

National Analytical Brains Competition 2025

NAB Competition 2025 - Grade 04

Mathematical Ability

All questions are mandatory. Please note there is no negative marking:

1. Give five-digit smallest number that can be formed using 7, 9, 0, 5, 2?
(a) 02579 (b) 20759 (c) 20579 (d) 07952
2. A bee has the same number of legs as three times its antennae. If a bee has 2 antennae, a swarm of 8 bees lands on a flower. How many legs do all 8 bees have altogether?
(a) 32 (b) 42 (c) 48 (d) 56
3. Rohan reads 13 books on every day of the week whose name starts with the letters T or S. How many books does he read in one full week?
(a) 91 (b) 52 (c) 65 (d) 78
4. A farmer owns 12 apple trees. Each tree gives as many apples as 10 dozen. After the farmer sells 100 dozen apples in the market, how many apples are still left with him?
(a) 240 (b) 180 (c) 120 (d) 300
5. A farmer owns 26 cows. He puts them in 3 fields. In the first field, there are as many cows as double the number of alphabets in the word “**twelve**.” In the second field, there are as many cows as the number of fingers on one hand. How many cows are left for the third field?
(a) 11 (b) 8 (c) 9 (d) 7
6. Which one is equal to Rupees twenty three and 4 paisa?
(a) ₹23.4 (b) ₹23.04 (c) ₹23.40 (d) ₹2304
7. Preeto had ₹425.82 in her bank account. She deposited an amount equal to one hundred twenty rupees and seventy five paise. Later, she withdrew an amount equal to one hundred eighty-five rupees and ninety paise. How much money does Preeto now have in her account?
(a) ₹360.67 (b) ₹370.75 (c) ₹385.45 (d) ₹340.52

8. Ramu makes ₹12.50 an hour at his job at the roller skating rink. He worked 25 hours. After he got his pay check, he spent ₹65 on a new pair of shoes. How much money does he have left from his pay check?
(a) ₹257.50 (b) ₹247.50 (c) ₹242.25 (d) ₹255.75

9. A farmer harvested 350 mangoes. He wants to pack them equally in boxes. Each box can hold as many mangoes as the number of days in two weeks.
How many boxes will he need?
(a) 20 (b) 25 (c) 30 (d) 35

10. Reena is 4 years older than Meena. If Reena is 12 years old, what is Meena's age?
(a) 16 (b) 12 (c) 8 (d) 9

11. Yesterday I bought 3.5kg of mangoes and I ate 2750g of mangoes from it. How much mangoes are left now?
(a) 650 g (b) 850 g (c) 750 g (d) 700 g

12. David has a jug full of milk. He pours the complete milk in 4 glasses, each glass of capacity 0.8 L. How much milk was there in the jug?
(a) 3.4 L (b) 3.2 L (c) 3.6 L (d) 3.0 L

13. There are 240 boxes with 25 bags of coffee each. If each bag weighs 0.62 kg, what is the total weight of all the coffee?
(a) 3680 kg (b) 3720 kg (c) 3700 kg (d) 3620 kg

14. Pankaj owns two animals. The first animal (Buffalo) gives 23 litres and 64 millilitres of milk daily. The second (cow) gives 16 litres and 845 millilitres of milk daily. If 1 litre = 1000 millilitres, which animal gives more milk and by how many millilitres?
(a) Cow, by 6,219 ml (b) Buffalo, by 6,219 ml
(c) Cow, by 6,219 L (d) Buffalo, by 6,219 L

15. Alka had container full of mineral water. The capacity of the container was 30 L. Due to a crack in the container, 65 ml water leaked out and got wasted. How much water is left in the container?
(a) 29 L 935 ml (b) 29 L 995 ml (c) 30 L (d) 29 L 865 ml

16. Rita is 6 years 14 weeks old and her cousin is 6 years 50 days old. Who among them is older and by how much?
(a) Cousin by 48 days (b) Rita by 14 days
(c) Rita by 48 days (d) Cousin by 32 days

17. A toy factory made 25,734 toys in January. In February, it produced as many toys as January plus an extra 18,567. Out of all toys produced in both months together, 9,835 were damaged. How many toys were left in good condition?
(a) 34,476 (b) 60,200 (c) 34,466 (d) 34,486

18. A school collected ₹15,980 for charity. They first spent an amount equal to eight thousand four hundred seventy-five rupees on food. Later, they raised another six thousand three hundred twenty-five rupees. How much money does the school finally have left?
(a) ₹13,830 (b) ₹13,820 (c) ₹13,810 (d) ₹13,840

19. A shopkeeper sold three bundles of goods in a day.
The first bundle earned him as much as 23,845 rupees.
The second bundle earned him as much as 19,678 rupees.
The total earnings from all three bundles were 56,234 rupees.
What was the value of the third bundle?
(a) ₹12,721 (b) ₹12,711 (c) ₹12,731 (d) ₹12,741

20. A farmer harvested as many mangoes as the highest number that can be formed with the digits 2, 3, 4, 6, 8. He sold as many mangoes as the lowest number that can be formed with the digits 1, 5, 7, 8, 9. How many mangoes are still left with him?
(a) 70,643 (b) 71,643 (c) 69,643 (d) 72,643

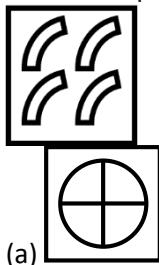
Logical Reasoning



(a)

(b)

(c)



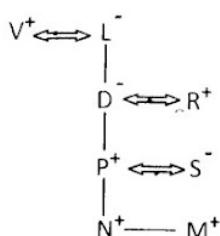
(a)

(b)

(c)

33. Complete the series: **D-4, F-6, H-8, J-10, ?, ?**
(a) K-12, M-13 (b) L-12, M-14 (c) L-12, N-14 (d) K-12, M-14

34. How many married people are there in the given family tree?



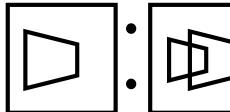
(a) 6

(b) 4

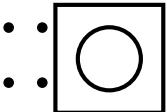
(c) 3

(d) 2

35. There is a certain relationship between the pair figure on the either side of :: identify the relationship between the left pair and find the missing figure?



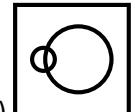
(a)



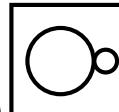
(b)



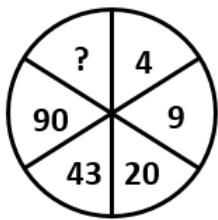
6



(c)



36. Which number will replace the “question mark” in the given image?



(a) 185

(b) 126

(c) 239

(d) 145

37. If code for 'KING' = 'GNIK', then code for 'PINK' = '?'

(a) NIKP

(b) INKP

(c) KNIP

(d) PINK

38. Arrange the given words in alphabetical orders choose the one that comes first.

(a) Wasp

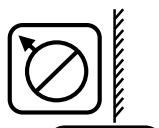
(b) Waste

(c) War

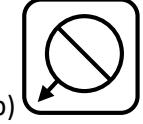
(d) Wrinkle

(e) Wrist

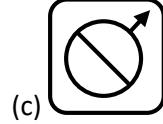
39. Find the mirror image of the given word?



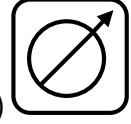
(a)



(b)



(c)



(d)

40. Complete the analogy:

Book : Reading :: Knife : ?

(a) Cutting

(b) Writing

(c) Eating

(d) Cooking

Daily Life Problems:

Rohan runs a small grocery shop. Today, he received 432 apples, 567 oranges, and 326 mangoes. By noon, he sold half of the apples and one-third of the oranges. He packed 10 boxes of mangoes, each with 25 mangoes, for delivery. The shop clock stopped at 10:20 a.m., and Rohan started selling fruits at 9:00 a.m.. He also checked his sugar packets, each weighing 500 g, to make 12 kg of sweets. Before closing, he threw away $\frac{1}{4}$ of the remaining mangoes and noticed the water tank had 1,800 liters left out of 2,500 liters.

41. How many apples did Rohan sell by noon?
(a) 216 (b) 432 (c) 108 (d) 324

42. How many oranges were left after selling one-third?
(a) 378 (b) 412 (c) 356 (d) 426

43. How many mangoes did Rohan pack for delivery?
(a) 225 (b) 200 (c) 250 (d) 275

44. If he sold half of the apples evenly from 9:00 a.m. to 10:20 a.m., how many apples were sold every 10 minutes?
(a) 20 (b) 27 (c) 22 (d) 30

45. How many sugar packets does Rohan have for 12 kg of sweets?
(a) 6 (b) 18 (c) 24 (d) 12

46. How many mangoes remained after throwing away $\frac{1}{4}$ of the remaining ones?
(a) 57 (b) 76 (c) 50 (d) 65

47. How much water was consumed?
(a) 2500 L (b) 1800 L (c) 800 L (d) 700 L

48. How many total fruits Rohan had initially?
(a) 1300 (b) 1310 (c) 1320 (d) 1325

49. How many boxes could he fill completely from the remaining mangoes before throwing $\frac{1}{4}$ away?
(a) 4 (b) 3 (c) 5 (d) 6

50. What is the total time taken to sell all apples if he started at 9:00 a.m. and finished at 11:00 a.m.?
(a) 100 min (b) 120 min (c) 150 min (d) 180 min

ANSWER KEY

1.	C	2.	C	3.	B	4.	A	5.	C
6.	B	7.	A	8.	B	9.	B	10.	C
11.	C	12.	B	13.	B	14.	B	15.	A
16.	C	17.	B	18.	A	19.	B	20.	A
21.	D	22.	C	23.	A	24.	C	25.	C
26.	A	27.	C	28.	C	29.	B	30.	A
31.	B	32.	B	33.	C	34.	A	35.	C
36.	A	37.	C	38.	C	39.	C	40.	A
41.	A	42.	A	43.	C	44.	B	45.	C
46.	A	47.	D	48.	D	49.	B	50.	B