MAHARASHTRA STATE ELIGIBILITY TEST (SET)

महाराष्ट्र राज्य व्याख्यातापदासाठी राज्यस्तरीय पात्रता चाचणी (सेट) परीक्षा

Conducted by University of Pune
(AS THE STATE AGENCY)

Syllabus for PAPER-I

UNIVERSITY OF PUNE
Ganeshkhind, Pune-411007

MAHARASHTRA STATE ELIGIBILITY TEST

Syllabus for PAPER-I

The main objective is to assess the teaching and research capabilities of the candidates. Therefore, the test is aimed at assessing the teaching and general/research aptitude as well as their awareness. They are expected to possess and exhibit cognitive abilities. Cognitive abilities include comprehension, analysis, evaluation, understanding the structure of arguments and deductive and inductive reasoning. The candidates are also expected to have a general awareness and knowledge of sources of information. They should be aware of interaction between people, environment and natural resources and their impact on quality of life. The details are given in the following sections :

NOTE : (i) Each section gets equal weightage : five questions and 10 marks from each section.

(ii) Whenever pictorial questions are set for the sighted candidates a passage followed by equal number of questions should be set for the visually handicapped candidates.

I. Teaching Aptitude
Teaching : Nature, objectives, characteristics and basic requirements;
Learners characteristics;
Factors affecting teaching;
Methods of teaching;
Teaching aids;
Evaluation systems.

II. Research Aptitude
Research : Meaning, characteristics and types;
Steps of research;
Methods of research;
Research Ethics;
Paper, article, workshop, seminar, conference and symposium;
Thesis writing : its characteristics and format.

III. Reading Comprehension
A passage to be set with questions to be answered.

IV. Communication
Communication : Nature, characteristics, types, barriers and effective classroom communication.

V. Reasoning (Including Mathematical)
Number series; letter series; codes;
Relationships; classification.

VI. Logical Reasoning
Understanding the structure of arguments;
Evaluating and distinguishing deductive and inductive reasoning;
Verbal analogies : Word analogy-Applied analogy;
Verbal classification;
Reasoning Logical Diagrams : Simple diagrammatic relationship, multidiagrammatic relationship; Venn diagram; Analytical Reasoning.

VII. Data Interpretation
Sources, acquisition and interpretation of data;
Quantitative and qualitative data;
Graphical representation and mapping of data.

VIII. Information and Communication technology (ICT)
ICT : meaning, advantages, disadvantages and uses;
General abbreviations and terminology;
Basics of internet and e-mailing.

IX. People and Environment
People and environment interaction;
Sources of pollution;
Pollutants and their impact on human life, exploitation of natural and energy resources;
Natural hazards and mitigation.

X. Higher Education System : Governance, Polity and Administration
Structure of the institutions for higher learning and research in India; formal and distance education; professional/technical and general education; value education; governance, polity and administration; concept, institutions and their interactions.

SAMPLE QUESTIONS

I. Teaching Aptitude
1. Which one of the following is the main objective of teaching ?
   (A) To give information related to the syllabus.
   (B) To develop thinking power of students.
   (C) To dictate notes to students.
   (D) To prepare students to pass the examination.

   Key : (B)

2. Which one of the following is a good method of teaching ?
   (A) Lecture and Dictation.
   (B) Seminar and Project.
   (C) Seminar and Dictation.
   (D) Dictation and Assignment.

   Key : (B)

3. Teacher uses teaching aids for
   (A) Making teaching interesting.
   (B) Making teaching within understanding level of students.
   (C) Making students attentive.
   (D) The sake of its use.

   Key : (B)

4. Effectiveness of teaching depends on
   (A) Qualification of teacher.
   (B) Personality of teacher.
   (C) Handwriting of teacher.
   (D) Subject understanding of teacher.

   Key : (D)

5. Which of the following is not characteristic of a good question paper ?
   (A) Objectivity.
   (B) Subjectivity.
   (C) No use of vague words.
   (D) Reliable.

Key : (B)

II. Research Aptitude

1. A researcher is generally expected to :
   (A) Study of existing literature in a field.
   (B) Generate new principles and theories.
   (C) Synthesize the ideas given by others.
   (D) Evaluate the findings of a study.

Key : (B)

2. One of the essential characteristics of research is :
   (A) Replicability.
   (B) Generalizability.
   (C) Usability.
   (D) Objectivity.

Key : (D)

3. The Government of India conducts Census aftger every 10 years. The method of research used in this process is :
   (A) Case study.
   (B) Developmental.
   (C) Survey.
   (D) Experimental.

Key : (C)

4. An academic association assembled at one place to discuss the progress of its work and future plans. Such an assembly is known as a :
   (A) Conference.
   (B) Seminar.
   (C) Workshop.
   (D) Symposium.

Key : (A)

5. An investigator studied the census data for a given area and prepared a write-up based on them. Such a write-up is called :
   (A) Research paper.
   (B) Article.
   (C) Thesis.
   (D) Research report.

Key : (B)

III. Reading Comprehension

Read the following passage and answer the question Nos. 1 to 5.

The Constitution guarantess every citizen the fundamental right to equality. Yet afer 50 years of independence, just one perusal of the female infant mortality figures, the literacy rates and the employment opportunities for women is sufficient evidence that discrimination exists. Almost predictably, this gender, bias is evident in our political system as well. In the 13th Lok Sabha, there were only 43 women MPs out of total of 543; it is not a surprising figure, for never has women's representation in Parliament been more than 10 per cent.

Historically, the manifestos of major political parties have always encouraged womens participation. It has been merely a charade. So, women's organizations, denied a place on merit, opted for the last resort; a reservation of seats for women in parliament and State Assemblies. Parties, which look at everything with a vote bank in mind, seemed to endorse this. Alas, this too was a mirage.

But there is another aspect also. At a time when caste is the trump card, some politicians want the bill to include further quotas for women from among minorities and backward castes. There is more to it. A survey shows that there is a general antipathy towards the bill. It is actually a classic case of doublespeak : in public, politicians were endorsing women's reservation but in the backrooms of parliament, they were busy sabotaging it. The resons are clear : Men just don's want to vacate their seats of power.

1. The problem raised in the passage reflects badly on our :
    (A) Political system.
    (B) Social behaviour.
    (C) Individual behaviour.
    (D) Behaviour of a group of people.

    Key : (B)

2. According to the passage, political parties have mostly in mind :
    (A) Economic prosperity.
    (B) Vote bank.
    (C) People' welfare.
    (D) patriotism.

    Key : (B)

3. "Trump Card" means :
    (A) Trying to move a dead horse.
    (B) Playing the card cautiously.
    (C) Sabotaging all the moves by others.
    (D) Making the final jolt for success.

    Key : (D)

4. The sentence "Men just don't want to vacate their seats of power" implies :
    (A) Lust for power.
    (B) Desire to serve the nation.
    (C) Conviction in one's own political abilities.
    (D) Political corruption.

    Key : (A)

5. What is the percentage of women in the Lok Sabha :
    (A) 10.
    (B) 7.91.
    (C) 43.
    (D) 9.1.

    Key : (B)

IV. **Communication**
    1. Informal communication network within the organization is known as :
        (A) Interpersonal communication.
        (B) Intrapersonal Communication.
        (C) Mass Communication.
        (D) Grapevine Communication.

    Key : (D)

2. TV Channel launched for covering only Engineering and Technology subjects is known as :
    (A) Gyan Darshan.
    (B) Vyas.
    (C) Eklavya.
    (D) Kisan.

                                                                                        Key : (C)

3. In which state the maximum number of periodicals are brought out for public information :
    (A) Uttar Pradesh.
    (B) Tamil Nadu.
    (C) Kerala.
    (D) Punjab.

                                                                                        Key : (C)

4. The main objective of public broadcasting system i.e. Prasar Bharti is :
    (A) Inform, Entertainment & Education.
    (B) Entertain, Information & Interaction.
    (C) Educate, Interact & entertain.
    (D) Entertainment only.

                                                                                        Key : (A)

5. The competency of an effective communicator can be judged on the basis of :
    (A) Personality of communicator.
    (B) Experience in the field.
    (C) Interactivity with target audience.
    (D) Meeting the needs of traget audience.

                                                                                        Key : (D)

V. Reasoning (Including Mathematical)
1. Which one of the following belongs to the category of homogeneous data :
    (A) Multi-storeyed houses in a colony.
    (B) Trees in a garden.
    (C) Vehicular traffic on a highway.
    (D) Student population in a class.

                                                                                        Key : (A)

2. In which of the following ways a theory is not different from a belief ?
    (A) Antecedent-consequent.
    (B) Acceptability.
    (C) Verifiability.
    (D) Demonstratability.

                                                                                        Key : (B)

3. The state - "Honesty is the best policy" is :
    (A) A fact.
    (B) A value.
    (C) An opinion.
    (D) A value judgement.

                                                                                        Key : (D)

4. Which one is like pillar, pole and standard ?
   (A) Beam.
   (B) Plank.
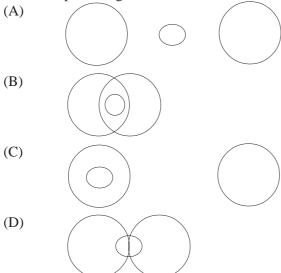   (C) Shaft.
   (D) Timber.

   Key : (A)

5. Following incomplete series is presented. Find out the number which should come at the place of question mark which will complete the series :
   4, 16, 36, 64 ?
   (A) 300.
   (B) 200.
   (C) 100.
   (D) 150.

   Key : (C)

VI. Logical Reasoning

1. The following question is based on the diagram given below. If the two big circles represent animals living on soil and those living in water, and the small circle stands for the animals who both live on soil and in water, which figure represents the relationships among them.

   (A)
   (B)
   (C)
   (D)

   Key : (D)

2. Of the following statements, there are two statements both of whcih cannot be true but both can be false. Which are these two statements ?

   (i) All machines make noise.
   (ii) Some machines are noisy.
   (iii) No machine makes noise.
   (iv) Some machines are not noisy.

   (A) (i) and (ii).
   (B) (iii) and (iv).
   (C) (i) and (iii).
   (D) (ii) and (iv).

   Key : (C)

3. In the following question a statement is followed by two assumptions (i) and (ii). An assumption is something supposed or taken for granted. Consider the statement and the following assumptions and decide which of the following assumptions is implicit in the statement.

   Statement : We need not worry about errors but must try to learn from our errors.

   Assumptions : (i) Errors may take place when we are carrying out certain work.

   (ii) We are capable of benefiting from the past and improve our chances of error-free work.

   (A) Only assumption (i) is implicit.
   (B) Only assumption (ii) is implicit.
   (C) Either assumption (i) or (ii) is implicit.
   (D) Both the assumptions are implicit.

   Key : (D)

4. The question below is followed by two arguments numbered (i) and (ii). Decide which of the arrguments is 'strong' and which is 'weak'. Choose the correct answer from the given below :

   (A) (B) (C) (D)

   Should the press exercise some self-restraint ?

   (i) Yes, they should not publish news items which may incite the readers to indulge in wrong practices.

   (ii) No, it is the responsibility of the press to present the truth irrespective of the consequences.

   (A) Only the argument (i) is strong.
   (B) Only the argument (ii) is strong.
   (C) Neither argument (i) nor argument (ii) is strong.
   (D) Both the arguments (i) and (ii) are strong.

   Key : (A)

5. Study the argument and the inference drawn from that argument, given below carefully.

   Argument : Anything that goes up definitely falls down. Helicopter goes up.

   Inference : So the helicopter will definitely fall down.

   What in your opinion is the inference drawn from the argument ?

   (A) Valid.
   (B) Invalid.
   (C) Doubtful.
   (D) Long drawn one.

   Key : (D)

VII. **Data Interpretation**

   Four students W, X, Y, Z appeared in four papers, I, II, III and IV in a test.

   Their scores out of 100 are given below :

Students	Papers			
	I	II	III	IV
W	60	81	45	55
X	59	43	51	A
Y	74	A	71	65
Z	72	76	A	68

   Where 'A' stands for absent

   Read the above table and answer below mentioned questions 1 to 5.

1. Which candidate has secured between 60-65% marks in aggregate :
    (A) W.
    (B) X.
    (C) Y.
    (D) Z.

Key : (A)

2. Who has obtained the lowest average in aggregate :
    (A) W.
    (B) X.
    (C) Y.
    (D) Z.

Key : (B)

3. Who has obtained the highest average :
    (A) W.
    (B) X.
    (C) Y.
    (D) Z.

Key : (A)

4. In which paper the lowest marks were obtained by the candidates :
    (A) I.
    (B) II.
    (C) III.
    (D) IV.

Key : (B)

5. Which candidate has secured the highest percentage in the papers appeared :
    (A) W.
    (B) X.
    (C) Y.
    (D) Z.

Key : (D)

VIII. Information and Communication technology (ICT)

1. ICT stands for :
    (A) Information common technology.
    (B) Information and communication technology.
    (C) Information and computer technology.
    (D) Inter connected technology.

Key : (B)

2. Computer can :
    (A) Process both quantitative and qualitative information.
    (B) Store huge information.
    (C) process information fast and accurately.
    (D) All the above.

Key : (D)

3. Satellite Communication works through :
   (A) Radar.
   (B) Transponder.
   (C) Receptor.
   (D) Transmitter.

   Key : (B)

4. A computer is that machine which works more like a human brain. This definition of computer is :
   (A) Correct.
   (B) Incorrect.
   (C) partially correct.
   (D) None of the above.

   Key : (A)

5. Information and communication technology includes :
   (A) E-mail.
   (B) Internet.
   (C) Educational television.
   (D) All the above.

   Key : (D)

IX. People and Environment

1. It is believed that our globe is warming progressively. this global warming will eventually result in :
   (A) increase in availability of usable land.
   (B) uniformity of climate at equator and poles.
   (C) fall in the sea level.
   (D) melting of polar ice.

   Key : (D)

2. In which parts of India ground water is affected with arsenic contamination ?
   (A) Haryana.
   (B) Andhra pradesh.
   (C) Sikkim.
   (D) West Bengal.

   Key : (D)

3. Sunderban in Hooghly delta is known for :
   (A) Grasslands.
   (B) Conifers.
   (C) Mangroves.
   (D) Arid forests.

   Key : (C)

4. Sardar Sarover dam is located on the river :
   (A) Ganga.
   (B) Godavari.
   (C) Mahanadi.
   (D) Narmada.

   Key : (D)

5. Which one of the following trees has medicinal value ?
   (A) Pine.
   (B) Teak.
   (C) Neem.
   (D) Oak.

   Key : (C)

X. Higher Education System : Governance, Polity and Administration

1. Which one of the following is not considered a part of technical education in India :
    (A) Medical.
    (B) Management.
    (C) Pharmaceutical.
    (D) Aeronautical.

    Key : (A)

2. Which of the following is a Central University :
    (A) Mumbai University.
    (B) Calcutta University.
    (C) Delhi University.
    (D) Madras University.

    Key : (C)

3. Identify the main Principle on which the Parliamentary System operates :
    (A) Responsibility of Executive to legislature.
    (B) Supremacy of parliament.
    (C) Supremancy of Judiciary.
    (D) Theory of Separation of Power.

    Key : (A)

4. The reservation of seats for women in the Panchayat raj Institutions is :
    (A) 30% of the total seats.
    (B) 33% of the total seats.
    (C) 33% of the total population.
    (D) In proportion to their population.

    Key : (B)

5. Match list I with list II and select the correct answer from the code given below :

LIST I (Institutions)		LIST II (Locations)	
(1)	Indian Veterinary Research Institute	(i)	Pune
(2)	Institute of Armament Technology	(ii)	Izat nagar
(3)	Indian Institute of Science	(iii)	Delhi
(4)	National Institute for Educational planer and Administrators.	(iv)	Bangalore

    (A) 1 (ii), 2 (i), 3 (iv), 4 (iii).
    (B) 1 (ii), 2 (iv), 3 (ii), 4 (iii).
    (C) 1 (ii), 2 (iii), 3 (i), 4 (iv).
    (D) 1 (iv), 2 (iii), 3 (ii), 4 (i).

    Key : (A)

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