2023/06

BA ADMINISTRATION AND GOVERNANCE
SECOND SEMESTER
GENERAL APTITUDE AND PRACTICE-I
BAAGNC - 207

SET B

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 1.30 hrs.

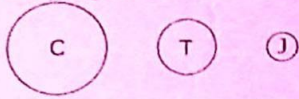Full Marks: 35

Objective

Time: 1.30 hrs.

Marks: 35

Choose the correct answer from the following:

$1 \times 35 = 35$

1. The rabbit population in community A increases at 25% per year while that in B increases at 50% per year. If the present population of A and B are equal, the ratio of the number of the rabbits in B to that in A after 2 years will be
   a. 1.44
   b. 1.72
   c. 1.90
   d. 1.25

2. A man completes 7/8 of a job in 21 days. How many more days will it take him to finish the job if quantum of work is further increased by 50%?
   a. 24
   b. 21
   c. 18
   d. 15

3. If the price of an article is decreased by 20% and then the new price is increased by 25%, then what is the net change in the price?
   a. 0%
   b. 5% increase
   c. 5% decrease
   d. Cannot be determined due to insufficient data

4. P scored 40 marks more than Q in an examination. If Q scored 10% less marks than P, then how much did Q score?
   a. 360
   b. 380
   c. 400
   d. 420

5. Amit, Raju and Salim can do a piece of work in 20, 30 and 60 days respectively. In how many days can Amit do the work if he is assisted by Raju and Salim on every third day?
   a. 12 days
   b. 15 days
   c. 16 days
   d. 18 days

6. A biology class at high school predicted that a local population of animals will double in size every 12 years. The population at the beginning of the year 2021 was estimated to be 50 animals. If P represents the population after n years, then which one of the following equations represents the model of the class for the population?
   a. $P = 12 + 50n$
   b. $P = 50 + 12n$
   c. $P = 50(2)^{12n}$
   d. $P = 50(2)^{n/12}$

7. If 3^{2019} is divided by 10, then what is the remainder?
   a. 1
   b. 3
   c. 7
   d. 9

8. In aid of charity, every student in a class contributes as many rupees as the number of students in that class. With additional contribution of Rs. 2 by one student only, the total collection is Rs. 443. Then how many students are there in the class?
   - a. 12
   - b. 21
   - c. 43
   - d. 45

9. The total emoluments of two persons are the same, but one gets allowances to the extent of 65% of his basic pay and the other gets allowances to the extent of 80% of his basic pay. The ratio of the basic pay of the former to the latter is
   - a. 16: 13
   - b. 5: 4
   - c. 7: 5
   - d. 12: 11

10. In a 500 metres race, B starts 45 metres ahead of A, but A wins the race while B is still 35 metres behind. What is the ratio of the speeds of A to B assuming that both start at the same time?
    - a. 25: 21
    - b. 25: 20
    - c. 5:3
    - d. 5:7

11. Select a suitable figure from the Answer Figures that would replace the question mark (?).

    - a. 1
    - b. 2
    - c. 3
    - d. 4

12. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

    - a. 1
    - b. 2
    - c. 3
    - d. 4

13. Identify the figure that completes the pattern

    - a. 1
    - b. 2
    - c. 3
    - d. 4

14. Choose the figure which is different from the rest.

| 1 | 2 | 3 | 4 | 5 |

   a. 1   b. 2
   c. 3   d. 4

15. Choose a figure which would most closely resemble the unfolded form of Figure (Z)

   a. 1   b. 2
   c. 3   d. 4

16. A, B and C can separately do a piece of work in 40 days, 60 days and 80 days respectively. They started to work together but A and B left the work 11 days and 8 days before completion of the work. How long will it take to finish the work?
   a. 35 days   b. 15 days
   c. 26 days   d. 24 days

17. Consider the table given below in which the numbers bear certain relationship among themselves along the rows:

29	13	18
33	X	19
30	27	3

Which one of the following numbers is the missing number indicated above by X?
   a. 19   b. 15
   c. 14   d. 8

18. If 15 pumps of equal capacity can fill a tank in 7 days, then how many extra pumps will be required to fill the tank in 5 days?
   a. 6   b. 7
   c. 14   d. 21

19. Juhi and Bhagyashree were playing simple mathematical puzzles. Juhi wrote a two digit number and asked Bhagyashree to guess it. Juhi also indicated that the number is exactly thrice the product of its digits. What was the number that Juhi wrote?
   a. 36   b. 24
   c. 12   d. 48

20. Find the missing number of the following series from the alternatives given:
5, 7, 2, 4, 8, ?, 5

a. 2　　　　　　　　　　　　　　　　　b. 12
c. 1　　　　　　　　　　　　　　　　　d. 11

21. MARATHON is to RACE as to HIBRNATION is to:

a. WINTER　　　　　　　　　　　　　b. BEAR
c. DREAM　　　　　　　　　　　　　　d. SLEEP

22. In June, a baseball team that played 60 games had won 30% of its game played. After a phenomenal wining streak this team raised its average to 50%. How many games must the team have won in a row to attain this average?

a. 12　　　　　　　　　　　　　　　　b. 20
c. 24　　　　　　　　　　　　　　　　d. 30

23. A sample of milk contains 5% water. What quantity of pure milk should be added to 10 litres of milk to reduce the water content to 2%?

a. 5 litres　　　　　　　　　　　　　b. 7 litres
c. 15 litres　　　　　　　　　　　　d. 12 litres

24. How many triangles are there in the diagram

a. 8　　　　　　　　　　　　　　　　b. 4
c. 10　　　　　　　　　　　　　　　　d. 16

25. Circle indicates "strong", square indicates "tall" and triangle "army officers". The strong army officers who are not tall are shown by

a. 4　　　　　　　　　　　　　　　　b. 3
c. 5　　　　　　　　　　　　　　　　d. 6

26. The words in the first column are written in a secret code in the second column. However, the secret writings in the second column are not in the same order. What is the code assigned for the letter D?

BRAIN　　　13529
DRAIN　　　35293
RIVER　　　13754
DRIVE　　　83754

a. 3　　　　　　　　　　　　　　　　b. 5
c. 1　　　　　　　　　　　　　　　　d. 9

27. Three ladies X, Y and Z marry three men A, B and C. X is married to A, Y is not married to an engineer, Z is not married to a doctor, C is not a doctor and A is a lawyer. Then which of the following statements is correct?
   a. Y is married to C who is an engineer
   b. Z is married to C who is a doctor
   c. X is married to a doctor
   d. None of these

28. Which of the following figures best depicts the relationship among criminals, thieves and judges?

29. Number of letters skipped in between the adjacent letters on the series decreases by two. Which of the following series observes that rule?
   a. EPVAF
   b. GPWBE
   c. UCJOP
   d. XFMQU

30. If the letters of the English alphabets are written as usual from left to right, then which letter is seventh to the right of the eighteenth letter from the right end?
   a. L
   b. M
   c. O
   d. P

31. In a rare coin collection, there is one gold coin for every three non-gold coins. 10 more gold coins are added to the collection and the ratio of gold coins to non-gold coins would be 1: 2. Based on the information; the total number of coins in the collection now becomes
   a. 90
   b. 80
   c. 60
   d. 50

32. There are two sets of figures; first four figures named Problem figures and next four figures named Answer figures indicated as 1, 2, 3 and 4. The problem figures follow a particular sequence. In accordance with the same, which one of the four answer figures should appear as the fifth figure?
   Problem figures:

   Answer figures:

a. 2   b. 4
c. 1   d. 3

33. If 'A' stands for '+' , 'B' stands for '-' , 'C' stands for 'x' , what is the value of
    (10C4)A(4C4)B6 = ?
    a. 46   b. 50
    c. 56   d. 60

34. 4 years ago A's uncle's age was 8 times A's age at that time. 8 years from now, A's
    uncle's age would be $2\frac{3}{4}$ times of A's age that time. 6 years from now what will be
    the respective ratio of A's age and A's uncle's age that time?
    a. 1:3   b. 4:7
    c. 5:8   d. 7:12

35. Population 5000 becomes 6000 in 6 years at a constant rate of growth. The population
    of the place at the same rate of growth after 18 years is
    a. 8946   b. 8640
    c. 9640   d. 10000

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