Directions (1-5): **What value should come in place of question mark (?) in the following questions?**

1.   8.4% of 270 – 9.6% of 105 = ?% of 168
    1) 2.5   2) 5   3) 7.5   4) 10   5)12.5

2. $\sqrt{70.56} \times (70.56)^{\frac{3}{2}} = (8.4)^?$
    1) 3   2) 4   3) 5   4) 6   5) 7

3.   17.5% of 1520 – 8.75% of 1200 = ?% of 2576
    1) 5.25   2) 6.25   3) 7.25   4) 8.25   5) 9.25

4. $8\frac{2}{3}$ of 1263 + $4\frac{5}{9}$ of 1179 = ? × 9
    1) 1809   2) 1810   3) 1811   4) 1812   5) 1813

5.   32% of 885 – 20% of 66 = 75% of ?
    1) 300   2) 320   3) 340   4) 360   5) 380

Directions (6-10): **What approximate value should come in place of question mark (?) in the following questions?**
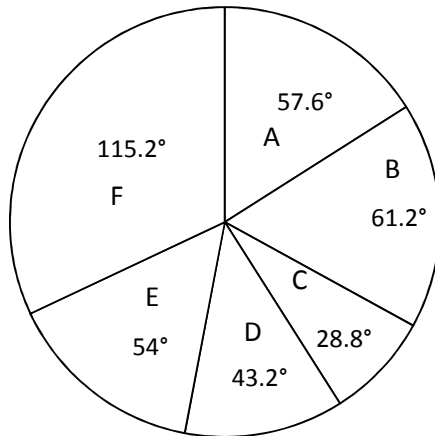
6. $\sqrt{164} \times \sqrt[3]{615} = ?$
    1) 70   2) 90   3) 110   4) 130   5) 150

7. $\left(\sqrt{485} \times 3.48\right) \times 12.08 = ?$
    1) 900   2) 925   3) 950   4) 975   5) 1000

8. $29.03 \times 24.96 - 7.98 \times \sqrt[3]{3370} = ?$
    1) 450   2) 500   3) 550   4) 600   5) 650

9. 245% of 49.962 – 115.03% of 41.89 = ?
    1) 75   2) 125   3) 175   4) 225   5) 275

10. $\sqrt{5930} \times \sqrt[3]{43}$ = ?
    1) 250   2) 260   3) 270   4) 280   5) 290

Directions (11-15): **Find out the number in places of question mark (?) in the following number series.**

11. 232 360 530 748 1020 ?
    1) 1350   2) 1352   3) 1354   4) 1356   5) 1358

12. 6 21 101 601 4201 ?
    1) 33601   2) 33602   3) 33603   4) 33604   5) 33605

13. 117 365 861 1853 3837 ?
    1) 7801   2) 7802   3) 7803   4) 7804   5) 7805

14. 15 66 321 1596 7971 ?
    1) 39842   2) 39844   3) 39846   4) 39848   5) 39850

15. 27 370 1099 2430 4627 ?
    1) 8002   2) 8004   3) 8006   4) 8008   5) 8010

Directions (16-20): **Following pie-chart shows the proportion of number of students of different schools. The table shows the percentage of girls among them.**

School	% Girls
A	20%
B	30%
C	45%
D	35%
E	42%
F	4.5%

16. If the number of girls in School D is 462, what is the total number of the students in School C?
    1) 820　　　　2) 840　　　　3) 860　　　　4) 880　　　　5) 900

17. If the total number of students in school A is 1760, what is the total number of boys in School B?
    1) 1303　　　2) 1306　　　3) 1309　　　4) 1312　　　5) 1315

18. If the total number of students in all six schools together is 11000, what is the difference between the number of boys and that of girls in School E?
    1) 260　　　　2) 264　　　　3) 268　　　　4) 272　　　　5) 276

19. If the total number of boys in School D is 858, what is the average number of girls in School C and D together?
    1) 425　　　　2) 426　　　　3) 427　　　　4) 428　　　　5) 429

20. If the total number of boys in School F is 1936, then the number of girls in School F is what percentage of the total number of students in all the six schools together?
    1) 12.8%   2) 13.2%   3) 13.6%   4) 14.4%   5) 15.2%

21. If the letters of the word NISHANT are arranged at random, what is the probability that the letters 1 and A will come together?
    1) $\frac{2\,!}{7\,!}$ 2) $\frac{1\,!}{7\,!}$ 3) $\frac{5\,!}{7\,!}$ 4) $\frac{6\,!}{7\,!}$ 5) None

22. A person borrowed Rs. 12000 at the rate of 13% and another amount at the rate of 18% for 2 years. The total interest paid by him was Rs. 9240. What amount did he borrow?
    1) Rs. 27000   2) Rs. 28000   3) Rs. 29000   4) Rs. 30000
    5) Rs. 31000

23. Two persons A and B can do a piece of work in 60 and 40 days respectively. They began to work together, but A left after some time and B finished the remaining work in 20 days. After how many days did A leave?
    1) 8 days   2) 12 days   3) 10 days   4) 15 days   5) 6days

24. Two trains running on parallel tracks in opposite directions cross each other in 10.5 seconds whereas a passenger on the second train observed that he crossed the first train in 5 seconds. If the speeds of the trains are in the ratio of 3:5, what is the ratio of their lengths?
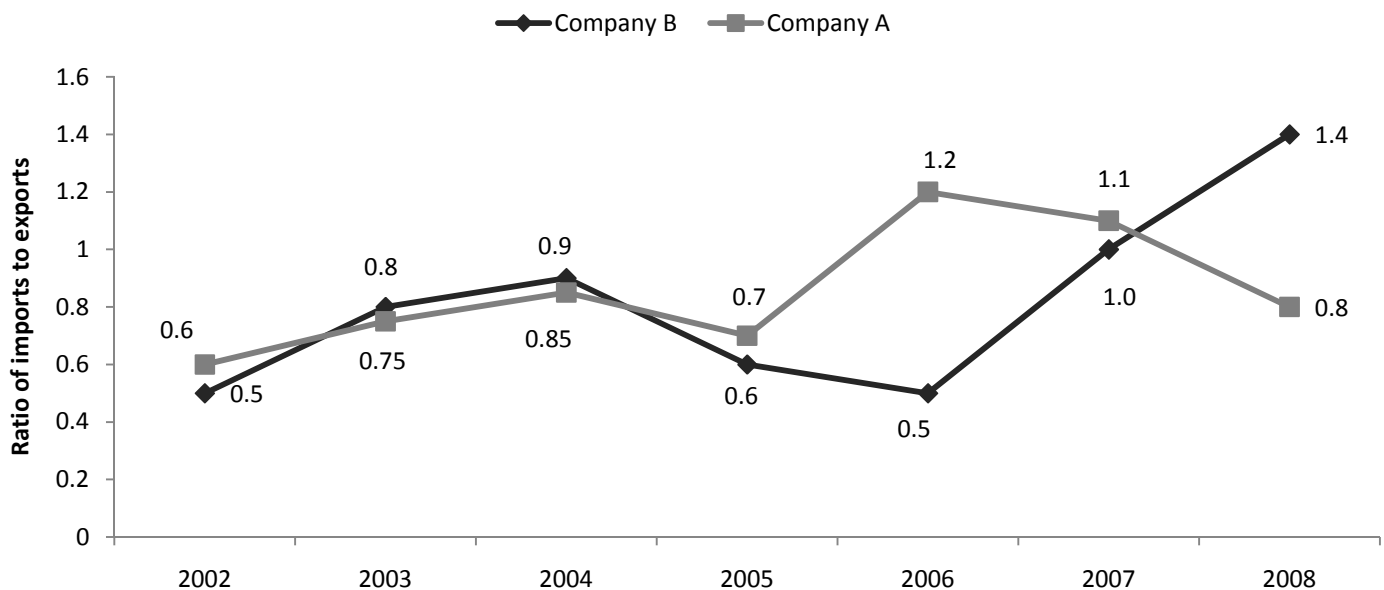   1) 5:6   2) 4:5   3) 9:10   4) 10:11   5) 5:8

25. A person buys 8 TVs and 6 computers for Rs. 141000. He sells the TVs at a profit of 7.5% and the computers at a profit of 12%. His net gain is Rs. 12600. What is the ratio of the cost prices of a TV and a Computer?
    1) 8:5   2) 5:3   3) 9:5   4) 12:7   5) 10:7

Directions (26-30): **Each of the questions below consists of a question and two statements (I) and (II) given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.**

1)   If the data in statement (I) alone are sufficient to answer the question while the data in statement (II) alone are not sufficient to answer the question.

2)   If the data in statement (II) alone are sufficient to answer the question while the data in statement (I) alone are not sufficient to answer the question.

3)   If the data either in statement (I) alone or in statement (II) alone are sufficient to answer the question.

4)   If the data even in both statement (I) and (II) together are not sufficient to answer the question.

5)   If the data in both statement (I) and (II) together are necessary to answer the question.

26. If $3x + 2y + z = 12$ then what is the value of z?
    I. $7x + 4y = 15$
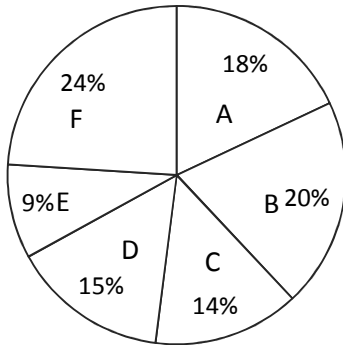   II. $3x - 7y = -11$

27. What is area of a rectangle?
    I. Its perimeter is 20 metres.
    II. Its length is 7 metres.

28. What is the rate of simple interest?
    I. Total interest is Rs. 616.
    II. The sum is invested for 7 years.

29. What is the rate of compound interest on a sum money?
    I. The total CI at the end of 2 years is Rs. 665.6
    II. The total simple interest at the same rate on Rs. 2400 at the end of 2 years is Rs. 384.

30. What is the length of a train?
    I. It takes 4 seconds to cross a pole.
    II. It takes 11 seconds to cross a 210-metre-long bridge.

Directions (31-35): **Study the given graph carefully and answer the following questions. The graph shows the ratio of imports to exports of two Companies A and B over the years.**

31. If the total imports of Company A in the year 2005 was Rs. 53.9 lakh, what was its total exports (in Rs.) in that year?
     1) 37.73 lakh   2) 47.8 lakh   3) 68.3 lakh   4) 77 lakh
     5) None of these

32. The ratio of imports to exports of Company B in the year 2004 was that percentage more than that of Company A in the year 2008?
     1) 10%   2) 12.5%   3) 20%   4) 25%   5) None

33. f in the year 2003 the imports of Company A increased by $33\frac{1}{3}\%$ and exports decreased by 20%, then what would be the new ratio of imports to exports of Company a in that year?
     1) 0.8   2) 0.6   3) 1.2   4) 1.25   5) None

34. If the imports of Company A in the year 2008 and exports of B in the year 2004 were Rs. 36 lakh and Rs. 60 lakh respectively, then the imports of Company B in the year 2004 would be what percentage of the exports of Company A in the year 2008?
     1) 125%   2) 120%   3) 97.5%   4) 83.33%   5) 75%

35. In which of the following years was the value of exports less than the value of imports in the case of Company B?
     1) 2002   2) 2006   3) 2004   4) 2007   5) 2008

Directions (36-40): **the following pie-chart shows the percentage distribution of employees in a company who are working in different units. The table shows the percentage of employees who are graduates and the ratio of males to females in these departments. The total number of employees in the company is 4000.**

Department	% Graduates	Male : Female
A	45%	13:5
B	37%	9:7
C	60%	17:11
D	51%	14:11
E	55%	7:3
F	40%	7:5

36.　What is the percentage of employees who are graduates, taking all six departments together?
　　1) 51.9%　　　2) 50.7%　　　3) 49.5%　　　4) 47.3%　　　5) 46.1%

37.　What is the ratio of the total Male employees of Unit B to the total Female employees of Unit E?
　　1) 21:5　　　2) 23:7　　　3) 25:6　　　4) 27:7　　　5) 28:9

38.　The total number of Male employees in Unit D is what percentage of the total number of employees of the company?
　　1) 8.4%　　　2) 9.6%　　　3) 12.5%　　　4) 14.2%
　　5) 15.75%

39.　The total number of employees in Unit A who are graduates is what percentage more than the total number of Female employees in that unit?
　　1) 60%　　　2) 62%　　　3) 64%　　　4) 66%　　　5) 68%

40.　What is the difference between the total number of Male employees and the total number of Female employees of the company?
　　1) 848　　　2) 896　　　3) 916　　　4) 936　　　5) 954