Reg. No. :

Question Paper Code: 54031

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2018

Fourth Semester

Civil Engineering

15UGS431 - REASONING AND QUANTITATIVE APTITUDE

(Common to ALL branches)

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer Any 50 Questions

PART A - (50 x 2 = 100 Marks)

1. If the number 517*324 is completely divisible by 3, then the smallest whole number in place of * will be?

    (a) 0   (b) 2   (c) 1   (d) 5

2. What is the difference between the place values of 2 in the numeral 7229?

    (a) 20   (b) 200   (c) 180   (d) 18

3. Find the Number of factors of 520

    (a) 8   (b) 14   (c) 16   (d) 12

4. How many numbers between 11 and 90 are divisible by 7?

    (a) 11   (b) 9   (c) 10   (d) 13

5. How many prime numbers between 50 to 100.

    (a) 15   (b) 10   (c) 9   (d) 11

6. The HCF of two prime numbers is

    (a) Their product (b) their sum   (c) one   (d) zero

7. On dividing 15968 by a certain number the quotient is 89 and the remainder is 37. Find the divisor?

   (a) 159   (b) 179   (c) 156   (d) 163

8. $\dfrac{(489+375)^2-(489-375)^2}{(489\times375)}=?$

   (a) 144   (b) 864   (c) 2   (d) 4

9. If a clock strikes once at 1 O'clock, twice at 2 O'clock and so on, how many times will it strike in a day

   (a) 78   (b) 156   (c) 144   (d) None of these

10. Find the largest number of 4-digits divisible by 12, 15 and 18.

   (a) 9900   (b) 9750   (c) 9450   (d) 9000

11. The sum of first 12 odd numbers is

   (a) 78   (b) 144   (c) 156   (d) None of these

12. Find the number of 3 digit numbers, which are divisible by 9

   (a) 99   (b) 100   (c) 101   (d) 98

13. The L.C.M. of two numbers is 48. The numbers are in the ratio 2 : 3. Then sum of the number is

   (a) 30   (b) 40   (c) 38   (d) 36

14. The sum of all even natural numbers between 1 and 31 is

   (a) 16   (b) 128   (c) 240   (d) 512

15. Find the least number, which when divided by 12, 15, 20 and 54 leaves a remainder of 8 in each case

   (a) 548   (b) 540   (c) 532   (d) 524

16. Find the average of first ten multiples of 3?

   (a) 13   (b) 15   (c) 18   (d) 16.5

17. In a cricket match, Rahul scored a century with 13 boundaries and 3 sixes. What percentage of his runs did he make by running between the wickets?

   (a) 70%   (b) 50%   (c) 35%   (d) 30%

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18. Average of five consecutive odd numbers is 35. Find the greatest number in these five numbers?

    (a) 33   (b) 35   (c) 37   (d) 39

19. If the average of seven numbers is 35. If one is included. The average becomes 40. The included number is

    (a) 70   (b) 75   (c) 65   (d) 80

20. Find the average of all numbers between 5 and 49 which are divisible by 5.

    (a) 20   (b) 25   (c) 30   (d) 35

21. If the length of the rectangle is decreased by 20% and breadth is increased by 25% then change of the area is

    (a) 5%   (b) 20 %   (c) 0%   (d) 10%

22. If the sides of a square are decreased by 10%, find the percentage decreased by its area?

    (a) 20%   (b) 19%   (c) 15%   (d) 10%

23. 40% of a number is 80. What is 30% of one – fourth of the number?

    (a) 60   (b) 30   (c) 15   (d) 10

24. The sum of ages of Sarvesh and his father is 46 years. 3 years back father's age was 4 times more than Sarvesh's age. Find present age of Sarvesh.

    (a) 11 years   (b) 8 years   (c) 12 years   (d) 16 years

25. If 20% of a certain number is 80, then what is 30% of that number is

    (a) 100   (b) 120   (c) 150   (d) 140

26. How many terms of A.P -10, -7, -4, -1,…… must be added to get the sum -104?

    (a) 10   (b) 13   (c) 12   (d) 11

27. After 5 years, age of Neelam would be 28 years. What was her age 8 years ago?

    (a) 15   (b) 20   (c) 25   (d) 30

28. The sum of first 45 natural numbers is

    (a) 1035   (b) 1280   (c) 2070   (d) 2140

29. Present age of the X and Y are in the ratio 5:6 seven years hence the ratio will become 6:7. What is present age of X in years?

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

30. The average age of our family of four is 35. Excluding me, the average age is 40. Find my age?

    (a) 15   (b) 25   (c) 20   (d) 30

31. 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%

32. If a worker in a factory receives one rupee on the first day from the second days onwards his wage is increased by one rupee every day. What is the total amount of wage he receives after 40 days?

    (a) Rs. 720/-   (b) Rs. 820/-   (c) Rs. 810/-   (d) Rs. 740/-

33. By selling a watch for Rs. 980/-, a man loses 30% what is that watch cost price

    (a) Rs.1200/-   (b) Rs.1300/-   (c) Rs. 1400/-   (d) None of these

34. 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

35. A man bought a second-hand typewriter for Rs.1200 and spent Rs.200 on its repairs. He sold it for Rs.1680. His profit per cent is

    (a) 20%   (b) 10%   (c) 8%   (d) 16%

36. The sum of the ages of 5 children born at the intervals of 3 years each is 50 years what is the age of the youngest child?

    (a) 4 years   (b) 7 years   (c) 5 years   (d) 6 years

37. The Difference between C.I and S.I on a sum of Rs. 10000 for two years at a rate of 5% interest is

    (a) Rs. 25   (b) Rs. 20   (c) Rs. 10   (d) Rs. 5

38. At what rate per annum a sum of Rs. 2400/- will become Rs. 3600/- in 5 years

    (a) 10%   (b) 15%   (c) 20%   (d) 12%

39. After selling 30% of the Oranges, a fruit vendor has 280 Oranges left. How many did he have originally?

    (a) 400   (b) 520   (c) 390   (d) 300

40. Find the principle, interest on Rs.900/- at 6% p.a. for 3 years?

    (a) Rs.5000   (b) Rs.4500   (c) Rs.3500   (d) Rs.2200

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41. If x : y = 5 : 8 and y : z = 4 : 7 then find x : z.

    (a) 32 : 35   (b) 67 : 56   (c) 5 : 14   (d) 5 : 7

42. The ratio of two numbers is 3:4 and their sum is 28. The greater of the two numbers is?

    (a) 8   (b) 12   (c) 14   (d) 16

43. A motorist travels for 6 hours, the first half at 60 kmph and rest 48 kmph. Find the distance traveled by him

    (a) 324 km   (b) 320 km   (c) 300 km   (d) 340 km

44. If a:b=1:2,b:c=3:4 and c:d=2:3 find a:b:c:d?

    (a) 3:6:8:24   (b) 6:12:16:24   (c) 6:18:24:16   (d) 3:6:2:3

45. What is the value of x in 1.7: 5.1:: 1.9: x?

    (a) 9.69   (b) 5.7   (c) 7.5   (d) 8.67

46. 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

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

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

48. A man starts at 3 pm with the speed of 50 Kmph. Another man follows him at 4 pm with the speed of 75 Kmph. When will they meet?

    (a) 5 pm   (b) 6 pm   (c) 7 pm   (d) 6.30 pm

49. An athlete runs 200m race in 24 seconds. What is his speed?

    (a) 20 km/hr   (b) 25 km/hr   (c) 27.5 km/hr   (d) 30 km/hr

50. If the side of the square are increased by 20%. Find the percentage increase in its area

    (a) 40%   (b) 44 %   (c) 20%   (d) 24%

51. If 4 men can colour 48 m long cloth in 2 days, then 6 men can colour 36 m long cloth in

    (a) 1 day   (b) 3/2 days   (c) 3/4 day   (d) 1/2 day

52. The ages of Vikas and Nikash are in the ratio of 5 : 3. If Vikas is 8 year elder than Nikash, find the age of Nikash?

    (a) 10   (b) 12   (c) 15   (d) 20

53. 36 workers can reap a field in 6 days. If the work is completed in 4 days, the extra workers required are

    (a) 10   (b) 25   (c) 18   (d) 15

54. A can do a work in 24 days and B can do it in 8 days. In how many days A and B can do the work?

    (a) 20 days   (b) 10 days   (c) 6 days   (d) 8 days

55. If 3 persons can do 3 times of a particular work in 3 days, then, 7 persons can do 7 times of that work in

    (a) 7 days   (b) 6 days   (c) 4 days   (d) 3 days

56. In an examination, 35% of the students passed and 455 failed. How many students appeared for the examination?

    (a) 490   (b) 700   (c) 845   (d) 1300

57. 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) 3.33 hours

58. Today is Monday. After 61 days, it will be

    (a) Thursday   (b) Tuesday   (c) Wednesday   (d) Saturday

59. A pipe can fill a tank in 3 hours. Because of leak in the bottom, it is filled in 4 hours. If the tank is full, how much time will the leak take to empty it?

    (a) 10 hours   (b) 11 hours   (c) 12 hours   (d) 9 hours

60. What was the day of the week on 17th June, 1998?

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

61. Two trains 300m and 400m long run at the speeds of 40 kmph and 50kmph respectively in opposite Directions on parallel tracks. The time taken to cross each other?

    (a) 20 sec   (b) 25 sec   (c) 26 sec   (d) 28 sec

62. On which week day August 15, 1947 falls?

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

63. There are 10 yes or no questions. In how many ways can these be answered

    (a) 1024   (b) 256   (c) 100   (d) 20

64. In how many different number of ways the letters of the word 'ENGINEERING' can be arranged

    (a) 27200   (b) 27700   (c) 277200   (d) 272700

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65. 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

66. Grish walked 15 m North – West, then turned South and walked another 12 m. How far was he from the starting point

      (a) 9 m   (b) 3 m   (c) 18 m   (d) 27 m

67. How many times in a day, are the hands of a clock in straight line but opposite in direction

      (a) 48   (b) 22   (c) 24   (d) 12

68. How many times are the hands of a clock at right angles in a day?

      (a) 22   (b) 44   (c) 38   (d) 48

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

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

70. How many persons are there who take both tea and coffee but not Milk?

      (a) 7   (b) 25   (c) 10   (d) 15

71. If P is the brother of Q, Q is the sister of R, and R is the father of S, how is P related to S?

      (a) Father   (b) Maternal Uncle   (c) Paternal Grandpa   (d) Paternal Uncle

72. Today is Friday, after 126 days, it will be

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

73. If B's mother was A's mother's daughter, How is A related to B?

      (a) Maternal Uncle   (b) Father   (c) Brother   (d) Sister

74. In a row of 25 boys, Mithun is twelfth from the left and Nitin is eighth from the right. How many boys are between them.

      (a) 4   (b) 7   (c) 6   (d) 5

75. Tree : Forest :: Grass : ?

      (a) Lawn   (b) Field   (c) Garden   (d) Farm

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