



GOVERNMENT OF MIZORAM
LOCAL ADMINISTRATION DEPARTMENT

EXAMINATION FOR RECRUITMENT
TO THE POST OF SA
2024

PAPER II
SIMPLE ARITHMETIC

FULL MARKS : 100
TIME ALLOWED : 3 HOURS

Candidate tana hriat tur

1. A dik zawnah "✓" thai tur.
2. Thlan tur zingah hian answer dik pakhat chiah a awm
3. Question tinin mark hnih zel a pu.
4. A kawmah hian i Roll No. chiah ziak ang che.

Signature of Invigilator _____

CODE NO.

(LAD Office dah khah tur) _____

No. of correct answers	Marks carried by one question	Marks Obtained
	2	

Chhanna endiktu signature _____



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Roll No. _____

1. A man gains 10% by selling an article for a certain price. If he sells it at double the price, then the profit made is

- A) 20% ()
- B) 40% ()
- C) 100% ()
- D) 120% ()

2. Reduce $4\frac{2}{3} : 3\frac{1}{3}$ to the simplest form.

- A) 7 : 4 ()
- B) 5 : 3 ()
- C) 7 : 5 ()
- D) 8 : 5 ()

3. A dozen apples costs ₹ 756. What will be the cost of 864 apples?

- A) ₹ 54432 ()
- B) ₹ 137142 ()
- C) ₹ 10500 ()
- D) None of these ()

4. Divide ₹ 96,000 among A, B, and C such that A's share is $\frac{3}{4}$ th of B's share, and the ratio of B's share to C's share is 4:5. What is the amount of C's share?

- A) ₹ 24000 ()
- B) ₹ 32000 ()
- C) ₹ 40000 ()
- D) None of these ()

5. A and B invest in a partnership in the ratio of 2:3. After one year, the total profit is ₹ 30,000. How much will A receive as his share?

- A) ₹ 15000 ()
- B) ₹ 18000 ()
- C) ₹ 10000 ()
- D) ₹ 12000 ()

6. Khuma starts a business with ₹ 20000 and Mawia joins after 3 months with ₹ 80000. Find the ratio of their profit at the end of the year.

- A) 2 : 3 ()
- B) 1 : 3 ()
- C) 3 : 5 ()
- D) 2 : 5 ()

7. A and B started a joint business. A's investment was thrice the investment of B and the period of his investment was twice the period of investment of B. If B got ₹ 6000 as profit, then what will be the total profit?

- A) ₹ 58000 ()
- B) ₹ 35000 ()
- C) ₹ 45000 ()
- D) ₹ 42000 ()

8. Mawia and Rama can do a piece of work in 12 days and Mawia alone can do it in 18 days. In how many days can Rama alone do it?

- A) 32 days ()
- B) 24 days ()
- C) 36 days ()
- D) None of these ()

9. Zuala can do a piece of work in 10 days and Sanga can do the same work in 12 days. How long will they take to finish the work, if both work together?

- A) $5\frac{2}{3}$ days ()
- B) $5\frac{5}{11}$ days ()
- C) $7\frac{5}{11}$ days ()
- D) None of these ()

10. If 6 men or 8 women can reap a field in 86 days, how long will 14 men and 10 women take to reap it?

- A) 18 days ()
- B) 36 days ()
- C) 24 days ()
- D) None of these ()

11. Express a speed of 30 m/s in km/h.

- A) 108 km/h ()
- B) 120 km/h ()
- C) 110 km/h ()
- D) None of these ()

12. Muanpuia drives his car at two different speeds to his office, resulting in different travel times. At a speed of 30 km/h, he arrives 8 minutes late, while at 45 km/h, he arrives 2 minutes early. Determine the distance between Muanpuia's home and his office.

- A) 15 km ()
- B) 20 km ()
- C) 12 km ()
- D) None of these ()

13. A man covers half of his journey at 6 km/h and the remaining half at 3 km/h. Find his average speed.

- A) 4.5 km/h ()
- B) 4 km/h ()
- C) 3.8 km/h ()
- D) None of these ()

14. Zonuni borrowed ₹ 50,000 from a moneylender. After 4 years, she repaid a total of ₹ 61,250. Calculate the rate of simple interest

- A) 7.5% ()
- B) 6.2% ()
- C) 5.6% ()
- D) None of these ()

15. A sum of money doubles itself in 8 years when invested at a certain rate of simple interest. How long will it take for the same amount to quadruple (4 times) at the same rate of interest?

- A) 36 years ()
- B) 24 years ()
- C) 12 years ()
- D) None of these ()

16. Find the compound interest on ₹ 8000 for 2 years compounded annually at 6%.

- A) ₹ 988.80 ()
- B) ₹ 899.9 ()
- C) ₹ 712.8 ()
- D) None of these ()

17. Determine the area of a triangle with a base of 10 cm and a height of 12 cm.

- A) 120 cm² ()
- B) 1200 cm² ()
- C) 90 cm² ()
- D) 60 cm² ()

18. The length and breadth of a rectangular field are in the ratio 5:4, and its area is 720 square metres. Calculate the cost of planting grass over the entire area at a rate of ₹ 12 per square meter.

- A) ₹ 7250 ()
- B) ₹ 9680 ()
- C) ₹ 8640 ()
- D) None of these ()

19. Find the radius of a circle whose circumference is 396 cm.

- A) 63 cm ()
- B) 198 cm ()
- C) 99 cm ()
- D) None of these ()

20. The volume of a water tank is 4320 m³, with a length of 20 m and a breadth of 18 m. Calculate the depth of the tank.

- A) 15 m ()
- B) 12 m ()
- C) 10 m ()
- D) 9 m ()

21. The diameter and height of a cylindrical water tank are 3.5 m and 3 m, respectively. Calculate the volume of water it can hold.

- A) 27,580 litres ()
- B) 31,250 litres ()
- C) 28,875 litres ()
- D) None of these ()

22. In how many different ways can the letters BAWIHTEI be arranged?

- A) 18030 ()
- B) 20160 ()
- C) 34680 ()
- D) None of these ()

23. Find the number of ways in which 6 different beads can be arranged to form a necklace?

- A) 60 ()
- B) 120 ()
- C) 180 ()
- D) None of these ()

24. Which of the following is a prime number?

- A) 189 ()
- B) 346 ()
- C) 101 ()
- D) 672 ()

25. What is the sum of the first 50 natural numbers?

- A) cannot be computed ()
- B) 1575 ()
- C) 725 ()
- D) 1275 ()

26. If a number is divided by 133, the remainder is 21. If this number is divided by 19, then the remainder will be _____

- A) 1 ()
- B) 2 ()
- C) 5 ()
- D) 9 ()

27. J. Lalrosanga's monthly income is three-fourth of Lalsangliana's income.

Lalsangliana's income is ₹ 38000. What is J. Lalrosanga's annual income?

- A) ₹ 4.32 lakh ()
- B) ₹ 2.52 lakh ()
- C) ₹ 3.42 lakh ()
- D) ₹ 5.62 lakh ()

28. What is the difference between the sum of the cubes and that of the squares of first ten natural numbers?

- A) 1080 ()
- B) 2640 ()
- C) 2620 ()
- D) 1980 ()

29. Express $\frac{7}{50}$ as decimal number.

- A) 1.4 ()
- B) 0.14 ()
- C) 14 ()
- D) 0.014 ()

30. What should come in place of the question mark in the following number series?

6, 4, 5, 11, 39, ?

- A) 169 ()
- B) 179 ()
- C) 189 ()
- D) 209 ()

31. Simplify

$$3[-2 - \{4 + 2(6 \times 2 \div 4 + \overline{7 - 3})\}]$$

- A) -60 ()
- B) +60 ()
- C) +30 ()
- D) -30 ()

32. Simplify

$$\frac{\frac{2}{5} + \frac{4}{5} \text{ of } \frac{1}{2}}{\frac{2}{3} - \frac{2}{3} \div \frac{5}{3}}$$

- A) 4 ()
- B) 3 ()
- C) 7 ()
- D) 11 ()

33. Simplify

$$\sqrt{625} \times 2 + \sqrt{169} \div 39 \times 27$$

- A) 49 ()
- B) 68 ()
- C) 72 ()
- D) 69 ()

34. What is the value of

$$\sqrt[3]{157464}$$

- A) 74 ()
- B) 44 ()
- C) 54 ()
- D) 66 ()

35. Which of the following is a perfect square?

- A) 6241 ()
- B) 5326 ()
- C) 3248 ()
- D) 3363 ()

36. What is the least number to be multiplied with 294 to make it a perfect square?

- A) 4 ()
- B) 6 ()
- C) 18 ()
- D) 21 ()

37. Calculate the average of the cubes of first 9 natural numbers.

- A) 125 ()
- B) 55 ()
- C) 75 ()
- D) 225 ()

38. The average age of 25 boys in a class decreases by 6 months when a new boy replaces a 20-year-old boy. Determine the age of the new boy.

- A) 7.5 years ()
- B) 8.5 years ()
- C) 6.5 years ()
- D) Cannot be computed ()

39. What will be the average of 3, 4, 5, 51, 52, 53?

- A) 26 ()
- B) 27 ()
- C) 28 ()
- D) 29 ()

40. A computer set with a marked price of ₹ 32,000 was sold for ₹ 28,000 during a Christmas sale. Calculate the discount rate offered.

- A) 6.5% ()
- B) 10.2% ()
- C) 12.5% ()
- D) 15% ()

41. The single discount equivalent to the discount series of 20%, 10% and 5% is

- A) 35% ()
- B) 31.6% ()
- C) 0.32% ()
- D) None of these ()

42. The marked price of an article is 50% higher than its cost price. If a 10% discount is offered on the marked price, what will be the profit percentage?

- A) 40% ()
- B) 45% ()
- C) 30% ()
- D) 35% ()

43. If the price of an LPG cylinder is increased by 12% today, by what per cent should it be reduced tomorrow to bring it to the previous level?

- A) 12% ()
- B) $10\frac{5}{7}\%$ ()
- C) $12\frac{5}{7}\%$ ()
- D) $8\frac{5}{7}\%$ ()

44. What percentage of one quintal is 600 grams?

- A) 0.006% ()
- B) 0.06% ()
- C) 0.6% ()
- D) 6% ()

45. Sangzuala spends 60% of his income on household expenses, 20% of the remaining amount on personal necessities, and 20% of what is left on savings. If his monthly savings amount to ₹ 1,600, determine his total income.

- A) ₹ 25000 ()
- B) ₹ 28000 ()
- C) ₹ 32000 ()
- D) ₹ 34000 ()

46. An ipad is sold for ₹ 60000 thereby making a profit of 20% on the cost price. Determine the cost price.

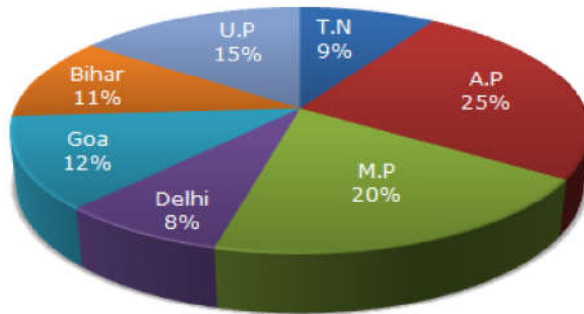
- A) ₹ 72000 ()
- B) ₹ 48000 ()
- C) ₹ 50000 ()
- D) None of these ()

47. Siama sold a mobile for ₹ 8,800, gaining a 10% profit. To achieve a 15% profit, at what price should he have sold it?

- A) ₹ 7800 ()
 B) ₹ 9200 ()
 C) ₹ 9800 ()
 D) ₹ 10120 ()

Directions Q 48-50: Study the following graph and the table and answer questions nos. 48 – 50

Data of different states regarding population of states in the year 1998



Total population of the given States = 3276000.

States	Sex and Literacy wise Population Ratio			
	Sex		Literacy	
	M	F	Literate	Illiterate
A.P.	5	3	2	7
M.P.	3	1	1	4
Delhi	2	3	2	1
Goa	3	5	3	2
Bihar	3	4	4	1
U.P.	3	2	7	2
T.N.	3	4	9	4

48. What will be the percentage of the male population in U.P to the total population of all the given states?

- A) 12% ()
 B) 9% ()
 C) 7.5% ()
 D) None of these ()

50. What is the ratio of the number of females in T.N. to the number of females in Goa?

- A) 24 : 35 ()
 B) 27 : 39 ()
 C) 17 : 28 ()
 D) None of these ()

49. How many literate persons are there in Delhi?

- A) 87360 ()
 B) 158730 ()
 C) 174720 ()
 D) None of these ()