



National Analytical Brains Competition 2024

NAB Competition 2024- Grade 03

Mathematical Ability

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

1. A train travels a distance of 60km in one hour. How much time will it take to cover 10km?
(a) 10 min (b) 15 min (c) 1 hr (d) 30 min
2. Which of the following set of numbers is in ascending order?
(a) 987, 978, 989, 991 (b) 978, 987, 989, 991
(c) 978, 989, 987, 991 (d) 978, 991, 987, 989
3. Rohan spent 35 days at his grandfather's house. If he spent the first 7 days helping his grandfather with chores and the rest of the time relaxing, how many complete weeks did he spend at his grandfather's house in total?
(a) 5 Weeks (b) 7 Weeks (c) 6 Weeks (d) 4 Weeks
4. How many seconds does the seconds hand take to complete half rotation in a clock?
(a) 30 minutes (b) Half an hour (c) 30 seconds (d) Half second
5. Sum of two numbers is 179. If one number is 85 then what is the other number?
(a) 100 (b) 18 (c) 94 (d) 95
6. Regroup 79 ones in tens and ones.
(a) 7 tens + 9 ones (b) 9 tens + 7 ones
(c) 10 tens + 79 ones (d) 7 tens + 10 + 9
7. A farmer has 180 carrots. If he packs them into boxes with 12 carrots each, then how many full boxes can he fill?
(a) 15 (b) 14 (c) 16 (d) 18

8. If you multiply a number by 4 and then add 6, you get 34. What was the original number before these operations?
- (a) 7 (b) 8 (c) 9 (d) 10

9. There are two cows and two hens. Find the total number of legs?



- (a) 4 (b) 6 (c) 12 (d) None of these
10. If a toy costs Rs. 50 and you have Rs. 200, how many toys can you buy if you need to save Rs. 20 for later?
- (a) 4 (b) 1 (c) 2 (d) 3
11. What is the sum of smallest 2-digit number and largest 2 digit number?
- (a) 100 (b) 108 (c) 101 (d) 109
12. Make the smallest four digit number by using the digits 2,0,5,3 (without repeating the digit). Which digit will come at its tens place?
- (a) 2 (b) 0 (c) 5 (d) 3

13. How many minutes should be added to the time shown by the clock to make it quarter to 5?



- (a) 15 minutes (b) 30 minutes (c) 10 minutes (d) 20 minutes
14. Which one of the following is correct about the below statements?
- Statement A:** The addition of a number with zero is the number itself.
- Statement B:** The product of a number with zero is the number itself.
- (a) Statement A is correct but Statement B is false
- (b) Statement A and B both are correct

(c) Both false

(d) Statement A is false and Statement B is True

15. Find the number which is divided by 3 gives 2 as remainder and 4 as the quotient?

(a) 12

(b) 14

(c) 9

(d) None of these

16. Sneha has 24 candies. She gives away twice as many as she keeps. How many candies does she keep?

(a) 8

(b) 12

(c) 6

(d) 10

17. Soina has 760m 70 cm of ribbon. She used 510m 40 cm of ribbon for decoration. How much ribbon is left with her?

(a) 245 m 40 cm

(b) 251 m 30 cm

(c) 245 m 30 cm

(d) 250 m 30 cm

18. Weight of one ball is 82 gram. What will be the weight of 9 such balls?

(a) 728 gram

(b) 738 gram

(c) 748 gram

(d) 91 gram

19. A monkey jumped on a pole to a height of 6.30 m but he slipped 2.19. At how much height is the monkey now?

(a) 4.29 m

(b) 8.11 m

(c) 4.12 m

(d) 4.11 m

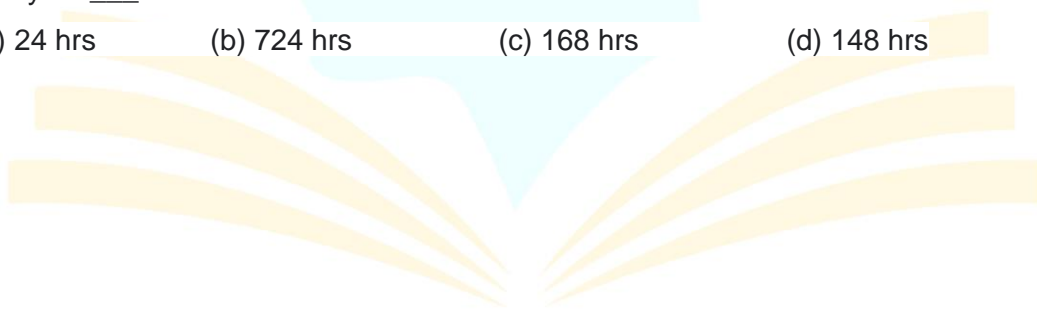
20. 7 days = ___ hrs.

(a) 24 hrs

(b) 724 hrs

(c) 168 hrs

(d) 148 hrs



Logical Reasoning:

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

21. If '536' is called '315', '782' is called '864', then '572' is called ____?

- (a) 384 (b) 484 (c) 483 (d) 285

22. Jai, Veer, and Raju are standing in a line. Veer is standing between Jai and Raju. Jai is not the first. Who is standing first in line?

- (a) Raju (b) Veer (c) Jai (d) Can't Determine

23. How many apples will be left after making groups of 3 apples each from the given apples?



- (a) 2 (b) 3 (c) 1 (d) 0

24. Count the number of triangles in the following figure?



- (a) 6 (b) 8 (c) 10 (d) 9

25. Which of the following options is different from the other?

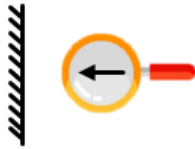
- (a)  (b)  (c)  (d) 

26. If the position of cupcake T and cupcake J is interchanged, then cupcake _____ is fourth from the left end.



- (a) R (b) K (c) T (d) J

27. Which of the following options resemble the mirror image of the given figure?



- (a) (b) (c) (d)

28. In the following numeric sequence there is a relation between the numbers. Find the relation and complete the sequence by identifying the correct option?



- (a) 32 (b) 26 (c) 31 (d) 31

29. Each stands for 1 unit. The weight of is _____ units?



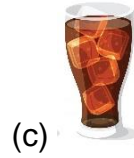
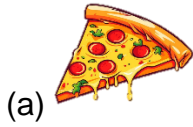
- (a) 5 (b) 3 (c) 1 (d) 2

30. If 'LM' is coded as 'KL', then 'DE' will definitely be coded as _

- (a) CD (b) RS (c) PY (d) JS

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





32. If day before yesterday was Thursday, then day after tomorrow will be ____.

(a) Friday (b) Monday (c) Saturday (d) Sunday

33. Which of the following words can be formed from the letters of the given word?
GEOGRAPHY

(a) Peach (b) Hyper (c) Rhyme (d) Cheap

34. Find the code for "RINSE" from the below tables.

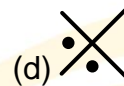
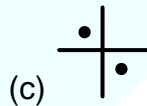
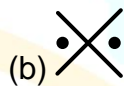
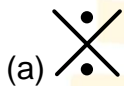
Letters	I	E	R	M	S	N	P
Code	%	#	*	=	&	\$?

- (a) = + * @ (b) % * \$ # & (c) * \$ # @ + (d) * % \$ & #

35. Complete the series: A _BBCAABCCA _BBCC

- (a) BACA (b) ABBA (c) CABA (d) ACBA

36. Choose the figure that does not belong to the group?



37. Chirag finishes his lunch in 20 minutes. Mayur finishes his lunch in 30 minutes. Alpesh finishes his lunch in 35 minutes. How much time did Alpesh take more to complete his lunch compared to Chirag?

(a) 25 minutes (b) 15 minutes (c) 20 minutes (d) 5 minutes

38. If stands for 24, then stands for:

(a) 26 (b) 48 (c) 56 (d) 49

39. If Orange is called as Butter, Butter is called as Soap, Soap is called as Ink, Ink is called as Honey, then which of the following is used for washing clothes?

- (a) Orange (b) Butter (c) Ink (d) Honey

40. Arrange the alphabet given below to form a meaningful English word and identify the category of the word?

SNEO

- (a) Flower (b) Body Part (c) Animal (d) Fruit



Daily Life Problems:

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

Based on the paragraph answer the below 5 questions:

Siddarth had 48 stickers. He gave 12 stickers to his brother and then received 8 more from a friend. After this, Siddarth decided to arrange all his stickers into 4 equal groups for a project. Later, he took 3 stickers from each group to share with his classmates.

41. How many stickers did Siddarth have after giving 12 stickers to his brother?
(a) 34 (b) 36 (c) 32 (d) 40
42. How many stickers were in each group after Siddarth arranged them into 4 equal groups?
(a) 10 (b) 11 (c) 12 (d) 14
43. How many stickers did Siddarth have left in each group after taking 3 stickers from each?
(a) 8 (b) 9 (c) 10 (d) 12
44. If Siddarth decides to put back 1 sticker in each group, how many stickers will be in each group now?
(a) 9 (b) 10 (c) 11 (d) 12
45. What was the difference in the total number of stickers Siddarth had after giving away some and receiving more?
(a) 4 (b) 12 (c) 8 (d) 6

Daily Life Problems Part - II:

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

Based on the paragraph answer the below 5 questions:

Parul had 60 rupees. She spent 25 rupees on a book and then earned 15 rupees by helping her neighbor with some chores. After that, she decided to divide the remaining money equally among 5 friends as a gift. Later, she borrowed 3 rupees from each friend to buy an ice cream.

46. How much money did Parul have after spending 25 rupees on a book?
(a) 30 rupees (b) 35 rupees (c) 40 rupees (d) 45 rupees
47. How much money did each friend get after Parul divided her remaining money equally among them?
(a) 8 rupees (b) 9 rupees (c) 10 rupees (d) 12 rupees
48. How much money did each friend have left after Parul borrowed 3 rupees from each?
(a) 6 rupees (b) 7 rupees (c) 8 rupees (d) 10 rupees
49. If Parul returns 2 rupees to each friend, how much money will each friend have now?
(a) 8 rupees (b) 9 rupees (c) 10 rupees (d) 12 rupees
50. What was the net change in Parul's money after spending on a book and earning from chores?
(a) 0 rupees (b) 5 rupees (c) 10 rupees (d) 15 rupees