electrochemistry:

Measurement of E.M.F., Kohlrausch's Law and its applications, Membrane equilibria.

#### 4. Thermodynamics:

Third Law of Thermodynamics and Joule-Thompson's experiment.

#### 5. Substitutions and Elimination Reactions:

 $SN^1$ ,  $SN^2$ ,  $SN^i$ ,  $E^1$  and E2 reactions of haloalkanes, Preparation and Chemical reactions of phenols, ethers and epoxides.

#### 6. Pericyclic Reactions:

Electrocyclic, Cyclo-addition and Sigmatropic rearrangement, Photo-organic chemistry of alkenes.

#### 7. Environmental Pollution:

Ozone depletion, Green house effect, Global warming.

#### 8. Spectroscopy:

Elementary idea of IR, UV and NMR techniques.

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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) PHYSICS

#### PAPER – II

#### Part – I Senior Secondary Level

- 1. **Physical World and Measurement** Fundamental and derived units, systems of units, dimensional formula and dimensional equations, accuracy and error in measurement.
- Description of Motion Motion in one dimension, uniformly accelerated motion, motion with uniform velocity/acceleration in two dimensions and relative velocity.
   Vectors - Scalar and vector quantities, unit vector, addition and multiplication

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**Laws of Motion** - First, second and third law of motion, impulse, momentum and conservation of linear momentum.

Friction - Types of friction, laws of friction.

- 3. Work, Energy and Power Work done by a constant/variable force, work- energy theorem, K.E., P.E., elastic and inelastic collision in one and two dimensions, conservation of energy, conservative and non-conservative forces, power and motion in vertical plane.
- 4. **Rotational Motion** Centre of mass, its motion, rotational motion, torque, angular momentum, laws of conservation of angular momentum, centripetal force, circular motion, moment of inertia, theorems of M.I. and rolling motion.
- Oscillatory Motion Periodic motion, S.H.M. its equation, K.E. and P.E. of S.H.M., simple pendulum and oscillation of a loaded spring.
   Waves Type of waves, wave equation, speed of a progressive wave, superposition principle, reflection of waves, beats, stationary waves and normal modes and Doppler's effect.
- 6. **Gravitation** Universal law of gravitation, variation of g, gravitational potential energy and potential, orbital and escape velocity, planetary motion, Kepler's Law.
- 7. Elasticity Hook's law, Young's modulus, bulk modulus and shear modulus of rigidity. Applications of elastic behaviour of matter.
  Surface Tension Fluid pressure, Pascal's law, molecular theory of surface tension, excess of pressure inside a drop and soap bubble, angle of contact, capillarity.
  Liquids in Motion Type of flow of liquid, critical velocity, coefficient of viscosity, Terminal velocity, Stoke's law, Reynold's number, Bernoulli's theorem its applications.

8. **Kinetic Theory of Gases -** Laws for gases, ideal gas equation, assumptions of kinetic theory of gases, pressure exerted by a gas, r.m.s speed of gas molecules, law of equipartition of energy, degree of freedom, specific heats of gases and solids, mean free path.

**Heat and Thermodynamics -** Concept of heat and temperature, temperature scales, thermal expansion of solid, liquid and gases, specific heat, change of state, latent heat, calorimetry, zeroth & first law of thermodynamics, thermodynamic process, second law of thermodynamics, heat engine.

**Radiation** - Modes of transmission of heat, thermal conductivity, Perfect blackbody, Stefen's law, Newton's law of cooling, Wein's displacement law.

9. **Ray Optics and Optical Instruments -** Laws of reflection, reflection by plane and curved mirrors, laws of refraction, total internal refraction - applications, lenses, image formation by lenses, thin lens formula, lens maker formula, power of lens, dispersion by prism, scattering of light, eye, defects of vision, microscopes, telescopes.

**Wave Optics -** Interference of light, Young's double slit experiment, diffraction of light, single slit diffraction, resolving power of optical instruments, polarisation of light, law of Malus, polarization by reflection.

10. **Electrostatics** - Coulomb's law, superposition principle, electric field and potential, Dipole, Gauss theorem - its applications, electric lines of force, torque experience by a dipole in uniform electric field, potential energy of a system of charges, equipotential surfaces.

**Capacitance** - Capacity of an isolated spherical conductor, parallel plate capacitors, effect of dielectric on capacitance, series and parallel combinations of capacitors, energy of a capacitor.

**Current Electricity** – Drift velocity and mobility, Ohm's Law, temperature dependence of resistance, colour code of resistors, series and parallel combination of resistors, resistivity, primary and secondary cells and their combination in series and parallel, Kirchoff's laws, Wheatstone bridge and potentiometer - their applications, electrical energy and power.

11. **Magnetism and Magnetic Effect of Current -** Magnetic lines of force, bar magnet, magnetic moment, torque on a magnetic dipole, magnetic induction, magnetic intensity, permeability, susceptibility & intensity of magnetisation - their relations. Curie law, hysterisis, B-H curve, classification of magnetic materials. Magnetic force, motion in the magnetic field, force on current carrying conductor, Biot - Savarts law, magnetic field by a straight conductor & circular current carrying coil, Ampere's circuital law, solenoid, toroid, moving coil galvanometer, ammeter, voltmeter.

**Electromagnetic Induction -** Faraday's Law, Lenz's Law, self induction, mutual induction, electric generators.

Alternating Current - Mean and rms value of A.C., A.C. circuit containing resistance, inductance and capacitance, series resonant circuit, Q factor, average power in a.c., wattless current, power factor, transformer.

12. **Photoelectric Effect and Matter Waves -** Einstein's photoelectric equation, matter waves, de-Broglie's hypothesis, Davison and Germer's experiment.

**Nuclear Physics and Radioactivity** – Nucleus, size, mass defect, binding energy, nuclear fission and fusion, nuclear reactor, radioactivity, laws of disintegration,  $\alpha$ ,  $\beta$  and  $\gamma$  decays.

**Solids and Semi Conductor Devices** - Energy band in solids, semi conductor, p-n junction diodes, special purpose p-n junction diodes, junction transistor, logic gates.

**Electromagnetic Waves and Communication** – Displacement current, electromagnetic waves, electromagnetic spectrum, elements of a communication system, bandwidth of signals and transmission medium, sky and space wave propagation, need for modulation, production and detection of an AM wave.

#### Part – II Graduation Level

1. **Mechanics:** Inertial frames, Galilean transformation, non-inertial frames, fictitious forces, rotating coordinate systems, Coriolis force and its applications, postulates of special theory of relativity, Lorentz transformations, relativistic addition of velocities, length contraction, time dilation, variation of mass with velocity, mass energy relation.

System of particles, concept of reduced mass, single stage and multistage rocket, analysis of collision in centre of mass frame, equation of motion of a rotating body, inertial coefficients, kinetic energy of rotation and idea of principal axes, Euler's Equations.

Elasticity, relation between elastic constants. Theory of bending of beams and cantilever, torsion of a cylinder, bending moments and shearing forces.

2. Waves & Oscillations: Damped harmonic oscillators, power dissipation, quality factor, driven harmonic oscillator, resonance, transient and steady state, power absorption, motion of two coupled oscillators, normal modes.

Waves in media, speed of longitudinal waves in a fluid, energy density and energy transmission in waves, group velocity and phase velocity.

Noise and music: the human ear and its responses: limits of human audibility, intensity and loudness, bel and decibel, the musical scale, temperament and musical instruments, the acoustics of halls, reverberation period.

3. **Electromagnetism**: Concept of multi poles, electrostatic energy of uniformly charged sphere, classical radius of an electron.

Electric Field in Matter: atomic and molecular dipoles, dielectrics, polarisability, polarization vector, electric displacement, electrostatic energy of charge distribution in dielectric, Lorentz local field and Clausius Mossotti equation, electrostatic field – conductors in electric field, boundary conditions for potential and field at dielectric surface, uniqueness theorem, Poisson's and Laplace's equations in cartesian, cylindrical and spherical polar coordinates.

Maxwell's equations (integral and differential form). E as an accelerating field, E as deflecting field, CRO.

4. Thermodynamics and Statistical Physics: Maxwell velocity distribution, transport phenomenon: coefficients of viscosity, thermal conductivity, diffusion and their interrelation. Clausius- Clapeyron equation, vapor pressure curve. maxwell relations and their applications, production of low temperatures, Joule Thomson expansion and J.T. coefficients for ideal as well as Vander Waals gas, temperature inversion, regenerative cooling, cooling by adiabatic demagnetization, liquid helium, He-I and He-II, super fluidity, Nernst heat theorem.

Phase space, Micro and Macro states, thermodynamic probability, relation between entropy and thermodynamic probability. Bose Einstein statistics and its distribution function, Planck distribution function and radiation formula, Fermi Diarc statistics and its distribution function.

5 **Electronics and Circuit Analysis**: Four terminal networks, open, close and hybrid parameters of any four terminal network, Input, output and mutual impedence for an active four terminal network, various circuits theorems: superposition, Thevenin, Norton, reciprocity, maximum power transfer theorems.

Rectifiers- half wave, full wave and bridge rectifier, calculation of ripple factor, efficiency and regulation, filters- series inductor, shunt capacitor, L-section and  $\pi$ -section filters, voltage regulation and voltage stabilization by Zener diode.

Analysis of transistor amplifiers using hybrid parameters and its gain frequency response, basic idea of R-C coupled amplifiers.

Transistor biasing - stability factors, various types of bias circuits for thermal bias stability, amplifier with feedback: positive and negative feedback, voltage and current feedback circuits. Oscillators: criteria for self excited and self sustained oscillators, basic transistor oscillator, circuit and its analysis; Colpitts, Hartley oscillators and R-C oscillators.

Junction Field Effect Transistor (JFET), biasing and volt-ampere relations.

6 **Optics**: Interference of a light in thin films, Newton's ring, Michelson interferometer, Fabry Perot interferometer. Fresnel diffraction: half periods zones, circular aperture, circular disc, straight edge, Fraunhoffer diffraction: double slit, plane diffraction grating.

Lasers and Holography: Spontaneous and stimulated emission, Einstein's A and B coefficients, condition for amplification, population inversion, methods of optical pumping, energy level schemes of He-Ne and Ruby lasers, working of a laser source, holography.

7 **Quantum Mechanics and Spectroscopy**: Failure of classical physics, uncertainty principle and its consequences, application of uncertainty principle.

Schrodinger equation – time dependent and time independent form, probability current density, operators in quantum mechanics, expectation values of dynamical variables, postulates of quantum mechanics, eigen function and eigen value, degeneracy, commutation relations, Ehrenfest theorem.

Time independent Schrodinger equation and stationary state solution, particle in one dimensional box, extension of results for three dimensional case and degeneracy of levels, potential step and rectangular potential barrier, reflection and transmission coefficient, square well potential problem. bound state problems - particle in one dimensional infinite potential well and finite depth potential well, simple harmonic oscillator (one dimensional), Schrodinger equation for a spherically symmetric potential, orbital angular momentum and its quantisation, spherical harmonics, energy levels of H-atom.

Elementary Spectroscopy: Quantum features of one electron atoms, Frank-Hertz experiment, Stern and Gerlach experiment, spin and magnetic moment, spin-orbit coupling and fine structure. atoms in a magnetic field, Zeeman effect, molecular spectroscopy, rigid rotator, diatomic molecules, rotational spectra, vibrational spectra, vibrational-rotational spectra, raman effect.

8. **Nuclear Physics**: Quadrupole moment and nuclear ellipticity, nuclear spin, parity and orbital angular momentum, proton-neutron hypothesis, the nuclear potential, nuclear forces, the liquid drop model.

Accelerators- Linear Accelerators, Cyclotron, Synchrocyclotron, Betatron, Electron Synchrotron, Proton Synchrotron.

Particle and Radiation Detectors: ionisation chamber, region of multiplicative operation, proportional counter, Geiger-Muller counter, scintillation counter, cloud chamber.

9. **Solid State Physics**: Crystal binding and crystal structure: Bravis lattice, Miller indices, crystal structure, X-ray diffraction and Bragg's law, Laue equation of X-ray diffraction.

Thermal Properties of the Solids: Phonons, various theories of lattice specific heat of solids: Einstein model, Debye model, electronic contribution to the specific heat of metals, thermal conductivity of the lattice, band theory of solids: wave function in a periodic lattice and Bloch theorem, Kronig-Penny model, effective mass, momentum, crystal momentum.

Electrical Conductivity: Sommerfield theory of electrical conductivity, Mathiessen's rule, thermal conductivity and Wildemann-Franz's Law, The Hall effect.

Super Conductivity: experimental features of superconductivity, the isotope effect, special features of superconducting materials, flux quantisation, BCS theory of superconductivity: cooper pairs.

#### Part – III Post Graduation Level

- 1. **Mathematical Physics and Classical Mechanics**: Tensors, matrices, Fourier and Laplace transforms. Bessel and Legendre functions. String formula, basic group theory. D' Alembert's Principle, Langrangian and Hamiltonian formalism, canonical transformation, Poisson bracket and Poisson theorem, Hamiltonian Principle and Jacobi equation.
- 2. **Electricity and Magnetism**: Radiation from moving charge and radiation from dipole, concepts of wave guides, retarded potentials, Lienard-Wiechart potential, bremsstrahlung and synchroton radiation.
- 3. **Thermodynamics and Statistical Physics**: Canonical and grand canonical ensemble, Bose-Einstein condensation, Gibb's paradox, Liouvilles' theorem, Landau theory of phase transitions. Langevin theory, Fokker-Plank equation.
- 4. **Quantum Physics**: Elementary theory of scattering in a central potential, partial wave and phase-shift analysis, Identical particle and spin statistics, approximation methods for stationary states.
- 5. **Electronics**: Clipping and clamping circuits, operational amplifiers and its applications, half and full adder circuits, K-maps, flip-flops, counters and registers.
- 6. Atomic, Molecular and Solid State Physics: Quantum states of an electron in an atom, hydrogen atom spectra, Pauli's Principle, Paschen-Back effect, Stark effect, LS and JJ coupling, hyperfine structure, Frank-Condon principle.

Semiconductors statistics of pure and impure semi conductors, electrical conductivity and its temperature dependence, recombination mechanisms, photo conductivity, NMR, ESR and Mossbauer effects.

7. Nuclear and Particle Physics: Nuclear shell model, collective model, Interaction of charged particles and electromagnetic waves with matter, meson theory of nuclear force, nuclear scattering: p-p and n-p, Breit- Wigner scattering formula, Fermi theory of beta decay, Gamov theory of alpha decay, elementary particles.

# Part – IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

#### I. Educational Psychology

- Concept, scope and functions of educational psychology.
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• Emotional intelligence and its implication in teaching learning.

# II Pedagogy and Teaching Learning Material (Instructional Strategies for Adolescent Learner)

- Communication skills and its use.
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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) MATHEMATICS

#### PAPER – II

#### Part-I Senior Secondary Level

#### 1. Algebra:

Quadratic equation with real coefficients, relation between roots and coefficients, formation of quadratic equation with given roots. Symmetric functions of roots, linear and quadratic inequations. Algebra of complex numbers, addition, multiplication, conjugation, polar representation, properties of modulus and principal argument, triangle inequalities, cube roots of unity, geometric interpretations. Arithmetic and geometric progressions, arithmetic and geometric means, infinite geometric series, Arithmetico-Geometric Progression. Sum of the first 'n' natural numbers, sums of squares and cubes of the first 'n' natural numbers, Fundamental principle of counting. Factorial n. Permutations and Combinations and simple applications. Exponential and logarithmic series, Binomial theorem (for positive integral index and for any index), general term and middle term, properties of binomial coefficients.

#### 2. Matrices and Determinants:

Matrices, algebra of matrices, type of matrices, determinants of order two and three, properties of determinants, Adjoint and evaluation of inverse of a square matrix using determinants and elementary transformations, Test of consistency and solution of simultaneous linear equations in two or three variables using determinants and matrices.

#### **3. Sets, Relations and Functions:**

Sets and their representations. Different kinds of sets. Venn diagrams. Operation on Sets. De-Morgan's laws and practical problems based on them. Ordered pair, relations, domain and co-domain of relations, equivalence relation. Function as a special case of relation, domain, co-domain, range of functions, invertible functions, even and odd functions, into, onto and one-to-one functions, special functions (polynomial, trigonometric, exponential, logarithmic, power, absolute value, greatest integer etc.), sum, difference, product and composition of functions. Inverse trigonometric functions (principal value only) and their elementary properties.

#### 4. Analytical Geometry:

(i)Two Dimensions: Cartesian coordinates, distance between two points, section formulae, shift of origin. Equation of a straight line in various forms, angle between two lines, distance of a point from a line; lines through the point of intersection of two given lines, equation of the bisector of the angle between two

lines, concurrency of lines; Centroid, orthocentre, incentre and circumcentre of a triangle. General equation of second degree. Nature of conic. Equation of a circle in various forms, equation of tangent, normal and chord of a circle. Parametric equations of a circle, intersection of a circle with a straight line/ circle, equation of a circle through the points of intersection of two circles and those of a circle and a straight line. Equation of a parabola, ellipse and hyperbola, their foci, directrices and eccentricity, parametric equations, equations of tangent and normal. Problems based on locus. Polar equation of a conic, polar equation of tangent, normal, asymptotes, chord of contact, auxiliary circle, director circle of a conic and related problems.

(ii)**Three Dimensions:** Distance between two points, direction cosines and direction ratios, equation of a straight line in space, skew lines, shortest distance between two lines, equation of a plane, distance of a point from a plane and a line, Cartesian and vector equation of a plane and a line. Angle between (i) two lines, (ii) two planes (iii) a line and a plane. Coplanar lines.

## 5. Calculus:

Limits, continuity and differentiability. Differentiation of the sum, difference, product and quotient of two functions. Differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite and implicit functions; Second and third order derivatives. Rolle's and Lagrange's Mean value Theorems, Applications of derivatives: Rate of change of quantities, monotonic Increasing and decreasing functions, Maxima and minima of functions of one variable, tangent and normal.

Integral as an anti-derivative, Integration of a variety of functions by substitution, by partial fractions and by Integration using trigonometric identities. Definite integral and their properties, application of definite integrals in finding the area under simple curves, especially lines, arcs of circles/parabolas/ellipses etc., area between the said curves (the region should be clearly identifiable).

## 6. Vector Algebra:

Vectors and scalars, magnitude and direction of a vector. Direction cosines/ratios of vectors. Types of vectors (equal, unit, zero, parallel and collinear vectors etc.), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Scalar (dot) product of vectors, projection of a vector on a line. Vector (cross) product of vectors. Scalar and Vector triple product and problems related to them.

# 7. Statistics and Probability:

Standard deviation, variance and mean deviation for grouped and ungrouped data. Dispersion and its various measures.

Probability: Probability of an event, addition and multiplication theorems of probability, conditional probability, Bayes' theorem, probability distribution of a random variate, Bernoulli trials and binomial distribution.

# Part-II Graduation Level

# 1. Abstract Algebra:

Definition and example of groups. General properties of groups, Order of an element of a group. Permutations: Even and Odd permutations. Groups of permutations. Cyclic group, Cayley's theorem. Subgroups, Cosets, Lagrange's theorem, Product Theorem of subgroups, Conjugate elements, conjugate complexes, Centre of a group, Simple group, centre of group, Normaliser of an element and of a complex. Normal subgroups, quotient Groups, Group homomorphism and isomorphism with elementary basic properties, fundamental theorem of homomorphism in groups. Isomorphism theorems of groups.

Ring Theory: Introduction to Rings, Zero divisors, Division ring, Ideals of a ring, Quotient rings, Integral Domain and Fields, their examples and properties.

## 2. Complex Analysis:

Functions, Limits, Continuity and Differentiability of complex functions. The extended plane and its spherical representation, Concept of an analytic function, Cartesian and Polar form of Cauchy-Riemann equations. Harmonic functions, Construction of an analytic function, Conformal mapping, Bilinear transformation and its properties, Fixed points, Cross ratio, Inverse point.

## 3. Calculus:

Polar Co-ordinates. Angle between radius vector and the tangent. Angle between curves in polar form. Length of polar sub-tangent and polar subnormal, Pedal equation of a curve, Derivatives of an arc, curvature, various formulae, Centre of curvature and chord of curvature and related problems. Partial differentiation, Euler's theorem on homogeneous functions, Chain rule of partial differentiation, Maxima and Minima of functions of two independent variables and of three variables connected by a relation, Lagrange's Method of undetermined multipliers. Asymptotes, double points, curve tracing, Envelopes and evolutes. Theory of Beta and Gamma functions. Quadrature and Rectification. Volume and Surfaces of solids of revolution. Differentiation and integration under the sign of integration. Evaluation of double and triple integrals and their applications in finding areas and volumes. Dirichlet's integral. Change of order of integration and changing into polar co-ordinates.

## 4. Differential Equations:

Ordinary differential equations of first order and first degree, differential equations of first order but not of first degree, Clairaut's equations, general and singular solutions, linear differential equations with constant coefficients, homogeneous differential equation, second order linear differential equations, simultaneous linear differential equations of first order. Partial differential equations of the first order, Solution by Lagrange's method.

## 5. Vector Calculus:

Curl, Gradient and Divergence & Identities involving these operators and related problems. Problems based on Stoke, Green and Gauss theorems.

# 6. Analytical Geometry of Three Dimensions:

- (i) Sphere: Equation of a sphere in various forms, Tangent Plane, Pole and Polar, Intersection of two spheres, Orthogonal spheres.
- (ii) Cone, Enveloping cone, Tangent plane, Reciprocal cone, Three mutually Perpendicular generators, Right circular cone.
- (iii) Cylinder, Right circular cylinder, Enveloping cylinder.

# 7. Statics and Dynamics:

Composition and resolution of co-planer forces, component of a force in two given directions, equilibrium of concurrent forces, parallel forces and moment, Friction, Virtual work and common catenary.

Velocity and acceleration, Velocities and accelerations along radial and transverse directions, and along tangential and normal directions, simple linear motion under constant acceleration, Laws of motion, projectile, Simple Harmonic Motion, Rectilinear motion under variable laws.

# Part-III Post Graduation Level

# 1. Linear Algebra and Metric Spaces:

Definition and examples of a vector space, subspace of a vector space, Linear combination, Linear dependence and independence of vectors. Direct product of vector spaces and internal direct sums of subspaces. Bases and dimension of a finitely generated spaces, Quotient space, Isomorphism, Linear transformation (Homomorphism), Rank and nullity of linear transformation. The characteristic equation of a matrix, Eigen values and Eigen vectors, Cayley-Hamilton theorem. Definition and example of a metric space, Diameter of a set, Bounded set, Open sphere, Interior point and Interior of a set, Derived and Closure of set, Closed set, Closed Sphere, Properties of Open and Closed sets, Boundary point of set, Convergent and Cauchy sequences, complete metric space, Cantor's Intersection theorem. Bolzano-Weierstrass theorem, Heine-Borel theorem, Compactness, connectedness, Cantor's ternary set.

## 2. Integral Transforms and Special Function:

Laplace transform: Definition and its properties. Rules of manipulations, Laplace theorems of derivatives and integrals, Properties of Inverse Laplace transforms, Convolution theorem, Complex inversion formulas, applications to the solutions of ordinary differential equations with constant and variable coefficients. Fourier Transform: Definition and properties of Fourier sine and cosine and complex transforms, Convolution theorem.

Legendre's polynomial/ Functions: Legendre's differential equation and associated Legendre's differential equations, Simple properties of Legendre's functions of first and second kind and the associated Legendre's function of integral order.

Bessel functions, Generating function, Integral formulae, Recurrence relations; Addition formula and other properties of Bessel functions.

# 3. Differential Geometry and Tensors

Differential Geometry: Curves in Space- Definition of unit tangent vector, tangent line, Normal line and Normal plane. Contact of a curve and a surface.

Tensors; Transformation of coordinates, Contravariant and covariant vectors, second order tensors, Higher order tensors. Addition, subtraction and multiplication of tensors, Contraction, Quotient Law, symmetric and skew symmetric tensors: Conjugate symmetric tensors of the second order, Fundamental tensor, Associated tensors, Christoffel symbols, Transformation law of Christoffel symbols, Covariant differentiation of vectors and tensors.

# 4. Numerical Analysis

Difference operators and factorial notation, Differences of polynomial, Newton's formulae for forward and backward interpolations. Divided differences, relation between divided differences and Simple difference. Newton's general interpolation formulae, Lagrange interpolation formula. Central differences, Gauss, Stirling and Bessel interpolation formulae. Numerical Differentiation. Numerical integration, Newton-Cotes quadrature formula, Gauss's, quadrature formulae, convergence, Estimation of errors, Transcendental and polynomial equations, bisection method, method of iteration, Trapezoidal, Simpson's and Weddle's rules.

# 5. Optimization Technique

Convex sets and their properties. Simplex Method. Concepts of duality in linear programming. Framing of dual programming. Assignment problems, Transportation problems. Theory of Games: Competitive strategies, minimax and maximin criteria, two-person zero-sum games with and without saddle point.

# Part – IV (Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning)

# I. Educational Psychology

- Concept, scope and functions of educational psychology.
- Physical, cognitive, social, emotional and moral developmental characteristics of adolescent learner and its implication for teaching-learning.
- Behavioural, cognitive and constructivist principles of learning and its implication for senior secondary students.
- Concept of mental health & adjustment and adjustment mechanism.
- Emotional intelligence and its implication in teaching learning.

# II Pedagogy and Teaching Learning Material (Instructional Strategies for Adolescent Learner)

- Communication skills and its use.
- Teaching models- advance organizer, concept attainment, information processing, inquiry training.
- Preparation and use of teaching-learning material during teaching.
- Cooperative learning.

#### III Use of Computers and Information Technology in Teaching Learning

- Concept of ICT, hardware and software.
- System approach.
- Computer assisted learning, computer aided instruction.

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#### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) BIOLOGY

### PAPER - II

#### Part – I Senior Secondary Level

#### 1. Taxonomy:

- Definition of life, Biodiversity, Need for classification, concept of species and taxonomical hierarchy, Binominal nomenclature.
- Tools for study of taxonomy Museums, Zoos, Herbaria, Botanical gardens.
- Classification of Living organism, five kingdom system.

#### 2. Structural Organization in Animals and Plants:

- Animal tissue: Types, Origin, Location, Structure and functions.
- Plant tissue: Anatomy of root, stem and leaves of monocots and dicots.
- Structure of flowers, types of Inflorescence and fruits.

#### 3. Plant Physiology:

- Water relations.
- Transpiration.
- Photosynthesis.
- Respiration.
- Mineral nutrition.
- Plant movements.
- Nitrogen and lipid metabolism.
- Growth and development.

### 4. Animal Physiology:

- Digestion and absorption.
- Breathing and respiration.
- Body fluids and circulation.
- Excretory products and their elimination.
- Locomotion and movement.
- Neural control and coordination.
- Chemical coordination and regulation.
- Reproduction.

### 5. Genetics and Evolution:

- Mendelian Inheritance.
- Chromosomal theory of inheritance.
- Sex determination in human beings.
- Linkage and crossing over.
- Origin of life theories and evidence.

# 6. Biology in Human Welfare:

- Economic importance of Protozoa, Helminths, Insects and Molluscs.
- Plant utilization- Cereals (Wheat, Rice), Fiber yielding plants (Cotton, Jute), Vegetable oils (Groundnut, Mustard), Spices (Coriander, Fenugreek and Cumin), Medicinal Plants (*Commiphora, Withania*), Beverages (Tea, Coffee).
- Basic concepts of Immunology, Vaccines, Pathogens, Parasites, Cancer, AIDS.

# 7. Environmental Biology:

- Organism and its environment.
- Biogeochemical cycles: Carbon, Nitrogen, Phosphorus.
- Environmental Pollution: Air, Water, Noise and Soil.

# **Part – II Graduation Level**

# 1. Cell Structure and Functions:

- Concept of Cell Theory; Structure of Prokaryotic and Eukaryotic cell; Plant and Animal cell.
- Structure, properties and functions of cell surface cell process.
- Cell organelles-structure and function.
- Chromosomes Structure, types, aberrations.
- Chemical constituents of living cells:
  - Biomolecules Structure and functions of proteins, carbohydrates, lipids, nucleic acids.
  - Enzymes Types, properties and enzyme action.
- Cell cycle; cell division mitosis, meiosis and their significance.

# 2. Taxonomy:

- Levels of Organization, Symmetry, Coelom and Metamerism in animals.
- Salient features and classification of non chordata and chordata upto order level with examples.
- Salient features and classification of plants (major groups upto class).
- Floral variations in Ranunculaceae, Apiaceae, Asteraceae and Poaceae.

# 3. Structure (External Internal), Reproduction and Life cycle of the following-

Amoeba, Obelia, Taenia, Ascaris, Pheretima, Periplanata, Rana and Rabbit.

# **4. Structure Reproduction and Life cycle of the following:** Algae, Fungi, Bryophytes, Pteridophytes, and Gymnosperms.

# 5. Developmental Biology:

• Gametogenesis, Spermatogenesis and Oogenesis.

- Fertilization, Cleavage, Blastula, Gastrula-Morphogenetic movement, Fate maps, embryonic induction.
- Metamorphosis of frog. Regeneration, Amphibian limb regeneration.
- Extra-embryonic membranes in chick.
- Placenta in mammals.
- Endocrine control of ovulation, pregnancy, parturition and lactation.

### 6. Reproduction in Higher Plants:

- Vegetative, Asexual and Sexual Reproduction.
- Pollination and Fertilization.
- Embryogenesis.

### 7. Ethology:

Types of Animal Behavior: Feeding, Learning, Instinctive, Motivated, Social and Reproductive.

# 8. Biostatistics:

- Mean, Mode, Median, Standard deviation.
- Tabular and graphical representation of data- histogram, Pie diagram, bar diagram, line graph.

# Part – III Post Graduation Level

### 1. Ecology:

Ecosystems- components and types. Energy flow; Food chain, food web. Environmental factors (climatic, edaphic and biotic). Population and ecological adaptations. Plant and animal succession.

### 2. Biotechnology and its Applications:

Definitions, scope and applications. Recombinant DNA technology. Transgenic animals and plants. Application in Health and Agriculture. Tissue culture- methods and application.

### 3. Techniques in Biology:

Electrophoresis, Centrifugation, Chromatography, Colorimetry, Spectrophotometry, ELISA.

### 4. Microscopy:

Principle of Light microscopy, Phase contrast microscopy and Electron microscopy.

# 5. Biogeography and Wild Life Conservation:

Endemism, Hot spots, Plant and Animal distribution with special reference to Rajasthan. Wild life conservation. Biosphere reserves, Wild life sanctuaries and National Parks.

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# **RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**

# SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) COMMERCE

# PAPER – II

### Part- I Senior Secondary Level

- Principles of book-keeping.
- Subsidiary books, final accounts, adjustment entries, opening and closing entries.
- Trial balance and rectification of errors.
- Depreciation, provisions and reserves.
- Partnership accounts.
- Company accounts- issue of shares, forfeiture and re-issue of shares, redemption of shares and debentures.
- Computers in accounting.
- Business organization-sole, partnership and joint stock company.
- Principles of management concept, nature and significance.
- Capital markets and types primary and secondary market.
- Marketing meaning, functions and role.
- Statistics for economics measures of central tendency, measures of dispersion and introduction to index numbers.
- Rural development key issues.
- Employment problems and policies.
- Economic reform since 1991 need and main features liberalization, globalization and privatization.

# **Part- II Graduation Level**

- Financial statements: meaning and importance.
- Tools for financial statement analysis.
- Cash flow statement.
- Cost accounting meaning and definition.
- Elements of cost material, labour and overhead.
- Auditing meaning and objectives.
- The Indian Contract Act, 1872 (Section 1 to 75).
- Consumer Protection Act, 2019.
- Functions of management- planning, organizing, staffing, directing and controlling.
- Human resources: meaning, scope, role and functions.
- Meaning and nature of entrepreneurship.

- Economic environment- meaning, factors affecting economic environment.
- Basic features of Indian economy.
- New economic policies and its effects.
- Foreign trade of India– volume, composition, direction and export promotion.
- National income- definition, measurement, distribution and economic welfare.

# Part- III Post Graduation Level

- Management accounting– meaning and functions.
- Working capital management.
- Capital budgeting.
- Business statistics– probability.
- Consumer behavior and buying motives.
- Marketing research.
- Role of advertising in marketing.
- Recent trends in management.
- Demand and demand forecasting.
- Public finance– central budget, deficit finance and fiscal management.
- Problems of Indian banking- central and commercial banking system, banking sector reforms.
- Monetary and fiscal policies.

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# **RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**

### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) DRAWING

# PAPER – II

#### Part I: Senior Secondary Level

### 1. Knowledge of Art and its Development:

- Ancient Literature on Art and Craft (specially Painting and Sculpture).
- Elements of Art and Principles of Composition.
- Three Dimensional and Two Dimensional approach in Art.
- Drawing and Rendering in Art.
- Folk Art (specially Rajasthan), Phad, Kawad, Puppet Art, Terracotta, Mandana.
- Medium and Techniques of Painting.

# 2. Indian Painting from Prehistoric to Modern Period:

- Prehistoric Art, Buddhist, Pal and Jain (Apbhransh), Mughal, Deccan, Rajasthani, Pahari, Company School and Raja Ravi Verma.
- Indian Renaissance- Bengal School and its Artists, Yamini Rai, Amrita Shergil.
- Modern Era and Artists.
  - 1 Kolkata Group.
  - 2 Progressive Artists Group.
  - 3 Shilpi Chakra
  - 4 Chola Mandal

### **Part II: Graduation Level**

- 1. History of Indian Architecture and Sculpture.
- Indus Valley Civilization.
- Sanchi, Bharhut, Amravati, Mathura, Gandhar, Karle, Bhaja.
- Ellora, Elephanta, Badami, Mahabalipuram, Udaigiri, Devgarh.
- Konark, Khajuraho, Meenakshi Temple.
- 2. Temples of Rajasthan- Harshnath (Sikar), Kiradu (Barmer), Osian (Jodhpur), Badoli (Kota), Dilwara (Mt. Abu, Sirohi), Ranakpur (Pali), Jagat (Udaipur), Abhaneri (Dausa).
- **3. Prominent Artists of India** K.K. Hebbar, N.S. Bendre, J.Swaminathan, K.G. Subramanium, Akbar Padmasi, Ganesh Pyne, Tayeb Mehta, Jogen Chaudhary,

G.R. Santosh, Rameshwar Broota, Vivan Sundaram, Amupam Sud, Somnath Hone, Bhupen Khakkar.

- 4. **Prominent Sculptors of India-** Devi Prasad Rai Chaudhary, Shanko Chaudhary, Dhanraj Bhagat, Ram Kinker Baij, Chintamani Karl, Mrinalini Mukherjee, Gopi Chand Mishra, Usha Rani Hooja, Arjun Prajapati.
- 5. Prominent Artists of Rajasthan- Ramgopal Vijayvargia, Bhawani Charan Gui, Bhoor Singh Shekhawat, Goverdhanlal Joshi, Devkinandan Sharma, Kripal Singh Shekhawat, Parmanand Choyal, Dwarka Prasad Sharma, Suresh Sharma, Ram Jaiswal, Jyoti Swaroop.

# Part III: Post Graduation Level

- 1. Indian Aesthetics- Rasa Theory (Bharat Muni to Abhinava Gupta).
- **2. Western Art-** Byzantine, Gothic (Giotto), High Renaissance- Leonardoda-Vinci, Michael Angelo, Sanzio Raphael.
- **3. Western Modern Art-** Impressionism (Adouard Manet, Claude Monet, Edgar Degas), Post impressionism (Vincent Van Gogh, Paul Gauguin, Paul Cezanne), Fauvism (Henri Matisse), Cubism (Pablo Picasso, George Braque), Expressionism (Edward Munch, Wassily, Kandanski), Dadism and Surrealism (Marchel Duchamp, Salvador Dali), Abstract Expressionism (Paul Klee, Joan Miro, Jackson Pollock).

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# **RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**

### SYLLABUS FOR EXAMINATION FOR THE POST OF LECTURER (SCHOOL EDUCATION) MUSIC

# PAPER – II

#### खण्ड— I उच्च माध्यमिक स्तर

- पारिभाषिक शब्दावली एवं मूल सिद्धांत— नाद (जाति एवं गुण), श्रुति, स्वर, सप्तक, ग्राम, मूर्छना, वर्ण, अलंकार, जाति, थाट, राग, राग—लक्षण, ताल (ताल के दस प्राण), मात्रा, लय (प्रकार), तान (प्रकार), गमक (प्रकार), कण, मींड, वादी, संवादी, अनुवादी, विवादी, आविर्भाव, तिरोभाव, अल्पत्व—बहुत्व, स्वस्थान, निबद्ध—अनिबद्ध गान, गत (प्रकार— रज़ाखानी, मसीतखानी), जोड़—आलाप, झाला, कृन्तन, जमजमा, घसीट, पेशकार, कायदा, रेला, मुखड़ा, मोहरा, परन, नृत्त, नृत्य, नाट्य, अभिनय, तांडव, लास्य ।
- हिन्दुस्तानी संगीत पद्धति के प्रमुख सिद्धांत, राग समय सिद्धांत, भारतीय स्वरलिपि पद्धति का विकास तथा भातखंडे एवं पलुस्कर स्वरलिपि पद्धति का अध्ययन ।
- वाद्य अध्ययन— वीणा, सितार, तानपुरा, सरोद, सारंगी, वायलिन, दिलरुबा, बांसुरी, तबला, पखावज वाद्यों का उद्गम, विकास, वर्तमान स्वरुप तथा प्रमुख कलाकार ।
- घराना गायन, तंत्री वाद्य तथा अवनद्ध वाद्यों के प्रमुख घराने ।
- लोक संगीत एवं शास्त्रीय नृत्य राजस्थानी लोक संगीत के गायन–वादन–नृत्य पक्ष, संगीताश्रित जाति/समुदाय की जानकारी । भारत की प्रमुख शास्त्रीय नृत्य शैलियाँ ।
- राग— यमन, भैरव, देस, देसकार, बागेश्री, मालकोंस, वृन्दावनी सारंग, बिहाग, भूपाली, खमाज, भैरवी ।
  ताल— दादरा, रूपक, तीव्रा, कहरवा, एकताल, चौताल, दीपचंदी, झूमरा, धमार, त्रिताल, तिलवाड़ा, पंजाबी ।

#### खण्ड –II स्नातक स्तर

 ऐतिहासिक अध्ययन – प्राचीन, मध्यकालीन तथा आधुनिक काल में भारतीय संगीत का इतिहास, प्रमुख ग्रंथों में वर्णित श्रुति–स्वर–सप्तक, प्रमुख ग्रन्थ एवं ग्रंथकारों का अध्ययन, राग वर्गीकरण का ऐतिहासिक अध्ययन ।

जाति गायन, ध्रुवा गायन, प्रबंध, रागालाप, रूपकालाप, आलप्ति, गीति–वानी, वाग्गेयकार लक्षण, गायक तथा वादक के गुण–दोष ।

- कर्नाटक संगीत कर्नाटक संगीत की त्रिमूर्ति, प्रमुख वाद्य, गीत शैलियाँ, स्वर तथा ताल व्यवस्था, कटपयादि का अध्ययन । हिन्दुस्तानी तथा कर्नाटक संगीत में प्रचलित गीत शैलियों का अध्ययन।
- पाश्चात्य संगीत— पाश्चात्य स्वरलिपि पद्धति, हारमोनी—मेलोडी, कॉर्ड, स्केल—डायटोनिक, क्रोमेटिक, ईक्वली टेम्पर्ड । भारतीय, पाश्चात्य तथा कर्नाटक संगीत के शुद्ध स्वर सप्तक का अध्ययन । हिन्दुस्तानी तथा पाश्चात्य स्वरों की आन्दोलन संख्या तथा सेंट एवं सेवर्ट पद्धति से सप्तक विभाजन ।
- राग– दस ठाट के आश्रय रागों का अध्ययन । शुद्धकल्याण, केदार, कामोद, हमीर, छायानट, हिंडोल, अल्हैया–बिलावल, दुर्गा, शंकरा, देसी, जोगिया, विभास, गुणक्री, रागेश्री, मियां मल्हार, बहार, जौनपुरी, दरबारी, अडाना, पूरिया, पूरियाधनाश्री, सोहनी, बसंत, श्री, कालिंगडा, मुल्तानी, जैजैवंती, तिलककामोद का परिचय।
  दक्षिणी संगीत से उत्तर में प्रचलित राग– मधुवंती, हंसध्वनि, कलावती, किरवानी, चारुकेशी, आभोगी का परिचय।

तालः रूद्र, मणि, गजझम्पा, शिखर, मत्त, लक्ष्मी, ब्रह्म।

 संगीतज्ञों का जीवन वृत्त और योगदान— स्वामी हरिदास, तानसेन, मीराबाई, महाराणा कुम्भा, नवाब वाजिद अली शाह, राजा चक्रधरसिंह, बालकृष्णबुवा इचलकरंजीकर, विष्णु नारायण भातखण्डे, विष्णु दिगंबर पलुस्कर, अल्लादिया खां, कृष्णराव शंकर पंडित, फैयाज़ खाँ, बड़े गुलाम अली खान, अब्दुल करीम खान, कुमार गंधर्व, ओमकारनाथ ठाकुर, मल्लिकार्जुन मंसूर, भीमसेन जोशी, जसराज, किशोरी अमोनकर, अमीर खां, विनायकराव पटवर्धन, इमदाद खां, इनायत खां, अलाउद्दीन खां, मुश्ताक अली खां, बिस्मिल्लाह खां, रवि शंकर, राम नारायण, निखिल बनर्जी, अब्दुल हलीम जाफर खां, पन्नालाल घोष, कुदऊ सिंह, शिव कुमार शर्मा, असद अली खां, कण्ठे महाराज, अनोखेलाल मिश्र, बिंदादिन महाराज, भैया गणपतराव, बिरजू महाराज, आचार्य कैलाश चन्द्रदेव बृहस्पति, लालमणि मिश्र ।

#### खण्ड –III स्नातकोत्तर

- वृन्दगान तथा वृंदवादन। ध्वनि सिद्धांत के मूल तत्त्व, उप–स्वर (हार्मोनिक्स)। रस सिद्धांत, राग और रस । मानव कंठ तथा कान की बनावट । राग ध्यान तथा राग चित्र । वैदिककालीन संगीत का अध्ययन । कला, सौन्दर्य तथा ललित कलाओं का परस्पर सम्बन्ध ।
- प्रमुख रागांग एवं रागों का अध्ययन–

अंग	राग	अंग	राग
कान्हड़ा	नायकी, कौंसी	तोड़ी	गुर्जरी, बिलासखानी
सारंग	मधुमाद, शुद्ध सारंग	बिलावल	देवगिरी, यमनी
बिहाग	बिहागडा, मारू बिहाग	खमाज	झिंझोटी, तिलंग
कल्याण	पूरियाकल्याण, श्याम कल्याण	मल्हार	गौड़मल्हार, मेघ मल्हार
कौंस	चंद्रकौंस, जोगकौंस	भैरव	बैरागी, अहीर भैरव
धनाश्री	पटदीप, भीमपलासी	नट	नट भैरव, नट बिहाग

भाग— IV (शैक्षिक मनोविज्ञान, शिक्षा शास्त्र, शिक्षण—अधिगम सामग्री, कम्प्यूटर एवं सूचना तकनीकी का शिक्षण—अधिगम में उपयोग)

### I. शैक्षिक मनोविज्ञान

- शैक्षिक मनोविज्ञान की अवधारणा, क्षेत्र तथा कार्य।
- किशोर अधिगमकर्ता की शारीरिक, संज्ञानात्मक, सामाजिक, संवेगात्मक एवं नैतिक विकासात्मक विशेषताएँ तथा शिक्षण–अधिगम के लिए इसके निहितार्थ।
- अधिगम के व्यवहारवादी, संज्ञानात्मक एवं निर्मितवादी (Constructivist) सिद्धान्त तथा उच्च माध्यमिक स्तर के विद्यार्थियों के लिए इसके निहितार्थ।
- मानसिक स्वास्थ्य एवं समायोजन की अवधारणा तथा समायोजन युक्तियाँ।
- संवेगात्मक बुद्धिमत्ता और शिक्षण–अधिगम में इसके निहितार्थ।

### II. शिक्षा शास्त्र एवं शिक्षण–अधिगम सामग्री (किशोर अधिगमकर्ता हेतु अनुदेशनात्मक व्यूह रचनाएँ)

- सम्प्रेषण कौशल तथा इसका उपयोग।
- शिक्षण प्रतिमान (Teaching Models) अग्रिम व्यवस्थापक, संप्रत्यय सम्प्राप्ति, सूचना प्रक्रिया (Information processing), पृच्छा प्रशिक्षण (Inquiry Training)।
- शिक्षण के दौरान शिक्षण–अधिगम सामग्री तैयार करना तथा उपयोग करना।
- सहकारी अधिगम

### III. शिक्षण-अधिगम में कम्प्यूटर एवं सूचना तकनीकी का उपयोग

- आई सी टी (ICT), हार्डवेयर (Hardware) एवं सॉफ्टवेयर (Software) की अवधारणा
- प्रणाली उपागम
- कम्प्यूटर सहाय अधिगम(CAL), कम्प्यूटर सहाय अनुदेशन (CAI)

For the competitive examination for the post of School Lecturer:-

- 1. The question paper will carry maximum 300 marks.
- 2. Duration of question paper will be Three Hours.
- 3. The question paper will carry 150 questions of multiple choices.
- 4. Negative marking shall be applicable in the evaluation of answers. For every wrong answer one third of the marks prescribed for that particular question shall be deducted.
- 5. Paper shall include following subjects: -
  - (i) Knowledge of Subject Concerned: Senior Secondary Level
  - (ii) Knowledge of Subject Concerned: Graduation Level.
  - (iii) Knowledge of Subject Concerned: Post Graduation Level.
  - (iv) Educational Psychology, Pedagogy, Teaching Learning Material, Use of Computers and Information Technology in Teaching Learning.

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