8th All India RPS OLYMPIAD

Online & Offline Mega Event

QUESTION PAPER (PHASE – I)

CLASS - V

RPS MATHS LEAGUE

Q1. Which percentage represents one whole?

(A) 10 % (B) 50% (C) 75% (D) 100%

Q2. A bicycle is sold for ₹2,350 at a loss of ₹250. What was its cost price?

(A) ₹2,100 (B) ₹2,400 (C) ₹2,500 (D) ₹2,600

Q3. How many glasses of 100 millilitres glasses can you filled from a 3-litres can of juice?

(A) 20 (B) 30 (C) 40 (D) 25

Q4. A bus travelled 648 km in 9 hours. How far will it travel in 5 hours at the same speed?

(A) 340 km (B) 360 km (C) 380 km (D) 400 km

Q5. A library has 500 books. If 30% of them are storybooks, how many books are not storybooks?

(A) 150 (B) 250 (C) 300 (D) 350

Q6. If 6 workers earn ₹4,800 altogether in a day, how much will 9 workers earn in a day at the same daily rate?

(A) ₹6,800 (B) ₹7,000 (C) ₹7,200 (D) ₹7,400

Q7. Which fraction represents 60% in its simplest form?

(A) $\frac{2}{3}$ (B) $\frac{3}{5}$ (C) $\frac{4}{5}$ (D) $\frac{5}{6}$

Q8. A student scored 30% of the total 250 marks and failed by 25 marks. What are the minimum marks required to pass?

(A) 50 (B) 75 (C) 100 (D) 125

Q9. In an examination, 80% of the 250 students passed. How many students failed?

(A) 40 (B) 45 (C) 50 D) 60

Q10. 10% of a number is 36. Find the number.

(A) 300 (B) 320 (C) 360 (D) 400

Q11. A shopkeeper buys an article for ₹1,200. He spends ₹100 on transportation and sells it for ₹1,450. What is his profit?

(A) ₹100 (B) ₹150 (C) ₹250 (D) ₹350

Q12. If an article is sold at its cost price, the seller makes:

(A) A profit (B) A loss

(C) Neither profit nor loss (D) A discount

Q13. Which of the following indicates a profit?

(A) C.P. = ₹500, S.P. = ₹450 (B) C.P. = ₹600, S.P. = ₹600

(C) C.P. = ₹350, S.P. = ₹400 (D) C.P. = ₹800, S.P. = ₹700

Q14. Sara sold a pair of shoes for ₹540. She suffered a loss of ₹41.50 in the deal. What was the cost price of the shoes?

(A) ₹581.50 (B) ₹591.50

(C) ₹571.50 (D) None of these

Q15. If the cost of 5 identical toys is ₹250, what does ₹250 ÷ 5 represent?

(A) The cost of 5 toys (B) The cost of 1 toy

(C) The cost of 10 toys (D) The number of toys

Q16. Convert 56,098 mL into litres.

(A) 56.098 L (B) 55.980 L (C) 50.670 L (D) 51.453 L

Q17. Sonia types 600 words in 30 minutes. How many words can she type in 1 hour 15 minutes?

(A) 800 (B) 1500 (C) 900 (D) 1,600

Q18. If 15 metres of cloth cost ₹1,125, what is the cost of 8 metres of the same cloth?

(A) ₹550 (B) ₹575 (C) ₹600 (D) ₹625

Q19. Which pair of operations is generally used in the unitary method to find the value of many units from a known quantity?

(A) Addition and subtraction (B) Division and multiplication

(C) Multiplication and subtraction (D) Addition and division only

Q20. The weight of Aarav is 42.675 kg. His friend Sumit is 3.25 kg heavier than him. If Kartik's weight is 1 kg 90 g less than Sumit's weight, find the weight of Kartik.

(A) 35.835 kg (B) 44.835 kg (C) 38.715 kg (D) 44.635 kg

Q21. Namita travels 20 km 50 m every day. Out of this, she travels 10 km 200 m by bus and the rest by auto. How much distance does she travel by auto?

(A) 9.850 km (B) 8.850 km (C) 9.750 km (D) 7.850 km

Q22. Centilitre, litre and kilolitre are units for measuring __.

(A) Weight (B) Mass (C) Length (D) Capacity

Q23. Which one of the following decimal numbers is the smallest?

(A) 2.405 (B) 2.45 (C) 2.054 (D) 2.504

Q24. What is the difference between the place values of 4 and 7 in the number 74,286?

(A) 67,000 (B) 62,000 (C) 66,000 (D) 68,000

Q25. Which of the following is true or false?

(i) XXVIII > 20 + 7

(ii) 30 + 5 = XXXIV

(iii) XXVII = 20 + 7

(iv) 30 + 9 < XXXVIII

(A) TFFT (B) FFTT (C) TFTF (D) TTTT

Q26. How many four-digit numbers are there between 899 and 3000?

(A) 2002 (B) 2000 (C) 1999 (D) 1998

Q27. Which one of the following statements is incorrect ?

(A) $0.086 = \frac{8}{100} + \frac{6}{1000}$ (B) 0.007 = 7 thousandths

(C) $0.025 = \frac{1}{40}$ (D) $0.018 = \frac{18}{100}$

Q28. Which digit should replace ★ to make the number divisible by 3

72 ★ 45

(A) 1 (B) 2 (C) 3 (D) 4

Q29. What is the sum of the face values of the digit 5 in 4535 and 7652 ?

(A) 5 (B) 10 (C) 15 (D) 20

Q30. Which of the following numbers gives the greatest value when rounded off to the nearest thousands place?

(A) 68,450 (B) 69,857 (C) 68,999 (D) 57,293

Q31. A stadium has a seating capacity of 98,765 people. Which is the smallest number that must be added to this number to make it 1,00,000?

(A) 1,225 (B) 1,235 (C) 1,245 (D) 1,255

Q32. A school has 1,248 students. Each student contributes ₹ 275 for a school trip. If the school spends ₹ 2,45,600 on transport and food, how much money is left?

(A) ₹ 97,600 (B) ₹ 97,500 (C) ₹ 96,600 (D) ₹ 98,600

Q33. Find the remainder when 8,76,543 is divided by 19.

(A) 8 (B) 10 (C) 12 (D) 16

Q34. How many zeros are there at the end of the product?

125×20

(A) 1 (B) 2 (C) 3 (D) 4

Q35. A number divided by 36 gives a quotient of 2,475 and a remainder of 18. Find the number.

(A) 89,100 (B) 89,118 (C) 89,128 (D) 88,118

Q36. Convert the fraction into its decimal form $\frac{6}{10} + \frac{5}{100} + \frac{8}{1000}$

(A) 0.625 (B) 0.586 (C) 0.685 (D) 0.658

Q37. The decimals 14.56 and 17.89 are:

(A) Like decimal fractions (B) Unlike decimal fractions

(C) Equivalent decimal fractions (D) None of these

Q38. The fraction equivalent to 1.25 is..

(A) $1\frac{1}{4}$ (B) $12\frac{1}{2}$ (C) $1\frac{1}{8}$ (D) $12\frac{1}{4}$

Q39. My father got 4.5 litres of petrol filled in his car. The price of petrol per litre is ₹98. How much money did my father pay at the petrol pump?

(A) ₹441.00 (B) ₹426.00 (C) ₹450.00 (D) ₹459.00

Q40. Every number is the _____ factor of itself.

(A) Greatest (B) Smallest

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

Q41. Which of the following list contains only prime numbers?

(A) 1, 7, 13, 21 (B) 2, 13, 27, 41

(C) 5, 11, 29, 31 (D) 6, 18, 21, 50

Q42. The difference between the 15th multiple of 20 and the 9th multiple of 9 is:

(A) 169 (B) 219 (C) 200 (D) None of these

Q43. How many common multiples of 18 and 24 are there between 1 and 100?

(A) 2 (B) 5 (C) 1 (D) 4

Q44. The product of two numbers is 2028 and their H.C.F is 13. Find their L.C.M.

(A) 156 (B) 152 (C) 148 (D) 153

Q45. A coat costs ₹560. Which of the following represents the greatest discount as a fraction of the original price?

(A) $\frac{1}{4}$ of the normal price

(B) $\frac{3}{10}$ of the normal price

(C) $\frac{2}{10}$ of the normal price

(D) $\frac{1}{2}$ of the normal price

Q46. Which of the following fractions is in its simplest form?

(A) $\frac{24}{36}$ (B) $\frac{35}{49}$ (C) $\frac{42}{56}$ (D) $\frac{13}{84}$

Q47. Which of the following is greater than $\frac{1}{2}$?

(A) $\frac{1}{4}+\frac{1}{4}$ (B) $\frac{5}{6}+\frac{1}{6}$ (C) $\frac{3}{8}+\frac{1}{8}$ (D) $\frac{7}{12}-\frac{1}{12}$

Q48. Consider the following statements.

Statement A: $\frac{6}{13}$ less than $\frac{7}{15}$

Statement B: $\frac{4}{25}=\frac{16}{100}$

(A) Only Statement A is true.

(B) Only Statement B is true.

(C) Both A and B are true.

(D) Both A and B are false.

Q49. The reciprocal of $3\frac{3}{5}$ is

(A) $\frac{3}{5}$ (B) $\frac{5}{18}$ (C) $\frac{18}{5}$ (D) $\frac{5}{3}$

Q50. Find the value of $\frac{7}{2}$ % of 80.

(A) $\frac{12}{5}$ (B) 15 (C) $\frac{14}{5}$ (D) $\frac{13}{4}$

Q51. The cost of one dozen bananas is ₹60.What is the cost of 25 bananas?

(A) ₹100 (B) ₹125 (C) ₹25 (D) ₹1500

Q52. The LCM of two prime numbers is the ____ of these numbers.

(A) Difference (B) Product (C) Sum (D) none of these

Q53. 4 + 4.44 + 44.4 = ?

(A) 52.08 (B) 52.84 (C) 50.48 (D) 5.284

Q54. The fraction $\frac{17}{4}$ lies between which two consecutive integers?

(A) 3 and 4 (B) 4 and 5 (C) 2 and 3 (D) 6 and 7

Q55. A pair of twin prime numbers between 70 and 100 is :

(A) 71 ,73 (B) 79 , 83 (C) 97 , 99 (D) 87 , 89

Q56. A boat can take 29 people at a time for a lake side. There are 1595 visitors waiting. How many times should the boat go so that everyone gets a ride once?

(A) 45 (B) 55 (C) 65 (D) 44

Q57. Find the value of X .

89.542 - X=27.453

(A) 62.089 (B) 65.724 (C) 70.256 (D) 61.874

Q58. Priya walks 1800 m distance everyday. Find the total distance did she walk in the month of March.

(A) 48km 600m (B) 50km 500m (C) 55km800m (D) 55km550m

Q59. Convert 10cm into hectometre.

(A) 1000hm (B) 10000hm (C) 0.01hm (D) 0.001hm

Q60. Find the least number which is divisible by 12,15,20 and 25 exactly.

(A) 500 (B) 200 (C) 300 (D) 400