QUANTS MISCELLANEOUS

1.. The average age of husband, his wife and daughter 3 years ago was 24 years and that of his wife and daughter 5 years ago was 18 years. What is husband's present age?
1. 32 years
2. 35 years
3. 28 years
4. 36 years
5. 40 years

2. In what ratio must rice at Rs. 9.30 per kg be mixed with rice at Rs. 10.80 per kg, so that the mixture be worth Rs. 10 per kg?
1.7 : 5
2. 6 : 7
3.5 : 7
4. 8 : 7
5.4 : 7

3. Punit, Netra and Nishka start running around a circular track and complete one round in 18, 20 and 15 seconds respectively. In how many seconds will the three meet again at the starting point if they all have started running at the same time?
1. 360
2. 180
3. 270
4. Cannot be determined
5. 240

4. What will come in place of question mark '?' in the following questions?
$12^2 - 4^3 - \sqrt{729} + 11 = ?^2$
1.$\sqrt{32}$
2. 64
3.$\sqrt{54}$
4. 53
5. 8

5. An auto retailer spends a certain amount of money on purchasing 3 components A, B and C. If the cost of A were one fifth of its actual cost, B were half of its actual cost and C were two fifth of its actual cost, the total cost of the three components would have been Rs 800. On the other hand, if the price of A were reduced two fold, that of B were reduced four fold and that of C were reduced three fold, the total cost would have been Rs. 1200. How much money did he spend on buying all three items?
1.Rs. 640
2.Rs. 1440
3.Rs. 1500
4.Rs. 2800
5. Insufficient Data

6. 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. 5,740. What is Kajal's monthly income?
1.Rs. 57,400
2.Rs. 56,500
3.Rs. 57,450
4.Rs. 55,650
5. None of these

7. If p : q = r : s = t : u = 1 : 2, then find the value of (3p + 5r + 7t) : (3q + 5s + 7u),
1.2 : 1
2. 1 : 2
3.3 : 4
4. 4 : 7
5. None of these

8. Tea worth Rs. 126 per kg and Rs. 135 per kg are mixed with a third variety of a higher cost in the ratio 1 : 1 : 2. If the mixture is worth Rs. 153 per kg, the price of the third variety per kg will be
1.Rs. 169.50
2.Rs. 180.65
3.Rs. 175.50
4. Cannot be determined
5. None of these

9. One year ago ratio of salary of Aditya and Bunny was 4: 5. The ratio of their individual salary from last year to this year is 5 : 6 and 2 : 3 respectively. At present total salary is Rs. 36900. Find salary of Aditya.
1.Rs. 12300
2.Rs. 13600
3.Rs. 14200
4.Rs. 14400
5.Rs. 15000

10. The ratio between the three angles of a quadrilateral is 6 : 7 : 8 respectively. The value of the fourth angle of the quadrilateral is 108°. What is the sum of the largest and the smallest angles of the quadrilateral?
1. 124°
2. 226°
3. 142°
4. 132°
5. None of these

11. Find the remainder when 242 × 590 is divided by 12.
1. 11
2. 8
3. 4
4. 6
5. 12

DIRECTION (Q. 12-16):- In the following question two equations are given in variables x and y. You have to solve these equations and determine relation between x and y.

12. I. $55x^2 - 495\,x + 1100 = 0$
II.$5y^2 + 10\,y - 120 = 0$
1.x> y
2. x < y
3.x ≥ y
4. x ≤ y
5.x = y or relation cannot be established

13. I. $x^2 + 4\,x + 4 = 0$
II.$y^2 + 7\,y + 12 = 0$
1.x< y
2. x > y
3.x ≤ y
4. x ≥ y
5.x = y or no relation is obtained

14. I. $x^2 - x - 6 = 0$
II.$y^2 + 2\,y - 3 = 0$
1.x< y
2. x > y
3.x ≤ y
4. x ≥ y
5.x = y or no relation is obtained

15. I. $x^2 + 3\,x + 2 = 0$
II.$y^2 - y - 2 = 0$
1.x< y
2. x > y
3.x ≤ y
4. x ≥ y
5.x = y or no relation is obtained

16. I. $x^2 + 2\,x - 8 = 0$
II.$y^2 + 8\,y + 16 = 0$
1.x< y
2. x > y
3.x ≤ y
4. x ≥ y
5.x = y or no relation is obtained

Directions (Q. 17-18):- In each of the following questions, a question followed by two statements numbered I and II are given. You have to read both the statements and then find the right answer.

17. The investment details of Ram and Shyam are provided in statement I and II respectively. Assuming that they get the same rate of interest, calculate the rate of interest p.c.p.a.?
I. An amount of Rs. 5700 fetches simple interest of Rs. 2394 in three years.
II. An amount of Rs. 2500 fetches compound interest of Rs. 1203.86 in three years.
1. If the data given in statement I alone are sufficient to answer the question whereas the data given in statement II alone are not sufficient to answer the question
2. If the data given in statement II alone are sufficient to answer the question whereas the data given in statement I alone are not sufficient to answer the question
3. If the data in either statement I alone or in statement II alone are sufficient to answer the question
4. If the data in both the statements I and II are not sufficient to answer the question
5. If the data given in both the statements I and II are necessary to answer the question

18. Two friends Anwesha's and Shweta's marks are related in the following manner as indicated by statement I and II. How much did Anwesha get in Chemistry?
I. Shweta got 90 marks in Physics which were thrice the marks Anwesha got in Chemistry
II. Anwesha's marks in Chemistry were 22 per cent of the total marks Shweta got in all the subjects together
1. If the data given in statement I alone are sufficient to answer the question whereas the data given in statement II alone are not sufficient to answer the question
2. If the data given in statement II alone are sufficient to answer the question whereas the data given in statement I alone are not sufficient to answer the question
3. If the data in either statement I alone or in statement II alone are sufficient to answer the question
4. If the data in both the statements I and II are not sufficient to answer the question
5. If the data given in both the statements I and II are necessary to answer the question

19. If A and B are independent events, then P (A∩B) equals
1.P1. + P2. 2.P1. P2.
3.P(A/B) 4.P(B/A)
5.None of these

DIRECTION (Q. 20-22):- What should come in place of question mark '?' in the following number series?

20. 7, 9, 12, 16, 21, 27, ?
1.29 2.33
3.36 4.34
5.38

21. 995, ?, 762, 656, 557, 465
1.845 2.875
3.865 4.885
5.None of these

22. 620, 632, 608, 644, 596, ?
1.536 2.556
3.656 4.646
5.None of these

Directions (Q. 23-25):- In each of the following questions, a question followed by two statements numbered I and II are given. You have to read both the statements and then find the answer.

23. The holy river Ganga in Uttrakhand is famous for its water sports adventures. A group of individuals go for a rafting adventure. What is the speed of the boat in still water given statement I and II?
I. The boat travels at the speed of 3 km/hr upstream
II. The boat travels at the speed of 5 km/hr downstream.
1. If the data given in statement I alone are sufficient to answer the question whereas the data given in statement II alone are not sufficient to answer the question
2. If the data given in statement II alone are sufficient to answer the question whereas the data given in statement I alone are not sufficient to answer the question
3. If the data in either statement I alone or in statement II alone are sufficient to answer the question
4. If the data in both the statements I and II are not sufficient to answer the question
5. If the data given in both the statements I and II are necessary to answer the question

24. What will be Raj'sage after two years?
I. Raj's present age is two third the present age of Simran.
II. The ratio between Simran's and Shweta's age is 5 : 6 respectively
1. If the data given in statement I alone are sufficient to answer the question whereas the data given in statement II alone are not sufficient to answer the question
2. If the data given in statement II alone are sufficient to answer the question whereas the data given in statement I alone are not sufficient to answer the question
3. If the data in either statement I alone or in statement II alone are sufficient to answer the question
4. If the data in both the statements I and II are not sufficient to answer the question
5. If the data given in both the statements I and II are necessary to answer the question

25. What is the three digit number?
I. On subtracting any two digits of the number, we get 0.
II. The three digits of the number sum up to 27.
1. If the data given in statement I alone are sufficient to answer the question whereas the data given in statement II alone are not sufficient to answer the question
2. If the data given in statement II alone are sufficient to answer the question whereas the data given in statement I alone are not sufficient to answer the question
3. If the data in either statement I alone or in statement II alone are sufficient to answer the question
4. If the data in both the statements I and II are not sufficient to answer the question
5. If the data given in both the statements I and II are necessary to answer the question

26. 4 boys and 3 girls are to be seated in a row in such a way that no two boys sit adjacent to each other. In how many different ways can it be done?

1.5040 2.30
3.144 4.72
5.24

27. In the following number-series, only one number is wrong. Find out the wrong number.

4, 6, 18, 49, 201, 1011

1.1011 2.201
3.18 4.49
5.4

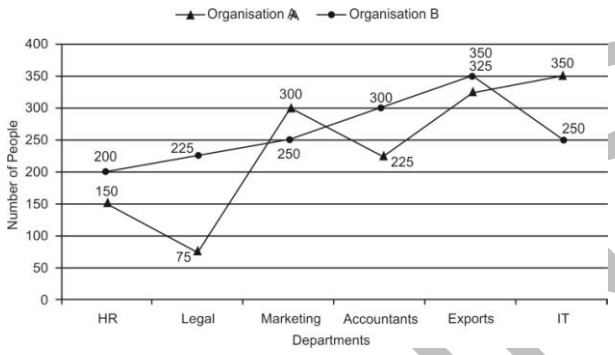
28. In the following number-series, only one number is wrong. Find out the wrong number.

18, 8, 17, 9, 14, 10, 15, 11

1.14 2.18
3.10 4.11
5.None of these

Directions (Q. 29-33):- Study the following graph carefully and answer the questions given below it.

Number of people working in various departments of two different organizations



29. If 25% more than the existing number of people in the Accounting department of organisation B, join the accounting department, then what will be the total number of people working in the Accounting departmentof both theorganisations A and B together?

1.500 2.600
3.700 4.725
5.None of these

30. What is the difference between the number of people working in Accounts, Export and IT department of organisation A and the number of people working in Exports, Legal and Marketing departments of organisation B?

1.25 2.50
3.75 4.100
5.None of these

31. What is the total number of people working in organisation A?

1.1755 2.1725
3.1675 4.1575
5.1425

32. The number of people working in IT department of organisation B is approximately what per cent of the total number of people working in that organisation?

1.5 2.10
3.16 4.20
5.25

33. What is the respective ratio of the number of people working in the Legal department of organisation A and the number of people working in the HR department of organisation B?

1.3 : 8 2.9 : 7
3.7 : 5 4.5 : 3
5.None of these

34. If a wire of diameter 4 mm is drawn from a copper spherical ball of diameter 12 cm, find the length of the wire

1.83 m 2.64 m
3.72 m 4.76 m
5.None of these

35. How many plants will be there in a circular bed whose outer edge measure 30 cms, allowing 4 cm2 for each plant?

1.18 2.750
3.24 4.120
5.None of these

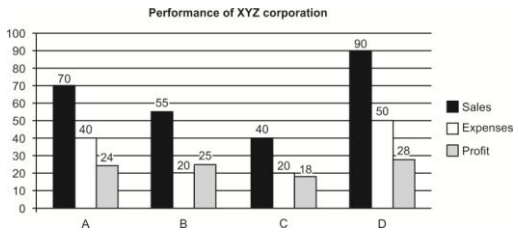
36. Two trains travel in the same direction at 46 km and 36 km per hour and the faster train passes a man in the slower train in 36 seconds. Find the length of the train (faster)

1.140 m 2.100 m
3.110 m 4.120 m
5.None of these **Directions (Q. 37-41):- Study the information given below carefully and answer the questions that follow.**

The graph shows the performance of XYZ corp. ltd in different zones (A, B, C, D) in India in the year 2009 – 2010. There is no overlap between the four zones, which together account for the entire sales, expenses and profits for XYZ corp. ltd. All figures are in crores.

Note: profit = sales – expenses – tax; where tax is imposed as a certain percentage of the pre–tax profits.

Pre–tax profits = sales – expenses



37. Expenses as a percentage of sales are the highest for which zone in the year 2009–2010

1.A 2.B

3.C 4.D
5.A and B both

38. In which zone is the tax–rate as a percentage of pre–tax profit the highest in 2009–2010?
1.A 2.B
3.D 4.A and C both
5.B and D both

39. The C zone accounted for what percentage of the overall sales for XYZ Corp. ltd in 2009–2010?
1.12% 2.15.7%
3.20% 4.35%
5.53%

40. The post–tax profits, expressed as a percentage of sales, for XYZ corp .ltd in 2009–2010 were
1.20.4% 2.37.3%
3.42.5% 4.53%
5.55%

41. XYZ corp. ltd paid the maximum tax in which of the four zones in 2009–2010?
1.A and C both 2.A
3.B 4.C
5.D

DIRECTION (Q. 42-44):-Study the information given below carefully and answer the questions that follow.

Akshun and Devansh can complete a school project in 4 days. Devansh and Vansh can do it in same number of days, Akshun and Vansh can do it in 6 days.

42. In how many days will Akshun alone finish the school project?
1.17 days 2.15 days
3.20 days 4.14 days
5.12 days

43. Vansh alone will finish the school project in
1.10 days 2.12 days
3.13 days 4.21 days
5.None of these

44. Devansh alone will finish the school project in
1.8 days 2.6 days
3.7 days 4.12 days
5.None of these

45. Two cars travel away from each other in opposite directions at 27 miles per hour and 45 miles per hour respectively. If first car travels for 30 minutes and the second car for 40 minutes. The distance (in miles) between them at the end of their trips is
1.45.5 2.28.5
3.35.5 4.43.5
5.47.5

46. An amount of Rs 6000 becomes Rs 7200 in 4 years at a certain rate of simple interest. If the rate becomes 1.5 times of itself, the amount of the same principal in 5 years will be-
1.Rs 8,230 2.Rs 8,250
3.Rs 8,245 4.Rs 8,255
5.None of these

47. If the compound of interest accrued on an amount Rs.14,500 in two years is Rs 4,676.25, find the rate of interest p.c.p.a.
1.12% 2.15%
3.20% 4.25%
5.None of these

48. A shopkeeper who marked his goods up by 30% subsequently offered a discount of 10% on the mark price. What is the percentage profit that the shopkeeper makes after offering the discount?
1.13% 2.15%
3.17% 4.23%
5.27%

49. A girl buys a single pineapple for Rs. 20. If she were to buy a dozen pineapples, she would have to pay a total amount of Rs. 200. What would be the approximate per cent discount she would get on buying a dozen pineapples?
1.32 2.20
3.12 4.8
5.17

50. On the basis of selling price of an article, the loss is calculated to be 25%. The percentage of loss on the basis of cost price is
1.18 2.20
3.22 4.25
5.28

ANSWER KEY

1(2)	2(4)	3(2)	4(5)	5(4)	6(1)	7(2)	8(3)	9(4)	10(5)
11(3)	12(3)	13(2)	14(5)	15(3)	16(4)	17(3)	18(1)	19(2)	20(4)
21(2)	22(3)	23(5)	24(4)	25(2)	26(3)	27(3)	28(1)	29(2)	30(3)
31(5)	32(3)	33(1)	34(3)	35(1)	36(2)	37(1)	38(3)	39(2)	40(2)
41(5)	42(5)	43(2)	44(2)	45(4)	46(2)	47(2)	48(3)	49(5)	50(2)