Reg. No. :

Question Paper Code: 54031

B.E. / B.Tech. DEGREE EXAMINATION, SEP 2020

Fourth Semester

Civil Engineering

15UGS431 - REASONING AND QUANTITATIVE APTITUDE

(Common to ALL branches)

(Regulation 2015)

Duration: One hour   Maximum: 30 Marks

PART A - (30x 1 = 30 Marks)

(Answer any Thirty of the following Questions)

1. Which of the following not a pair of co-prime numbers?

    (a) (4, 9)   (b) (9, 14)   (c) (3, 27)   (d) (5, 13)

2. Which of the following not a prime number?

    (a) 31   (b) 41   (c) 71   (d) 91

3. Find the numbers of divisors/factors of 127?

    (a) 2   (b) 3   (c) 8   (d) 9

4. Find the unit digit of $789^{263} + 485^{529} + 902^{335}$

    (a) 2   (b) 4   (c) 6   (d) 5

5. The sum of first 15 even numbers is?

    (a) 225   (b) 120   (c) 240   (d) 105

6. Find the value of $1^2+2^2+3^2+\ldots\ldots+11^2=?$

    (a) 66   (b) 132   (c) 385   (d) 506

7. Number of squares in the 8*8 chess board is

    (a) 64   (b) 65   (c) 204   (d) 224

8. Find the number of 3digit number upto 400.which are divisible by 11.

    (a) 25   (b) 26   (c) 27   (d) 28

9. Two numbers are 48 and 64. If HCF of two number is 16. Find the LCM?

(a) 188   (b) 192   (c) 144   (d) 16

10. Find the highest common factor of 300, 450 and 525.

(a) 125   (b) 50   (c) 75   (d) 25

11. The average of first 50 natural numbers is?

(a) 12.25   (b) 21.25   (c) 25   (d) 25.5

12. The average of first 20 multiples of 6?

(a) 63   (b) 62.5   (c) 60   (d) 65

13. The average of 7 consecutive number is 20.The largest of these numbers is

(a) 20   (b) 22   (c) 23   (d) 24

14. 63% of $3\frac{4}{7}$ is?

(a) 2.25   (b) 2.40   (c) 2.50   (d) 2.75

15. 40% of X120 Find the value of X =?

(a) 300   (b) 600   (c) 200   (d) 240

16. If A is 35% greater than B then how much percentage is B smaller than A?

(a) 16 2/3%   (b) 18 2/3%   (c) 16%   (d) None of these

17. If P% of P is 36 then, P is equal to

(a) 15   (b) 60   (c) 600   (d) 3600

18. What is present age of X in years?

(a) 35   (b) 42   (c) 49   (d) None of these

19. A man is 24 years older than his son. In two years, his age will be twice the age of his son. The present age of the son is.

(a) 14 years   (b) 18 years   (c) 20 years   (d) 22 years

20. By selling a book for 270, 20% profit was earned. What is the cost price of the book?

(a) 216   (b) 226   (c) 254   (d) 225

21. The cost price of 6 pens is equal to the selling price of 4 pens. Find the profit percent

(a) 25%   (b) 60 %   (c) 50%   (d) 80%

22. A sum of money fetched an interest of Rs. 2400 in 3 years at an interest rate

of 8%. Find the sum

(a) Rs. 8000 (b) Rs. 13000 (c) Rs. 16000 (d) Rs. 16000

23. A sum of Rs. 2500 at compound interest at 20% per annum for 2 years amount to

(a) Rs. 3600 (b) Rs. 8100 (c) Rs. 3000 (d) Rs. 8082

24. If a: b = 3: 5 and b: c = 4: 2 find a: b: c =?

(a) 3: 8: 5 (b) 3: 6: 8 (c) 6: 10: 5 (d) 4: 6: 3

25. The ratio of three numbers is 2:3:1 and their sum is 216. The first number of the three numbers is?

(a) 18 (b) 72 (c) 27 (d) 26

26. What is the value of x in 3: 12:: x: 6?

(a) 9.69 (b) 5.7 (c) 7.5 (d) 1.5

27. The speed of the car is 10 m/s. What is the speed in kmph?

(a) 25 kmph (b) 30 kmph (c) 50 kmph (d) 36 kmph

28. A person crosses a 400 m long street in 90 seconds. What is his speed in km/hr?

(a) 16 (b) 7.2 (c) 8.4 (d) 10

29. A person crosses a 600 m long street in 5 minutes. What is his speed in km/hr?

(a) 3.6 (b) 7.2 (c) 8.4 (d) 10

30. If 6 men take 9 days to complete a work, how many men can complete the work in 3 days?

(a) 2 men (b)12 men (c) 9 men (d) 18 men

31. A can do a piece of work in 10 days and B can do the same work in 15 days. How long will they take if both work together**?**

(a) 6 days (b) 8 days (c) 4 days (d) 5 days

32. Three pipes can fill a tank in 6, 10 and 15 hours respectively. If they are opened together, how long does it take to fill the tank?

(a) 3 Hours (b) 30 Hours (c) 10 Hours (d) 3.3 Hours

33. A train of length 600 m crosses a Pole in 4 min. 30 seconds. Find

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the speed of the train

(a) 6 kmph   (b) 5 kmph   (c) 9 kmph   (d) 8 kmph

34. The number of new words that can be formed by rearranging the letters of the word 'ALIVE' is

(a) 23   (b) 24   (c) 119   (d) 120

35. Find 8P3

(a) 336   (b) 504   (c) 1   (d) 0

36. The angle between the minute hand and hour hand of a clock when the time is 8.30 is

(a) 80° (b) 70° (c) 75° (d) 85°

37. How many times are the hands of a clock coincide in a day

(a) 44   (b) 48   (c) 24   (d) 22

38. Today is Friday, after 126 days, it will be:

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

39. Today is Tuesday, after 94 days, it will be:

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

40. On 8th September 2004, it was Monday. What was the day of the week on 8th September 2003?

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

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