QUANTITATIVE TOPIC WISE EXAM (TIME& WORK, PIPES, PERCENTAGE)

1. The difference between 20% of a number and 4/5th of the same number is 2499. What is 2/7th of that number ?
A. 2156
B. 1190
C. 1090
D. 1465
E. None of these

2.If the numerator of a fraction is increased by 300% and the denominator is increased by 200%, the resultant fraction is 4/15. What is the original fraction ?
A. 3/5
B. 4/5
C. 2/5
D. 1/5
E. None of these

3.Kajal spends 55% of her monthly income on grocery, clothes and education in the ratio of 4 : 2 : 5 respectively. If the amount spent on clothes is Rs. 5,540. What is Kajal's monthly income ?
A. Rs. 55,400
B. Rs. 54,500
C. Rs. 55,450
D. Rs. 55,650
E. None of these

4.35 percent of a number is two times 75 percent of another number. What is the ratio between the first and the second numbers respectively ?
A. 35 : 6
B. 31 : 1
C. 23 : 7
D. 32 : 9
E. None of these

5.Last year there were 610 boys in a school. The number decreased by 20 percent this year. How many girls are there in the school if the number of girls is 175 percent of the total number of boys in the school this year ?
A. 854
B. 848
C. 798
D. 782
E. None of these

6.The salary of Anup is 30% more than that of Barun. Find by what percentage is the salary of Barun less than that of Anup ?
A. 26.12%
B. 21.23%
C. 23.07%
D. 27.03%
E. None of these

7.Akash scored 73 marks in subject A. He scored 56% marks in subject B and x marks in subject C. Maximum marks in each subject were 150. The overall percentage marks obtained by Akash in all the three subjects together were 54%. How many marks did he score in subject C?
A. 84
B. 86
C. 79
D. 73
E. None of these

8.What value will you obtain if twenty five percent of 2340 is subtracted from four-ninth of square of 36 ?
A. 9
B. -18
C. 18
D. -9
E. 3

9.In a class of 35 students and 6 teachers, each student got sweets that are 20% of the total number of students and each teacher got sweets that are 40% of the total number of students. How many sweets were there?
A. 245
B. 161
C. 406
D. 84
E. None of these

10. Prithvi spent Rs. 89,745 on his college fees, Rs. 51,291 on Personality Development Classes and the remaining 27% of the total amount he had as cash with him. What was the total amount ?
A. Rs. 1,85,400

B. Rs. 1,89,600
C. Rs. 1,91,800
D. Rs. 1,93,200
E. None of these

11. Kamala got married six years ago and her present age is 1 ¼ times her age at the time of her marriage. Age of her son is 10% of her present age. What is her son's age ?
A. 3 years
B. 4 years
C. 2 years
D. 5 years
E. None of these

12.A's salary is 50% more than that of B's. How much percent is B's salary less than A's?
A. 33 1/4 %
B. 33 1/3%
C. 33 1/2%
D. 33%
E. None of these

13. If increasing 20 by P percentage gives the same result as decreasing 60 by P percentage, what is P percentage of 70?
A. 50
B. 140
C. 14
D. 35
E. None of these

14. Tirupati sells a calculator to Ashokan. Ashokan, offered him a sum of money for which he refused as being 13% below the value of the calculator. Ashokan then offered him Rs. 45 more and the second offer was 5% more than the estimated value. The value of the calculator is
A. Rs. 450
B. Rs. 225
C. Rs. 250
D. Rs.500
E. None of these

15. Sivaram regularly saves 60% of his monthly salary. On account of a rise in price he has to increase his monthly expenses by 20%. Now he is able to save Rs. 10,400 per month. What is his monthly salary ?
A. Rs. 15,000
B. Rs. 30,000
C. Rs. 20,000
D. Rs. 25,000
E. None of these

16.A conductor pays 25% more to a male worker than what he pays to the female worker. How much percent less does the conductor pay to the female worker than the male worker ?
A. 15%
B. 20%
C. 25%
D. 10%
E. None of these

17. The mean annual salary paid to all employees of company was Rs. 8,000. The mean annual salaries paid to male and female employees were Rs. 7,000 and Rs. 12,000 respectively. What is the percentage of male workers in the company ?
A. 80%
B. 20%
C. 60%
D. 50%
E. None of these

18. The length of the rectangular field is increased by 25%. By what percent must the width be reduced so that the area in each case remains the same ?
A. 15%
B. 17%
C. 18%
D. 20%
E. None of these

19. Hari had three note books X, Y, Z. of these, X had 120 pages less. Y had 10% more pages and Z had 10% less pages. If he tore roughly 5 %, 10% and 15% of pages in X, Y and Z respectively, then what percent of pages did he tear out?
A. 8%
B. 10%
C. 7%
D. 13%
E. None of these

20. Due to an increase of 15% in price of milk, a family reduces its consumption of milk by 15%. What is the

effect in the expenditure of the family on account of milk ?
A. 3% decrease
B. 2.25% decrease
C. 2.50% increase
D. 3.5% decrease
E. None of these

21Ratan bought a car at a discountof 16.67% on listed price from an automobile company. If the listed price of the car is Rs. 6, 60, 000, then find the amount of discount.
A. Rs. 1,10,000
B. Rs. 1,00,000
C. Rs. 1,01,000
D. Rs. 1,25,000
E. None of these

22. Two candidates contested in a election. If one got 520 votes which was 65% of votes, then what was the total number of votes?
A. 858
B. 702
C. 780
D. 754
E. None of these

23. In an election between two candidates, one got 52% of the valid votes. 25% of the total votes were invalid. The total number of votes were 8400. How many valid votes did the other person get?
A. 3276
B. 3196
C. 3024
D. Cannot be determined
E. None of these

24.A student scores 55% marks in 8 papers of 100 marks each. He scores 15% of his total marks in English. How much does he score in English?
A. 55
B. 66
C. 77
D. 44
E. None of these

25.A student has to secure a minimum 35% marks to pass in an examination. If he gets 200 marks and fails by 10 marks, then the maximum marks are:
A. 300
B. 400
C. 500
D. 600
E. None of these

26.A's salary is 50% more than that of B. How much % is B's salary less than A?
A. 50
B. 33(1 / 3)
C. 45
D. 66(2 / 3)
E. None of these

27. What percent decrease in salaries would exactly cancel out 20% increase?
A. 20
B. 16(2 / 3)
C. 33(1 / 3)
D. 18
E. None of these

28. The price of a car is first increased by 10%& then decreased by 15%. What is the net percentage change in price of the car ? Also find the new price if the price was initially Rs. 2,40,000.
A. Rs. 2,48,000
B. Rs. 2,24,000
C. Rs. 2,42,000
D. Cannot be determined
E. None of these

29. What will be the net% change in salary of Abha it is first decreased by 25% and then increased by 30%.
A. -5/2 %
B. 5/2%
C. 2/5%
D. 6/5%
E. None of these

30. The cost of manufacturing one unit of an article goes up by 2% in 1992 and 5% in 1993. Find the net % increase in the cost till 1993. Also find the cost in 1993, if it was Rs. 500, in 1992 (before increase).
A. Rs. 535. 5
B. Rs. 535
C. Rs. 500
D. Cannot be determined
E. None of these

31. A is thrice as good a workman as B and therefore able to finish a job in 48 days less than B working together ,they can do it in how many days together ?
A. 13 days
B. 15 days
C. 18 days
D. 12 days
E. 116 days

32. Three men –A ,B and C working together can do a job 6 hours less time than A did alone ,1 hour less time than B alone and half the time needed by C .In how many days will A finish the work alone ?
A. 20/3 days
B. 23/4 days
C. 22/5 days
D. 33/6 days
E. 27/8 days

33. A work is started by a man on the first day. Each subsequent day a new person joined the work and it is known that the total work will completed on the 11th day. If from the starting day 6 men working on that work and no new men added later, in how many days the work got completed?
A. 15 days
B. 12 days
C. 14 days
D. 11 days
E. None of these.

34. Two men can complete a piece of work in 3 days while 3 women can complete the same work in 4 days and 4 children can complete the same work in 6 days. Then find in how many days 1 men ,1 women and 2 children can complete the same work ?
A. 4 days
B. 3 days
C. 5 days
D. 2 days
E. None of these.

35. 30 men are supposed to do a work in 38 days. After 25 days, 5 more men were employed on work for which the work is completed in 1 day before . If 5 more men were not worked then how many days took in delay?
A. 1 day
B. 2 days
C. 3 days
D. 4 days
E. None of these.

36. A group of men decided to do a job in 4 days but 20 men dropped out everyday ,the job was completed at the end of the 7th day .Find the men who are in the work initially ?
A. 155
B. 135
C. 120
D. 140
E. 160

37. A printer A can print one thousand books in 15 hours ,printer B can print the same number of books in 10 hours and printer C can print the same number of books in 12 hours . If all the printers are started to print the books at 8 A.M, After sometime printer A is closed at 9 A.M and printer B and printer C remains working. Find at what time the printing will be completed ?
A. 4(3/11)hours
B. 3(1/11)hours
C. 5(1/11)hours
D. 3(5/11)hours
E. None of these.

38. Ramesh and Ram can do a piece of work in 24 and 30 days respectively. They both started and worked for 6 days. Ram then leaves the work and another their friend Rohit joins the work and completed the remaining work with Ramesh in 11 days . Find how many days are taken by Rohit alone to finish the work?
A. 110 days
B. 132 days
C. 150 days
D. 120 days
E. None of these.

39. A woman has her three daughters. First and second can take 24 and 30 days resp. to complete a work .In how many days third one takes to complete the work. If woman can complete the whole work alone in 3(3/11) days .The efficiency of woman is double than her three daughters.
A. 22 days

B. 12 days
C. 13 days
D. 21 days
E. 19 days

40. A contractor takes a road construction project to finish it in 40 days and for that he engaged 200 men. After 30 days he employed 100 more men in this project, then the work finished on time. Find if the 100 more men would not worked then how many more days required to finish the work ?
A. 8 days
B. 10 days
C. 12 days
D. 7 days
E. None of these.

41. Three pipes A, B and C can fill a cistern in 6 hours. After working at it together for 2 hours, C is closed and A and B can fill the remaining part in 6 hours. The number of hours taken by C alone to fill the cistern is
A.12hrs
B.10hrs
C.18hrs
D.8hrs
E.None of these

42. A tap can fill a tank in 6hrs.After half the tank is filled, three more similar taps are opened. What is the total time taken to fill the tank completely?
A. 3hrs
B. 3hrs 15 min
C. 3hrs 45 min
D. 4hrs
E. None of these

43. **Two pipes A and B can fill a tank in 10 minutes and 20 minutes respectively. Both the pipes are opened together but after 4 minutes, Pipe A is turned off. What is the total time required to fill the tank ?**
A.12m
B.10m
C.8m
D.16m
E.None of these

44. **Two pipes A and B can fill a tank in 6 hours and 5 hours respectively. If they are turned on alternatively for 1 hour each, find the time in which the tank is full.**
A.4hrs 30min
B.5hrs
C.6hrs 25min
D.5hrs 30min
E.None of these

45. A pump can fill the tank in 4 hours.Because of a leak in the tank i took 5(1/2) hours to fill the tank.If the tank is full,how much time will the leak take to empty it?
A. 14hrs
B. 14hrs 20min
C. 14hrs 40min
D. 14hrs 45min
E. None of these

46. **Two pipes M and N can fill a tank in 30 and 45 minutes respectively. If both the pipes were open for few minutes after N was closed and the tank was full in 25 minutes, find the time for pipe N was open.**
A.8.16m
B.7.5min
C.5min
D.10.2m
E.None of these

47. **A cistern is filled by 3 pipes A, B and C with uniform flow. The second pipe B takes3/2 times the time taken by A to fill the tank, while C takes twice the time taken by B to fill the tank. If all the three pipes can fill the tank in 7 hours, find the time required by pipe A alone to fill the tank.**
A.10hrs
B.12hrs
C.14hrs
D.15hrs
E.None of these

48. **Two pipes P and Q can fill a tank in 8 hours. If only pipe P is open then it would take 4 hours longer to fill the tank. Find how much longer would it take if only pipe Q is open.**
A.16hrs
B.12hrs

C.10hrs
D.8hrs
E.None of these

49. **Two pipes P and Q can fill a tank in 20m and 30m respectively. If both the pipes are opened simultaneously,**
after how much time should Q be closed so that the tank is full in 16minutes ?
A.12min
B.6min
C.10min
D.7min
E.None of these

50. **A tap can fill a tank in 12 minutes and another tap can empty the tank in 6 minutes. If the tank is already full and**
then both the taps are opened the tank will be
A.Filled in 6 minutes
B.Emptied in 6 minutes
C.Filled in 6 minutes
D.Emptied in 12 minutes
E.None of these