8th All India RPS OLYMPIAD

Online & Offline Mega Event

QUESTION PAPER

CLASS - VII

ENGLISH (10 Marks)

Q1. Choose the word closest in meaning to obdurate.

(A) Amenable (B) Intransigent (C) Capricious (D) Taciturn

Q2. Choose the grammatically correct passive transformation.
The committee will have scrutinised all the proposals by Monday.

(A) All the proposals will have been scrutinised by the committee by Monday.

(B) All the proposals would have been scrutinised by the committee by Monday.

(C) All the proposals will be scrutinised by the committee by Monday.

(D) All the proposals will have scrutinised by the committee by Monday.

Q3. Which sentence contains an abstract noun formed from an adjective?

(A) The children played happily in the garden.

(B) The teacher explained the lesson clearly.

(C) Her kindness won everyone's heart.

(D) The artist painted a beautiful picture.

Q4. Choose the correct relative pronoun.
The scientist, _____ groundbreaking research transformed the field, received international recognition.

(A) whom (B) whose (C) which (D) who

Q5. Choose the correct completion.

Of all the competing theories, this explanation is _____ supported by empirical evidence.

(A) more convincingly (B) the most convincing

(C) most convincingly (D) the more convincing

Q6. Choose the correct tense combination.
By the time the auditors arrived, the accountant _____ the discrepancies that _____ in the previous report.
(A) identified; appeared (B) had identified; had appeared
(C) has identified; appeared (D) was identifying; have appeared

Q7. Choose the sentence in which the adverb correctly modifies the intended word.

(A) She speaks fluent English.

(B) He completed the assignment careful.

(C) The girl danced graceful on the stage.

(D) The students listened attentively to the teacher.

Q8. Choose the correct set of articles.
She is _____ European scholar who has published _____ exceptionally insightful analysis of _____ Ganges.
(A) an; a; the (B) a; an; the (C) a; an; no article (D) an; an; the

Q9. Identify the structural type of the sentence.
Although the evidence was circumstantial, the jury deliberated for hours, and the judge postponed the verdict.
(A) Simple (B) Compound
(C) Complex (D) Compound-complex

Q10. Choose the sentence with correct punctuation.

(A) The principal announced, "The examination will begin at nine o'clock; therefore, all candidates must arrive early."

(B) The principal announced "The examination will begin at nine o'clock"; therefore all candidates must arrive early.

(C) The principal announced, "The examination will begin at nine o'clock", therefore, all candidates must arrive early.

(D) The principal announced: "The examination will begin at nine o'clock", therefore all candidates must arrive early.

MATHEMATICS (10 Marks)

Q11. A quantity Q is multiplied successively by $\frac{4}{5}$, $\frac{3}{2}$, $\frac{5}{8}$ and then divided by $\frac{9}{10}$. The final result is 270. Find Q.
(A) 324 (B) 225 (C) 250 (D) 200

Q12. In which century was the Chautisa Yantra recorded?

(A) 8th century (B) 10th century

(C) 12th century (D) 14th century

Q13. If 47.2506 = 4A + $\frac{7}{B}$ + 2C + $\frac{5}{D}$ + 6E, then the value of 5A + 3B + 6C + D + 3E is:

(A) 53.6003 (B) 53.603 (C) 153.6003 (D) 213.0003

Q14. Round off 9,81,22,678 to the nearest lakh.

(A) 9,81,00,000 (B) 9,82,00,000

(C) 9,80,00,000 (D) 10,00,00,000

Q15. The number 8,76,54,321 is increased by 1 and then each digit is reversed. What number is obtained?

(A) 1,23,45,678 (B) 2,34,56,789 (C) 2,23,45,678 (D) 9,87,65,432

Q16. Study the statements carefully and answer the question given below.

(i) The successor of 0 × (−52) is 1 × (−52).

(ii) Integers are closed under division.

(iii) 20 × (5 − 3) = (−20) × (−2).

(iv) (−2) + (−9) is less than (−9) − (−2).

Which of the following statements is/are correct?

(A) Only (i) (B) both (iii) and (iv)

(C) Both (i) and (iv) (D) Both (i) and (iii)

Q17. The numerator and denominator of a fraction are in the ratio of 3 : 7. If 225 is subtracted from both the numerator and denominator, the ratio of the fraction becomes 33 : 152. Find the fraction.

(A) $\frac{351}{819}$ (B) $\frac{393}{917}$ (C) $\frac{423}{987}$ (D) $\frac{357}{833}$

Q18. The expression (x + 1) (x − 1) gives:

(A) An odd number always (B) An even number only if x is odd

(C) Always divisible by 2 (D) None of these

Q19. If $x = (-1)^1 + (-1)^2 + \ldots + (-1)^{2009}$ and $y = (-1)^1 - (-1)^2 + (-1)^3 - (-1)^4 + \ldots + (-1)^{2009}$, then find x − y.

(A) 2009 (B) 2008 (C) 0 (D) 1004

Q20. Which system uses the grouping 3-2-2 pattern?

(A) Binary system (B) American system

(C) Indian system (D) Roman system

SCIENCE (10 Marks)

Q21. Which of the following instrument is used to check whether electricity is flowing through a substance or not?

(A) Voltmeter (B) Ammeter (C) Tester (D) Cell

Q22. During the day time,the atmospheric temperature rises by 18°F .What is the corresponding rise on Celsius scale ?

(A)10°C (B) 12°C (C) 14°C (D) 16°C

Q23. Which of the following statements does not illustrate uniform motion?

(A) A boy runs along a straight track at a constant speed.

(B) A stone is thrown upwards with a speed of 10 m per second.

(C) A ball moves along a frictionless surface without any external force.

(D) An aeroplane flying with a constant speed of 250ms^{-1} at an altitude of 1000 m.

Q24. The oxides of metals are commonly called_____because they react with acids to form salt and water as only products.

(A) salts (B) non metals (C)basic oxides (D)acidic oxides

Q25. Pick out the correct statement among the following

(A) An alloy is a homogeneous mixture of two or more metals.

(B) An alloy may contain non-metal in addition to metals.

(C) Alloy possesses better physical properties than metals .

(D) All of the above

Q26. During electrolysis of water, Oxygen gas liberates at which electrode:

(A) Anode (B) Cathode

(C) Both (A) and (B) (D) None of these

Q27. Graphite is used as pencil lead because:

(A) It has a high melting point.

(B) It is a good conductor of heat and electricity.

(C) It is soft in nature.

(D) It is highly resistant to chemicals.

Q28. Antacid contain :-

(A) Weak Base (B) Strong Base (C) Weak Acid (D) Strong Acid

Q29. When does a solar eclipse occur?

(A) When the Earth comes between the Sun and the Moon.

(B) When the Moon comes between the Earth and the Sun.

(C) When the Sun comes between the Earth and the Moon.

(D) When the Moon is full and directly opposite the Sun.

Q30. Which pair is correctly matched?

(A) Testes – Oestrogen (B) Ovaries – Testosterone

(C) Thyroid – Thyroxine (D) Pancreas – Adrenaline

APTITUDE (10 Marks)

Q31. Directions : The terms given in each of the following questions follow a definite pattern and thus make a series. Find the missing number from the series out of the given alternatives.

26, 34, 41, 46, 56, 67, ?

(A) 85 (B) 84 (C) 90 (D) 80

Q32. If A + B = C + D and A + D > B + C, then which one of the following is definitely wrong?

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

Q33. Y is in the East of X which is in the North of Z. If P is in the South of Z, then in which direction of Y is P?

(A) North (B) South (C) South East (D)None of these

Q34. Select the right pair of analogy?

123 : 4 :: 726 : ?

(A)23 (B)26 (C)14 (D)12

Q35. Select the one which is different from the other three responses.

(A) Shimla (B) Agra (C) Ooty (D) Darjeeling

Q36. If D = 4 and READ is coded as 7, then what is HEAR coded as?

(A) 32 (B) 33 (C) 7 (D) 8

Q37. Pointing to Sita, Rohit says, " She is the only daughter of my father's mother – in – law". How is Sita related to Rohit?

(A) Sister in Law (B) Aunt (C) Mother (D) Sister

Q38. Sonali walks 20m North. Then she turns right and walks 30m. Then she again turns right and walks 35m. In which direction and how many metres away is she from her original position.

(A) 15m, West (B) $15\sqrt{5}$ m, South West

(C) $15\sqrt{3}$ m, South East (D) $15\sqrt{5}$ m, South East

Q39.

7	**9**	**11**
2	**3**	**2**
51	**84**	**?**

(A) 123 (B) 125 (C) 100 (D) 64

Q40. Which one of the four interchanges in signs and numbers would make the given equation correct ?

3 + 5 - 2 = 4

(A) + and -, 2 and 3 (B) + and -, 2 and 5

(C) + and -, 3 and 5 (D) None of these

SST. (10 Marks)

Q41. Which river is known as the 'Ganga of the South'?

(A) Godavari (B) Krishna (C) Periyar (D) Mahanadi

Q42. Match the following:

(A) Preamble	**(i) Federal structure**
(B) Fundamental Rights	**(ii) Equality and freedom**
(C) Directive Principles	**(iii) Goals of society**
(D) Federalism	**(iv) Introduction of Constitution**

(A) A–iii, B–ii, C–iv, D–I (B) A–iv, B–ii, C–iii, D–i

(C) A–ii, B–iv, C–i, D–iii (D) A–i, B–iii, C–ii, D–iv

Q43. What does separation of powers ensure?

(A) All powers in one hand (B) No branch interferes with the other

(C) Only military rules (D) Religious rule

Q44. Bharhut Stūpa, in Madhya Pradesh, has Shunga Art depicted on it. It was built during whose period?

(A) Ashoka (B) Chandragupta I

(C) Chandragupta II (D) Prabhavati Gupta

Q45. Socotra Island is located in which of the following water body?

(A) Bay of Bengal (B) Caspian Sea

(C) Arabian Sea (D) Black Sea

Q46. In the terracota sculptures from the Gupta period what are the vahanas (vehicles) of the rivers: Ganga and Yamuna?

(A) crocodile, tortise (B) tortise, crocodile

(C) alligator, turtle (D) turtle, alligator

Q47. Which of the following statements are correct about Sātavāhana coins?

i) They had seafaring ships with two masts.

ii) Masts of the ship are prominently depicted with intersecting lines.

iii) The wavy lines below represented soil.

iv) The type of ship depicted on the coin above suggests advanced shipbuilding and navigation technologies.

(A) only (i) and (ii) (B) (i), (ii) and (iii)

(C) (i), (ii) and (iv) (D) All the statements are correct

Q48. India's geographical diversity includes the Himalayas, the Gangetic Plains, the Thar Desert and the Peninsular Plateau. Which of the following combinations most accurately explains how these physical features influence human life and economic activities?

(A) The Himalayas facilitate extensive mechanised farming on high peaks, while the Thar Desert supports dense settlements due to abundant rainfall.

(B) The Gangetic Plains support intensive agriculture through fertile soils and river systems, while the Peninsular Plateau provides mineral resources and supports hydroelectric power generation.

(C) The Peninsular Plateau consists entirely of young fold mountains, while the Gangetic Plains are primarily formed by volcanic eruptions.

(D) The Thar Desert and the Gangetic Plains have similar agricultural potential because both receive abundant rainfall and possess uniformly fertile soils.

Q49. A government introduces a policy to improve public health and living standards. A citizen approaches a court because the government has made insufficient efforts to achieve these goals. Consider the following statements:

1. Directive Principles of State Policy guide the government towards social and economic welfare.

2. Fundamental Rights and Directive Principles have exactly the same legal enforceability.

3. The Constitution deliberately distinguishes immediately enforceable rights from broader goals that may require time and policy action.

4. The Constitution can guide governance while allowing its provisions to be amended through the prescribed process.

Which of the following combinations is correct?

(A) 1, 2 and 4 only
(B) 1, 3 and 4 only
(C) 2 and 3 only
(D) 1, 2, 3 and 4

Q50. Consider the following statements about parliamentary and presidential democracies:

1. In a Parliamentary Democracy, the executive is drawn from the legislature.

2. In India, the Council of Ministers remains in office as long as it has the confidence of the Lok Sabha.

3. In a Presidential Democracy, the executive must always retain the legislature's confidence to remain in office.

4. Separation of powers means the legislature, executive and judiciary perform their functions independently.

Which of the statements are correct?

(A) 1 and 2 only
(B) 1, 2 and 4 only
(C) 2, 3 and 4 only
(D) 1, 2, 3 and 4

HINDI (10 Marks)

Q51. वह 'स्वतः' कार्य करेगा। 'स्वतः' शब्द सर्वनाम का कौन- सा भेद है?

(A) गुणवाचक (B) संबंधवाचक (C) पुरुषवाचक (D) निजवाचक

Q52. 'अरुण' शब्द की भाववाचक संज्ञा है-

(A) अरुणिमा (B) अरूणिमा

(C) अरूणीमा (D) इनमें से कोई नहीं

Q53. 'देश को जयचंदों से बचाओ।' 'जयचंदों' शब्द में संज्ञा का कौन -सा भेद है?

(A) व्यक्तिवाचक (B) भाववाचक

(C) जातिवाचक (D) इनमें से कोई नहीं

Q54. 'गीता स्कूल चली गई होगी।' वाक्य में काल का भेद है-

(A) अपूर्ण भूतकाल (B) संदिग्ध भविष्य

(C) संदिग्ध भूतकाल (D) पूर्ण भूतकाल

Q55. पुरुषवाचक सर्वनाम में 'उसे' शब्द का बहुवचन रूप कौन- सा है?

(A) उससे (B) उनसे (C) उनको (D) उन्हें

Q56. 'सुष्मिता ऐश्वर्या की तुलना में लंबी है।' इस वाक्य में विशेषण की कौन -सी अवस्था है?

(A) मूलावस्था (B) उत्तमावस्था (C) उत्तरावस्था (D) यह सभी

Q57. 'परि+नाम' संधि से बनने वाला शब्द है-

(A) परिनाम (B) परिणाम

(C) परिमाण (D) इनमें से कोई नहीं

Q58. 'व्याकरण' शब्द में उपसर्ग और मूल शब्द का सही विकल्प है --

(A) व्या+करण (B) वि:+आकरण

(C) वि+आकरण (D) इनमें से कोई नहीं

Q59. संज्ञा ,सर्वनाम व विशेषण शब्दों के अंत में लगने वाले प्रत्यय क्या कहलाते हैं?

(A) तद्धितांत प्रत्यय (B) कृदंत प्रत्यय (C) कृत प्रत्यय (D) तद्धित प्रत्यय

Q60. कृत प्रत्यय के कितने भेद हैं?

(A) दो (B) तीन

(C) पाँच (D) इनमें से कोई नहीं