

# Aligarh Muslim University

## Scheme of Exam for Direct Recruitment of Post Graduate Teacher in AMU Schools

The written test is of 120 marks (120 objective type multiple choice question) carrying 01 mark for each question. The duration of written test will be 120 minutes without any time limit for each part individually.

### **Section Name – Nature of Questions**

#### **Part I – Proficiency in Languages**

**(12 marks)**

- A. General English (06 questions)
- B. General Hindi (06 questions)

#### **Part II – General awareness, Reasoning & Proficiency in computers**

**(18 marks)**

- a) General Awareness & Current Affairs and Aligarh Movement (10 questions)
- b) Reasoning Ability (4 questions)
- c) Computer Literacy (4 questions)

#### **Part III – Perspectives on Education and leadership (25 questions)**

**(25 marks)**

- (a) Understanding the learner (5 questions)
- (b) Understanding teaching learning (5 questions)
- (c) Creating Conducive learning (5 questions)
- (d) School Organization and leadership (5 questions)
- (e) Perspectives in Education (05 questions)

#### **Part IV – subject – specific Syllabus**

**(65 marks)**

#### **Professional Competency Test:**

The Professional Competency Test is 70 marks (Demo Teaching 70 marks)

**Note:** The weightage of Written Test & Demo Teaching in drawing the Final Merit list will be 30:70 respectively.

## Scheme & Syllabus of Exam for Direct Recruitment of PGTs:

### Part I – Proficiency in Language

(12 marks)

- (a) General English (06 questions)  
Reading comprehension, word power, Grammar & usage)
- (b) General Hindi (6 questions)  
पठन कौशल शब्द सामर्थ्य, व्याकरण एवं प्रयुक्ति

### Part II – General Awareness, Reasoning & Proficiency in Computers

(18 marks)

- (a) General Awareness & Current Affairs and Aligarh Movement (18 questions)  
(b) Reasoning Ability (5 questions)  
(c) Computer literacy (5 questions)

### Part III – Perspectives on Education and Leadership

(25 marks)

#### (a) Understanding the Learner (10 questions)

- Concept of growth, maturation and development, principles and debates of development, development tasks and challenges.
- Domains of Development: Physical, Cognitive, Socio-emotional, Moral etc., deviations in development and its implications.
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- Understanding Adolescence: Needs, challenges and implications for designing institutional support.
- Role of Primary and Secondary Socialization agencies. Ensuring Home School continuity.

#### (b) Understanding Teaching Learning (15 questions)

- Theoretical perspectives on learning – Behaviorism, Cognitivism and Constructivism with special reference to their implications for:
  - i. The role of teacher
  - ii. The role of learner
  - iii. Nature of teacher-student relationship
  - iv. Choice of teaching methods
  - v. Classroom environment
  - vi. Understanding of discipline, power etc.
- Factors affecting learning and their implications for:
  - i. Designing classroom instructions,
  - ii. Planning student activities and,
  - iii. Creating learning spaces in school.
- Planning and Organization of Teaching – Learning
  - i. Concept of Syllabus and Curriculum, Over and Hidden Curriculum, Principles of curriculum organizations.

- ii. Competency based Education, Experiential learning, etc.
  - iii. Instructional Plans :- Year Plan , unit Plan , Lesson Plan
  - iv. Instructional material and resources.
  - v. Information and Communication Technology (ICT) for teaching – learning
  - vi. Evaluation: Purpose, types and limitations. Continuous and Comprehensive Evaluation, Characteristics of a good tool.
  - vii. Assessment of learning, for learning and as learning: Meaning, purpose and consideration in planning each.
- Enhancing Teaching learning processes: Classroom Observation and Feedback, Reflections and Dialogues as a means of constructivist teaching.

**(c) Creating Conducive Learning Environment (04 questions)**

- The concepts of Diversity, disability and Inclusion, implications of disability as social construct, types of disabilities – their identification and interventions.
- Concept of School Mental Health, addressing the curative, preventive and promotive dimensions of mental health for all students and staff. Provisioning for guidance and counselling.

**(d) School Organization and Leadership (4 questions)**

- Leader as reflective practitioner, team builder, initiator, coach and mentor.
- Perspectives on School Leadership: instructional, distributed and transformative
- Vision building, goal setting and creating a School Development plan
- Using School Processes and forums, for strengthening teaching learning – Annual Calendar, time – tabling, parent teacher forums, school assembly, teacher development forums, using achievement data for improving teaching – learning, School Self-Assessment and improvement
- Creating partnerships with community, industry and other neighbouring schools and Higher Education Institutes- forming learning communities

**(e) Perspectives in Education (2 questions)**

- NEP – 2020: Curriculum and Pedagogy in Schools: Holistic & Integrated Learning: Equitable and inclusive Education: Learning for All: Competency based learning and Education.
- Guiding Principles for Child Rights, Protecting and provisioning for rights of children to safe and secure school environment, Right of Children to free and Compulsory Education Act, 2009,
- Historically studying the National Policies in education with special reference to school education;
- School Curriculum Principles: Perspective, Learning and Knowledge, Curricular Areas, School Stage, Pedagogy and Assessment

**Part IV- Subject – specific Syllabus**

**(65 marks)**

**Note:** The weightage of Written Test & Demo Teaching in drawing the Final Merit list will be 30:70 respectively.

## Syllabus for the post of PGT-Geography

Subject specific syllabus includes the concepts of NCERT/CBSE syllabus and Text Books (Classes XI & XII), however, the questions will be testing the depth of understanding and application of these concepts at the level of Post-Graduation.

### **Geography as a Discipline**

Geography as an integrating discipline, as a science of spatial attributes

- Branches of Geography: Physical Geography and Human Geography

### **The Earth**

- Origin and evolution of the earth
- Interior of the earth Earthquakes and volcanoes: causes, types and effects
- Distribution of oceans and continents: Wegener's continental drift theory and plate tectonics

### **Landforms**

- Geomorphic process: weathering, mass wasting, erosion and deposition, soil-formation
- Landforms and their evolution-Brief erosional and depositional features

### **Climate**

Atmosphere- composition and structure; elements of weather and climate.

- Solar Radiation-Insolation-angle of incidence and distribution heat budget of the earth-heating and cooling of atmosphere (conduction, convection, terrestrial radiation and advection): temperature-factors controlling temperature; distribution of temperature-horizontal and vertical, inversion of temperature.
- Atmospheric circulation and weather systems - Pressure-pressure belts, winds-planetary seasonal and local; air masses and fronts, tropical and extra tropical cyclones.
- Water in the atmosphere-Precipitation- evaporation, condensation-dew, fog, mist, and cloud, rainfall-types and world distribution.
- World Climate and Global Concerns.

### **Water (Oceans)**

- Basics of Oceanography
- Oceans-distribution of temperature and salinity
- Movements of ocean water-waves, tides and currents; submarine reliefs

### **Life on the Earth**

- Biosphere- importance of plants and other organisms: biodiversity and conservation.

### **India-Physical Environment**

- India: Location, space relations, India's place in the world

## **Physiography**

- Structure and Relief, Physiographic Divisions
- Drainage systems: Concept of river basins, watershed; the Himalayan and the Peninsular rivers

## **Climate, Vegetation and Soil**

- Weather and climate spatial and temporal distribution of temperature, Indian monsoon mechanism, onset and withdrawal.
- Natural vegetation-forest types and distribution: wild life, conservation; biosphere reserves.

## **Hazards and Disasters: Causes, Consequences and Management**

- Floods, Cloudbursts
- Droughts: types and impact
- Earthquakes and Tsunami Cyclones: features and Impact Landslides
- Landslides

## **Fundamentals of Maps**

- Geospatial data, Concept of Geographical data matrix, Point, line, area data.
- Maps-types; scales-types; construction of simple linear scale, measuring distance, finding direction and use of symbols.
- Map projection- Latitude, longitude and time, typology, construction and properties of projection: Conical with one standard parallel and Mercator's projection

## **Topographic and Weather Maps**

- Study of topographic maps (1: 50,000 or 1: 25,000 Survey of India maps); contour cross section and identification of landforms-slopes, hills, valleys, waterfall, cliffs; distribution of settlements.
- Satellite imageries, stages in remote sensing data acquisition, platform and sensors and data products, (photographic and digital)

## **People**

- The World Population-distribution, density and growth.
- Population change-Components of population change, Demographic Transition.
- Human development-concept; selected indicators, international comparisons.
- Population: distribution, density and growth; composition of population - linguistic, religious; sex, rural-urban and occupational-regional variations in growth of population.

## **Human Activities**

- Primary activities concept and changing trends; gathering, pastoral, mining, subsistence agriculture, modern agriculture; people engaged in agricultural and allied activities – some examples from selected countries.
- Secondary activities-concept; manufacturing types - household, small scale, large scale, agro based and mineral based industries;
- Tertiary activities-concept: trade, transport and tourism; services: people engaged in tertiary activities.
- Quaternary activities- concept; people engaged in quaternary activities - case study from selected countries.

## **Human Settlements**

- Rural settlements-types and distribution.
- Urban settlements-types, distribution and functional classification.

## **Transport, Communication and Trade**

- Land transport roads, railways; trans- continental railways Water transport- inland waterways; major ocean routes.
- Air transport-Intercontinental air routes Oil and gas pipelines.
- Satellite communication and cyber space- importance and usage for geographical information; use of GPS.
- International trade- bases and changing patterns; ports as gateways of international trade; role of WTO in international trade.

## **Resources and Development**

- Land resources general land use, agricultural land use: geographical conditions and distribution of major crops (Wheat, Rice, Tea, Coffee, Cotton, Jute, Sugarcane and Rubber): agricultural development and problems.
- Water resources-availability and utilization- irrigation, domestic, industrial and other uses; scarcity of water and conservation methods-rain water harvesting and watershed management.
- Mineral and energy resources- distribution of metallic (Iron ore, Copper, Bauxite, Manganese); non-metallic (Mica, Salt) minerals; conventional (Coal, Petroleum, Natural gas and Hydroelectricity) and non-conventional energy sources (solar, wind, biogas) and conservation.
- Planning in India- target group area planning(case study); idea of sustainable development (case study)

### **Transport, Communication and International Trade**

- Transport and communication-roads, railways, waterways and airways: oil and gas pipelines; Geographical information and communication net works.
- International trade- changing pattern of India's foreign trade; sea ports and their hinterland and airports.

### **Geographical Perspective on selected issues and problems**

- Environmental pollution; urban-waste disposal
- Urbanization, rural-urban migration, problems of slums
- Land degradation