

## Additional Questions

In the following questions, answers are given in groups (a), (b), (c), (d) and (e). Put a (×) against the right answer.

1. **ADD**

2 5 4 7 6	
7 8 2 3 4	
9 7 4 6 2	
3 8 6 4 3	

(a) 2401815	(b) 234715
(c) 240815	(d) 214805
(e) None of these	
2. **Subtract**

6 4 9 0 1 2	
2 9 4 7 7 3	

(a) 354239	(b) 352329
(c) 355229	(d) 354229
(e) None of these	
3.  $\sqrt{441} =$ 

(a) 21	(b) $\pm 21$
(c) -19	(d) 20.9
(e) None of these	
4.  $\sqrt{.04} =$ 

(a) 0.02	(b) 1.2
(c) 0.2	(d) 2
(e) None of these	
5. What is 20% of 60%?
 

(a) 12	(b) 3
(c) 12%	(d) 1/3
(e) None of these	
6. 30 is  $12\frac{1}{2}\%$  of
 

(a) 250	(b) 240
(c) 300	(d) 280
(e) None of these	
7. What decimal fraction of a kg. is 510 gms?
 

(a) 5.1	(b) 0.051
(c) 0.51	(d) 0.49
(e) None of these	
8. Which is the smallest fraction?
 

(a) $\frac{2}{3}$	(b) $\frac{5}{9}$
(c) $\frac{1}{2}$	(d) $\frac{11}{8}$
(e) $\frac{5}{7}$	
9. Which is the greatest fraction?
 

(a) $\frac{7}{8}$	(b) $\frac{6}{7}$
(c) $\frac{8}{10}$	(d) $\frac{8}{9}$
(e) $\frac{1}{5}$	
10.  $\frac{3}{4} + \frac{7}{8} + \frac{1}{6} = ?$ 

(a) $\frac{9}{12}$	(b) $\frac{7}{12}$
(c) $\frac{5}{24}$	(d) $\frac{5}{6}$
(e) None of these	
11.  $0.1 \times 0.01 \times 0.001 = ?$ 

(a) 0.1	(b) 0.0001
(c) 0.001	(d) 1
(e) None of these	
12.  $0.8 \times 0.9 + 0.05 \times 1.4 =$ 

(a) 7.92	(b) 0.0792
(c) 1.420	(d) 0.792
(e) None of these	
13.  $\frac{3.52}{0.8} = ?$ 

(a) 0.4	(b) 0.44
(c) 0.044	(d) 4.4
(e) None of these	
14.  $\frac{3 \text{ km } 405 \text{ m } 76 \text{ cm}}{10 \text{ km } 217 \text{ m } 28 \text{ cm}} = ?$ 

(a) $\frac{1}{3}$ km	(b) $\frac{1}{8}$
(c) $\frac{1}{3}$	(d) $\frac{33}{3}$
(e) None of these	
15. Find the middle term  $5, 7\frac{1}{2}, \dots, 12\frac{1}{2}, 15$ 

(a) 12	(b) 10
(c) 9	(d) $11\frac{1}{2}$
(e) None of these	
16. What is the least number to be added to the number 1669, so that this number is exactly divisible by 7?
 

(a) 4	(b) 2
(c) 5	(d) 1
(e) None of these	
17. Simplify:  $\frac{0.2 \times 0.2 + 0.02 \times 0.02}{0.0404}$ 

(a) 4	(b) 3
(c) 2	(d) 1
(e) None of these	
18. Simplify:  $\frac{3 \div 4 \times 4 \div 5 \times 5 \div 6}{1 \div 6}$ 

(a) 1	(b) 2
(c) 3	(d) 4
(e) None of these	
19. Supply the missing figure, if the number 711\_ is exactly divisible by 8.
 

(a) 6	(b) 2
(c) 0	(d) 1
(e) None of these	
20. Find the value of x if  $x^3 = -8$ 

(a) 2	(b) -2
(c) 3	(d) -3
(e) None of these	
21. A certain sum amounts to Rs. 10,500 at the end of the 1st year, Rs. 11,025 at the end of the 2nd year and Rs. 11,576.25 at the end of the 3rd year. The rate of interest is
 

(a) 5%	(b) 2%
(c) 4%	(d) $3\frac{1}{2}\%$
(e) None of these	

22. A person gets Rs. 300 as 1st year's interest on a certain sum and Rs. 330 as 2nd year's interest, find the sum.  
 (a) Rs. 9000 (b) Rs. 3000  
 (c) Rs. 4000 (d) Rs. 5000  
 (e) None of these
23. The simple interest on a certain sum is Rs. 1200 in 3 years and the compound interest in two years is Rs. 825. The rate of interest is  
 (a) 5% (b)  $6\frac{1}{4}\%$   
 (c) 7% (d)  $4\frac{1}{3}\%$   
 (e) None of these
24. A person deposits at a bank a certain amount every month without break for 12 months. The Bank pays him at the end of the period Rs. 616.25. If the simple interest is 5% per year, the sum deposited each month is  
 (a) Rs. 30 (b) Rs. 10  
 (c) Rs. 40 (d) Rs. 50  
 (e) None of these
25. 7290 ml. of a mixture contains milk and water in the ratio of 7 : 2. How much more water must be added to this mixture to get a new mixture containing milk and water in the ratio of 7 : 3?  
 (a) 600 ml (b) 710 ml  
 (c) 520 ml (d) 810 ml  
 (e) None of these
26. Divide Rs. 600 among A, B and C so that Rs. 40 more than  $\frac{2}{5}$ th of A's share; Rs. 20 more than  $\frac{2}{7}$ th of B's share; Rs. 10 more than  $\frac{9}{17}$ th of C's share may all be equal, What is A's share?  
 (a) Rs. 280 (b) Rs. 150  
 (c) Rs. 170 (d) Rs. 200  
 (e) None of these
27. The average temperature of the first three days of a week is  $27^\circ$  and of the next three days is  $29^\circ$ . If the average of the whole of the week is  $28.5^\circ$  the temperature of the last day of the week is  
 (a)  $31.5^\circ$  (b)  $10.5^\circ$   
 (c)  $21^\circ$  (d)  $42^\circ$   
 (e) None of these
28. A candidate scores on an average of 53 marks per paper at an examination. The average mark in the 4 papers is 47 and the average for the other papers is 61. The number of papers there for the examination are

- (a) 5 (b) 6  
 (c) 7 (d) 8  
 (e) None of these
29. The average marks obtained by the boys in English paper is 39. If 4 of the boys who actually obtained 5, 12, 15 and 19 marks, had not been sent up, the average marks would have been 44. Find the number of boys.  
 (a) 20 (b) 22  
 (c) 24 (d) 25  
 (e) None of these
30. A number is 30% more than the other. The second number is less than the first by  
 (a) 30% (b) 20%  
 (c)  $16\frac{2}{3}\%$  (d) 23.07%  
 (e) None of these
31. A man buys 10 articles for Rs. 8 and sells the articles at the rate of Rs. 1.25 per article. His gain per cent is  
 (a) 50% (b)  $56\frac{1}{4}\%$   
 (c) 20% (d)  $19\frac{1}{2}\%$   
 (e) None of these
32. The marked price is 10% higher than the cost price. A discount of 10% is given on the marked price. In this kind of sale, the seller has  
 (a) no loss, no gain (b) gains (c) losses  
 (d) lost 1% (e) None of these
33. The difference in simple interest on Rs. 1000 for 2 years paid by two banks is Rs. 50. The difference in their rates of interest is  
 (a)  $\frac{1}{3}\%$   
 (b) 1%  
 (c) 2.5%  
 (d) 5%  
 (e) None of these
34. A mixture contains 80% copper, another mixture contains 70% copper. In order to get 73% of another mixture, in what ratio, these two must be mixed?  
 (a) 13 : 3 (b) 4 : 1  
 (c) 5 : 4 (d) 6 : 5  
 (e) None of these
35. A train goes at a speed of 54 kms per hour. It takes 15 seconds to cross a bridge of 150 m length. The length of the train is  
 (a) 50 m (b) 75 m  
 (c) 60 m (d) 80 m  
 (e) None of these

36. The distance between A and B is 200 kms. A motor car starts from A at 7 a.m. and travels towards B at 20 kms per hour. Another motor car starts from B at 8 a.m. and travels towards A at 25 kms per hour. They will meet at .....
- (a) 100 kms from B  
 (b) 90 kms from A  
 (c) 150 kms from A  
 (d) 170 kms from B (e) None of these
37. A and B can do a piece of work in 20 days, B and C in 24 days and C and A in 15 days. A works at it for 4 days, B for 8 days and C for 8 days. The total work turned out by them is
- (a)  $21/60$  (b)  $43/60$   
 (c)  $29/60$  (d)  $41/60$   
 (e) None of these
38. A can do a piece of work in 24 days, B in 32 days and C in 64 days. All begin to do the work together, but 'A' leaves after 6 days and B leaves 6 days before the completion of the work. How many days did the work last?
- (a) 24 days (b) 10 days  
 (c) 16 days (d) 14 days  
 (e) None of these
39. A and B together can do a piece of work in 12 days, which B and C together can do in 16 days. After 'A' has been working at it for 5 days and B for 7 days, C finishes it in 13 days. In how many days could B alone finish it?
- (a) 48 days (b) 24 days  
 (c) 16 days (d) 40 days  
 (e) None of these
40. A can do  $1/3$  of a work in 5 days and B can do  $2/5$  of the work in 10 days. In how many days both can do the work together?
- (a)  $7\frac{1}{2}$  days (b)  $8\frac{3}{4}$  days  
 (c)  $9\frac{3}{4}$  days (d) 10 days  
 (e) None of these
41. When aunt makes soup, she puts in 1 bean for 3 peas. If her soup contains a total of 400 peas and beans, how many peas are there?
- (a) 100 (b) 200  
 (c) 300 (d) 400  
 (e) None of these
42. River A and River B have a combined length of 650 miles and River B is 250 miles shorter than River A. How many miles long is the River A?
- (a) 200 (b) 300  
 (c) 550 (d) 600  
 (e) None of these
43. Ram and Sham went to the race, where Ram lost 68 rupees on the first 2 races, losing 6 rupees more on the second race than he lost on the first one. But he lost 4 rupees less on the second race than Sham did. How much did Sham lose on the second race?
- (a) 30 (b) 31  
 (c) 27 (d) 41  
 (e) None of these
44. George was cycling to his grandmothers' house. For the first third of the way, he averaged 8 mph, second third of the distance he walked at 5 mph because the cycle tyre had burst. Then he left the cycle with a repairer and completed the journey on foot on an average of 4 mph. He walked the whole way back at 4 mph. How does the return journey compare with the onward journey?
- (a) Onward journey took less time  
 (b) Onward journey took more time  
 (c) Both journeys took equal time  
 (d) Return journey was tiresome  
 (e) Cannot be compared
45. There are 30 boys in a class and the average age is 15.1 years. Three new boys are put in this class, which made the average age 15.2 years. One new boy is aged 16 years the other two are twins. How old are the twins?
- (a) 14 (b) 16.3  
 (c) 17 (d) 18  
 (e) None of these
46. A steamer leaves Colombo and sails North-East for 100 miles. It alters the course and sails South-East 30 miles. Then it turns and sails 100 miles South-West and drops anchor. How many miles away is Colombo now?
- (a) 30 (b) 100  
 (c) 60 (d) 200  
 (e) None of these
47. A room is 50 foot square. A second room is 100 sq.yds. and a third room 200 sq. ft., which of these can seat maximum people?
- (a) first room (b) second room  
 (c) third room  
 (d) All the three can seat equal number of people  
 (e) Cannot say



48. A man travels 1 mile due East, then 5 miles due South then 2 miles due East and finally 9 miles due North. How far is he from the starting point?  
 (a) 6 miles (b) 5 miles  
 (c) 4 miles (d) 3 miles  
 (e) None of these
49. A certain sum of money amounts to Rs.770/- in one year and amounts to Rs.847 in two years at certain rate of interest. Find the sum.  
 (a) Rs. 700 (b) Rs. 600  
 (c) Rs. 500 (d) Rs. 400  
 (e) None of these
50. A person deposits at a bank 100 rupees per month regularly for a period of two years. The Bank pays a simple interest of  $4\frac{1}{2}\%$  per year. Find the amount at the end of the period.  
 (a) Rs.2,043 $\frac{1}{2}$  (b) Rs.2,504 $\frac{1}{2}$   
 (c) Rs.2,442 $\frac{1}{2}$  (d) Rs.2,406  
 (e) None of these
51. The property of a man was divided among his wife, son and daughter according to his will as follows :- wife's share is equal to  $\frac{6}{7}$  of son's share and daughter's share is equal to  $\frac{4}{7}$  of son's. If the son and daughter together receive Rs.1,02,300 how much does the wife get?  
 (a) Rs.55,800 (b) Rs.42,800  
 (c) Rs.44,640 (d) Rs.54,254  
 (e) None of these
52. A book contains 50 leaves. On each page there are 20 lines and in each line there are 10 words. How many words does that book contain?  
 (a) 10,000 (b) 15,000  
 (c) 20,000 (d) 25,000  
 (e) None of these
53. Ramu has 60 one rupee currency notes which bear numbers in order. If the number of first note is 7575, find the number of the last note.  
 (a) 7635 (b) 7634  
 (c) 7633 (d) 7632  
 (e) None of these
54. The volume of a wall 5 times as high as it is broad and 8 times as long as it is high is 18,225 cubic metres. Find the breadth of the wall.  
 (a) 4 m (b)  $4\frac{1}{2}$  m  
 (c) 3 m (d) 5 m  
 (e) None of these
55. A vessel contains 180 litres of wine. 60 litres are taken out of the vessel everyday and an equal quantity of water put in. What quantity of wine remains at the end of three days?  
 (a)  $53\frac{1}{3}$  lts. (b) 60 lts.  
 (c) 40 lts. (d) 35 lts.  
 (e) None of these
56. Find the present worth of Rs.10,000 due at the end of 5 years reckoning money worth 5% per annum.  
 (Note : It means, given the amount, time & rate, to find the Principal)  
 (a) Rs.6000 (b) Rs.8000  
 (c) Rs.10,000 (d) Rs.12,000  
 (e) None of these
57. A bill of Rs.672 is due at the end of 4 years. At the end of  $2\frac{1}{2}$  years, its worth due would be Rs.620. The rate per cent is  
 (a) 4% (b)  $6\frac{1}{2}\%$   
 (c)  $7\frac{1}{2}\%$  (d) 8%  
 (e) None of these
58. If 20 men can dig 40 holes in 60 days. In how many days can 10 men dig 20 holes?  
 (a) 30 days (b) 60 days  
 (c) 75 days (d) 90 days  
 (e) None of these
59. A train running at 30 miles per hour is in front of a train running at 50 miles per hour. How many miles apart are the trains if it takes 15 minutes for the faster train to catch the slower one?  
 (a) 1 mile (b) 3 miles  
 (c) 4 miles (d) 5 miles  
 (e) None of these
60. A boy walks 4 km. due east, 3 km. due south. How far is he from the starting point?  
 (a) 5 km. (b) 6 km.  
 (c) 7 km. (d) 8 km.  
 (e) None of these
61. A man travels 2 miles, turns left and travels another 4 miles, turns right and travels yet another mile. How far is he from the starting point?  
 (a) 5 miles (b) 6 miles  
 (c) 7 miles (d) 8 miles  
 (e) None of these
62. In a den, there are some rabbits and pigeons. They have 20 heads and 48 feet. How many pigeons are there?  
 (a) 4 (b) 16  
 (c) 6 (d) 8  
 (e) None of these

63. There is a certain number of cigarettes in a box. They are divided in such a way that the person who gets  $\frac{1}{4}$  of the whole gets thrice the others'. Find the number of people amongst whom the cigarettes are distributed.  
 (a) 8 (b) 9  
 (c) 10 (d) 12  
 (e) None of these
64. The sum of all the edges of a cube is equal to 48". What is the volume of the cube?  
 (Hint : A cube has 12 equal edges.)  
 (a) 48 C. inches (b) 64 C. inches  
 (c) 72 C. inches (d) 84 C. inches  
 (e) None of these
65. If electricity poles stand 50 yards apart in a straight line, what is the distance from the first to the ninth?  
 (a) 200 yards (b) 300 yards  
 (c) 400 yards (d) 500 yards  
 (e) None of these
66. Two cyclists approach each other on a straight road, pedalling at 15 miles an hour. When they are 30 miles apart, a fly alights on one bicycle, then dashes off to the other. It shuttles back and forth between the two at 20 miles an hour until the riders meet. How far has it travelled?  
 (a) 10 miles (b) 20 miles  
 (c) 30 miles (d) 40 miles  
 (e) None of these
67. Express 12.5 percent as a fraction.  
 (a)  $\frac{1}{4}$  (b)  $\frac{1}{8}$   
 (c)  $\frac{1}{16}$  (d)  $\frac{1}{32}$   
 (e) None of these
68. A box contains four small boxes. Each of the four boxes contains three small boxes, in each of which there are two boxes. How many boxes are there altogether?  
 (a) 39 (b) 40  
 (c) 41 (d) 42  
 (e) None of these
69. A cake is divided into twelve portions. If three quarters of the cake are eaten, how many portions remain?  
 (a) 10 (b) 4  
 (c) 8 (d) 3  
 (e) None of these
70. In a den, there are rabbits and pigeons. They have altogether thirty five heads and ninety eight feet. How many rabbits are there?  
 (a) 14 (b) 16  
 (c) 8 (d) 4  
 (e) None of these
71. A railway carriage has twelve compartments of which half are third class and half first class. Third class compartments seat 8 passengers, first class 6. How many passengers does the carriage seat altogether?  
 (a) 42 (b) 84  
 (c) 63 (d) 40  
 (e) None of these
72. A man will be three times old in 20 years as he is now. What is his present age?  
 (a) 4 years (b) 6 years  
 (c) 10 years (d) 12 years  
 (e) None of these
73. The length of a plot is twice its breadth. Its area is 4050 sq.m. Find the cost of fencing the plot at Rs. 2.50 metre.  
 (a) Rs. 525 (b) Rs. 675  
 (c) Rs. 415 (d) Rs. 652  
 (e) None of these
74. A man sold a cow at a loss of 10%. Had he charged Rs. 30/- more he would have gained  $12\frac{1}{2}\%$ . Find the cost of a cow.  
 (a) Rs. 80 (b) Rs. 93.75  
 (c) Rs. 100 (d) Rs. 110  
 (e) None of these
75. A earns 10% more than B, but 15% less than C. If B earns Rs. 85/-, then C earns  
 (a) Rs. 100 (b) Rs. 93.75  
 (c) Rs. 15 (d) Rs. 110  
 (e) None of these
76. Which is the least among the following?  
 (a)  $\frac{1}{5}$  (b)  $\sqrt{5}$   
 (c)  $\frac{1}{\sqrt{5}}$  (d)  $\frac{5}{\sqrt{5}}$   
 (e)  $\frac{1}{5\sqrt{5}}$
77. A number of two digits get reversed if 18 is subtracted from it. If the sum of its digits is 12 then the number is  
 (a) 48 (b) 84  
 (c) 66 (d) 57  
 (e) 75
78. If Rs. 91/- is divided among A, B, C in the ratio  $1\frac{1}{2} : 3\frac{1}{3} : 2\frac{3}{4}$  B will get  
 (a) Rs. 36 (b) Rs. 40  
 (c) Rs. 45 (d) Rs. 48  
 (e) Rs. 42



79. In a triangle ABC, find Angle B, if Angles  $(B+C) = 130^\circ$  and Angle A = Angle C  
 (a)  $60^\circ$  (b)  $70^\circ$   
 (c)  $80^\circ$  (d)  $50^\circ$   
 (e) None of these
80. Rs. 6 is divided among A, B & C so that A gets 59p more than B and 53p less than C. Then A gets  
 (a) Rs. 2 (b) Rs. 2.02  
 (c) Rs. 2.05 (d) Rs. 1.98  
 (e) None of these
81. Represent 0.32 into percentage.  
 (a) 0.032% (b) 0.32%  
 (c) 32% (d) 3.2%  
 (e) None of these
82. Represent the answer in fractions (approx.)  
 of the sum  $\left(\frac{2.9 \times 8.3}{1.22}\right)$   
 (a) 19.73 (b) 18.23  
 (c) 20.23 (d) 21.33  
 (e) 11.34
83. A boy was asked to subtract the sum of  $\frac{1}{4}$  and  $\frac{1}{5}$  from unity and express the result in decimals. His result was 0.45. The percentage of error in his result was  
 (a) 0% (b) 100/9%  
 (c) 100/11% (d) 5%  
 (e) 200/11%
84. When 75% of a number is added to 75 it results in the number itself, the number is  
 (a) 300 (b) 200  
 (c) 240 (d) 280  
 (e) 320
85. The number in the tens column of a two digit number is one less than half of the number in the unit's place. Further add 45 to it, the digits get reversed. If so the number is  
 (a) 14 (b) 25  
 (c) 49 (d) 38  
 (e) None of these
86. A bag contains a number of 10 paise, 20 paise, 25 paise coins in the ratio of 7 : 4 : 3. If the money value comes to be Rs. 90/- the number of 25 paise coins in the bag is  
 (a) 120 (b) 160  
 (c) 280 (d) 30  
 (e) None of these
87. A sum of Rs. 500/- was lent for two years at 2% compound interest. The interest for two years will be  
 (a) Rs. 20 (b) Rs. 25  
 (c) Rs. 50.20 (d) Rs. 20.20  
 (e) None of these
88. A tree of height 24 m on a road side broke at a certain height and it fell in such a way that its top touched the other edge of the road. If the breadth of the road be 12 m then the height at which it broke was  
 (a) 12 m (b) 6 m  
 (c) 9 m (d) 13 m  
 (e) 7.07 m
89. A man deposited a certain amount in a bank that would pay two-fold after a year. In the beginning of the second year the man took Rs. 8 and deposited the rest in the same bank. Again in the beginning of third year he took Rs. 8/- and deposited the rest. In the beginning of the fourth year, he took Rs. 8/-. He was not left with any balance in the bank. If so his original deposit was  
 (a) Rs. 6 (b) Rs. 8  
 (c) Rs. 7 (d) Rs. 10  
 (e) None of these
90. 16 chairs cost the same as 7 tables, 5 chairs and 2 tables together cost Rs. 335/-. If so a chair costs  
 (a) Rs. 35 (b) Rs. 70  
 (c) Rs. 80 (d) Rs. 30  
 (e) None of these
91.  $\frac{1}{16}$  of a number is 51 which is greater than 50% of another number. Then that number is  
 (a) 832 (b) 704  
 (c) 960 (d) 816  
 (e) None of these
92. 'A' does work in 5 days for which 'B' takes only 4 days. 'C' does a work in 3 days for which B takes only 2 days. If Rs. 7.40 be the daily wage for their combined work, then A's share will be  
 (a) Rs. 3 (b) Rs. 2.40  
 (c) Rs. 2 (d) Rs. 1.50  
 (e) None of these
93. A circular path runs around a circular field. The outer perimeter is 66 m and the inner perimeter is 2 m less than the outer perimeter. If so the area of the path is  
 (a) 154 sq.m. (b) 346.5 sq.m.  
 (c) 192.5 sq.m. (d) 196 sq.m.  
 (e) None of these

94. The value of  $1502^2 - 1498^2$   
 (a) 12,000 (b) 25,56,006  
 (c) 15,610 (d) 22,560  
 (e) None of these
95. The compound interest for Rs. 500/- at the rate of 15% for 3 years is  
 (a) Rs. 75 (b) Rs. 85.40  
 (c) Rs. 78.8 (d) Rs. 80.78  
 (e) None of these
96. A man gave  $\frac{2}{5}$  of his property to his wife,  $\frac{3}{4}$  of the remaining to his son and  $\frac{2}{3}$  of the remaining to his daughter and the remaining to his faithful servant. If the servant gets Rs. 2,500/- then his son gets  
 (a) Rs. 50,000 (b) Rs. 25,000  
 (c) Rs. 22,500 (d) Rs. 30,000  
 (e) None of these
97. A train of length 150 m takes 10 seconds to pass another train of length 100 m coming from the opposite direction. If the speed of the first train be 36 km/hr. the speed of the second train is  
 (a) 54 km/hr (b) 52 km/hr  
 (c) 72 km/hr (d) 36 km/hr  
 (e) None of these
98. A mixture contains acid and water in the ratio 1 : 4 and another contains in the ratio 4 : 5. If we want another mixture from the above ones with a ratio 2 : 7 the proportion in which the two varieties should be mixed is  
 (a) 1 : 10 (b) 3 : 5  
 (c) 5 : 2 (d) 10 : 1  
 (e) None of these
99. A circular string of diameter  $11\frac{5}{11}$  cm. is bent into a form of semi-circle. The radius of the semi-circle will be  
 (a)  $5\frac{9}{11}$  cm. (b) 7 cm.  
 (c) 3.5 cm. (d)  $4\frac{2}{11}$  cm.  
 (e) None of these
100. A boat is steered at a speed of 10 km/hr. It travels along a river whose stream has a speed of 2 km/hr for two hours and without any delay completes the backward journey in 3 hours. Its average speed in the journey is  
 (a) 10 km/hr (b) 9 km/hr  
 (c) 8.4 km/hr (d) 9.6 km/hr  
 (e) None of these

101. A three digit number gets decreased by 207 if its digits are changed cyclic. Its hundred's digit is the sum of the other two digits and if 10th place digit is more than the unit place digit by 1, the number is  
 (a) 431 (b) 743  
 (c) 826 (d) 532  
 (e) None of these
102. 7 pens and 5 pencils cost Rs. 16.90. Had it been a purchase of 5 pens and 7 pencils the expense would have been Rs. 2.60 less. If so, a pen costs  
 (a) Rs. 1.65 (b) Rs. 2.25  
 (c) Rs. 1.95 (d) Rs. 2.15  
 (e) None of these
103. The value of  $8025 \times 103 + (56+47) \times 1975$  is  
 (a) 80,25,000 (b) 19,31,025  
 (c) 10,30,000 (d) 10,30,725  
 (e) None of these
104. The surface area of a rectangular parallelepiped with length 5 m, breadth 4 m and height 3 m is  
 (a) 60 sq.m. (b) 70 sq.m.  
 (c) 94 sq.m. (d) 84 sq.m.  
 (e) None of these
105. The rate of exchange being Rs. 4.75 to a dollar, the exchange value of Rs. 270.75 is  
 (a) 55 dollars (b) 67 dollars  
 (c) 37 dollars (d) 59 dollars  
 (e) None of these
106. To a certain number 6 is added. The sum is multiplied by 6 and the product is divided by 13. 7 is subtracted from the quotient. If the remainder be 5, the number is  
 (a) 30 (b) 35  
 (c) 20 (d) 15  
 (e) None of these
107. A grocer mixes two varieties of coffee seeds the cost prices of which are Rs. 12.50 and Rs. 8 per kg. respectively. He gains 20% by selling a kg. of the mixture at Rs. 12/-. The proportion in which he has mixed the two varieties is  
 (a) 2 : 3 (b) 3 : 4  
 (c) 4 : 5 (d) 4 : 3  
 (e) None of these
108. The value of  $1098 \times 1102$  is  
 (a)  $1102^2$  (b) 13,27,046  
 (c) 11,07,856 (d) 12,09,996  
 (e) None of these



109. A contractor engaged 42 labourers to complete a work in five weeks, at the rate of 6 hours a day. After two weeks, only one third of the work was over and hence he included a few more men for the task and also extracted work of one more hour a day from all the labourers to complete the work in time. The number of men he included on the staff was  
 (a) 10 (b) 7  
 (c) 12 (d) 5  
 (e) None of these
110. A has Rs. 120 less than B. C has Rs. 60 more than A. If all the three have Rs. 1,080 totally, the amount B has is  
 (a) Rs. 400 (b) Rs. 380  
 (c) Rs. 420 (d) Rs. 450  
 (e) None of these
111. After plucking a certain number of fruits in a garden, a visitor has to trace back three gates. At each gate he has to offer half the number of fruits in his possession and with a sense of gratitude the guard at each gate will return one fruit to him. When the visitor came out of the garden he possessed the same number of fruits as he had gathered from the tree. If so, he has plucked  
 (a) 1000 fruits  
 (b) an infinite number of fruits  
 (c) 108 fruits (d) 2 fruits  
 (e) None of these
112. If  $X^2 + Y^2 + Z^2 = 0$  then the value of Z is  
 (a)  $-(X + Y)$  (b)  $-X$   
 (c)  $-Y$  (d) 0  
 (e) None of these
113. A man allocated half of his wealth to his wife, four-fifth of the remaining to his son, two-thirds of the remaining to his daughter and the remaining for an endowment. If the endowment received from him was Rs. 1000 in all, his wealth was  
 (a) Rs.50,000 (b) Rs.30,000  
 (c) Rs.1 lakh (d) Rs.10,000  
 (e) None of these
114. The area of the biggest square inscribed inside the circle of radius 4 m is  
 (a) 32 sq.m. (b) 64 sq.m.  
 (c) 80 sq.m. (d) 128 sq.m.  
 (e) None of these
115. If we consider 1 inch = 2.54 cm. then 76.2 cm. represents

- (a) 25.4 inches (b) 30 inches  
 (c) 33 inches (d) 25 inches  
 (e) None of these
116. 5 women and 6 children do the work of 7 men. Also the same task is carried out by 14 children alone in the same duration. If so the work of 5 women equals to that of  
 (a) 3 men (b) 4 men  
 (c) 5 men (d) 2 men  
 (e) None of these
117. In climbing a greased pole 15 m high a monkey ascends 5 m and slips down 3 m in alternate minutes. To get to the top of the pole the monkey would take  
 (a) 10 mins. (b)  $7\frac{1}{2}$  mins.  
 (c) 15 mins. (d) 11 mins.  
 (e) None of these
118. A certain number of birds together with the same number of birds of another type and another set of birds numbering half in the second collection and another collection of birds numbering half in the third collection and one bird make a total of 100 birds. If so, the number of birds in the first collection is  
 (a) 24 (b) 40  
 (c) 36 (d) 64  
 (e) None of these
119. Gold is 19 times as heavy as water and copper 9 times as heavy as water. If we want a mixture of these two metals that is 15 times as heavy as water, then the proportion in which they are mixed is  
 (a) 5 : 3 (b) 8 : 2  
 (c) 2 : 3 (d) 3 : 5  
 (e) None of these
120. The value of  $267^2 - 2 \times 267 \times 7 + 49$  is  
 (a) 67,600 (b) 2,672  
 (c) 3,738 (d) 37,600  
 (e) None of these
121. In an exhibition, I bought 15 shirt bits and 20 pant bits for Rs.975. Had I cut short the number of pant bits by 10, twelve more shirt bits would have been available. If so, a shirt bit costs  
 (a) Rs.20 (b) Rs.35  
 (c) Rs.25 (d) Rs.22  
 (e) None of these
122. 80% of a number is 300 more than  $\frac{2}{5}$  of the same number. If so the number is  
 (a) 500 (b) 600  
 (c) 850 (d) 750  
 (e) None of these



123. 25 m/sec. is equivalent to a speed of  
 (a) 75 km/hr (b) 80 km/hr  
 (c) 90 km/hr (d) 100 km/hr  
 (e) None of these
124. If 91 be the dividend and  $13/15$  be the divisor the quotient would be  
 (a) 95 (b) 100  
 (c) 105 (d) 110  
 (e) None of these
125. The square root of  $0.0676 \times 0.04$  is  
 (a) 52 (b) 0.52  
 (c) 0.052 (d) 5.2  
 (e) None of these
126. The common fraction for 0.875 is  
 (a)  $2/8$  (b)  $3/8$   
 (c)  $5/8$  (d)  $7/8$   
 (e) None of these
127. The output of a machine (efficiency = 0.6) is 51 units. If so the input is  
 (a) 306 units (b) 30.6 units  
 (c) 85 units (d) 65 units  
 (e) None of these
128. A chair and a table together cost Rs.100. If the chair costs Rs.16 less than the table, the cost of the table is  
 (a) Rs.42 (b) Rs.84  
 (c) Rs.64 (d) Rs.58  
 (e) None of these
129. The sum of the first 24 natural numbers is  
 (a) 276 (b) 300  
 (c) 242 (d) 232  
 (e) None of these
130. A certain number of 10 paise coins and thrice the number of 20 paise coins add up to Rs.21. If so, the number of 20 paise coins is  
 (a) 60 (b) 30  
 (c) 45 (d) 90  
 (e) None of these
131. A pole and a tower cast shadows 2 m and 7 m at a particular instant. If the height of the pole be 5 m, the height of the tower is  
 (a) 17.5 m (b) 9 m  
 (c) 35 m (d) 14 m  
 (e) None of these
132. If 4 men or 5 women carry out a task in 12 days, then for the same task 4 men and 10 women will take  
 (a) 14 days (b) 4 days  
 (c) 7 days (d) 5 days  
 (e) 6 days

133. Half of a collection exceeds its one-third by 10. If so, the number of things in the collection is  
 (a) 30 (b) 90  
 (c) 120 (d) 60  
 (e) None of these
134. The term that succeeds 1000 in the series 13, 26, 39, ... .. is  
 (a) 1003 (b) 1013  
 (c) 1005 (d) 1006  
 (e) None of these
135. 90% of a number p falls short of p by 90. If so, p is equal to  
 (a) 8100 (b) 180  
 (c) 900 (d) 1000  
 (e) None of these
136. Feb. 1st 1972 was Tuesday, March 1st 1972 was therefore:  
 (a) Thursday (b) Monday  
 (c) Wednesday (d) Tuesday  
 (e) Friday
137. A cow is tied at one corner of a rectangular field by a rope 2.8 m in length. The field is also fenced and the cow cannot graze outside the field. If so, the area at the disposal of the cow is  
 (a) 464 sq.m. (b) 6.16 sq.m.  
 (c) 784 sq.m. (d) 5.6 sq.m.  
 (e) None of these
138. The product of two consecutive odd numbers is 195. The smaller of them is  
 (a) 15 (b) 5  
 (c) 13 (d) 3  
 (e) None of these
139.  $\frac{24}{x} = \frac{4}{5}$  implies that x equals  
 (a) 30 (b) 5  
 (c) 48 (d) 96  
 (e) None of these
140. A string of length 36 cm. is bent into a form of a semi-circle. Its radius will be  
 (a) 6 cm. (b) 12 cm.  
 (c) 3 cm. (d) 7 cm.  
 (e) None of these
141. The square root of  $0.15 \times 0.35 \times 0.21$  is  
 (a) 0.21 (b) 0.105  
 (c) 0.287 (d) 0.251  
 (e) None of these
142. 65% of a number n is 78, if so 'n' is  
 (a) 100 (b) 120  
 (c) 115 (d) 78  
 (e) None of these

143. Perimeter of a circular sector is 25 cm and the radius is 7 cm. The length of the arc is  
 (a)  $725/7$  cm (b) 11 cm  
 (c) 175 cm (d) 9 cm  
 (e) None of these
144. The product of two consecutive natural numbers is 240. The higher of the two numbers is  
 (a) 12 (b) 15  
 (c) 24 (d) 16  
 (e) None of these
145. The product of two consecutive natural numbers is 420. The smaller of them is  
 (a) 21 (b) 10  
 (c) 20 (d) 42  
 (e) None of these
146. Given that  ${}^7C_3 = \frac{7.6.5}{1.2.3}$  the value of  ${}^9C_6$  is  
 (a) 54 (b) 48  
 (c) 3 (d) 84  
 (e) None of these
147.  $3x + 4y = 11$  and  $4x + 3y = 10$  imply that y equals  
 (a) 1 (b) 3  
 (c) 2 (d) 4  
 (e) None of these
148.  $P : 7 = 12 : 21$  implies that P equals  
 (a) 3 (b) 4  
 (c) 6 (d) 7  
 (e) None of these
149. The 16th term of the series 1, 3, 6, 10, 15, ..... is  
 (a) 132 (b) 136  
 (c) 126 (d) 120  
 (e) None of these
150. 60% of a mixture is pure acid and the rest is water. If the volume of pure acid exceeds the volume of water by 4 litres then the volume of water in it is  
 (a) 10 litres (b) 8 litres  
 (c) 40 litres (d) 20 litres  
 (e) None of these
151. A string of 66 cm length is bent so as to get a circle. Its diameter is  
 (a) 10.5 cm (b) 7 cm  
 (c) 22 cm (d) 21 cm  
 (e) None of these
152. A and B do the same work in 8 days and 4 days respectively. If the wages for a day of their combined work is Rs. 18, then A gets Rs. ....

- (a) 6 (b) 12  
 (c) 9 (d) 8  
 (e) None of these
153. If 4 women carry out a task in 4 days, then for the same task one woman will take  
 (a) 1 day (b) 8 days  
 (c) 12 days (d) 16 days  
 (e) None of these
154.  $\frac{5}{13} = \frac{x}{78}$  implies that x equals  
 (a) 30 (b) 18  
 (c) 60 (d) 5  
 (e) None of these
155. Rama is n years old. His brother is 5 years elder to him. Before seven years, the age of his brother was  
 (a) n-7 years (b) 0 years  
 (c) n-2 years (d) n+5 years  
 (e) None of these
156. The length of the rectangle is twice its breadth. If its breadth be 'b' then its perimeter is  
 (a) 3b (b) 6b  
 (c)  $2b^2$  (d)  $3b^2$   
 (e) None of these
157. A rectangular sheet of length 44 cm is bent so as to get a regular cylinder of height 7 cm. The surface area of the cylinder is  
 (a) 308 sq.cm (b) 58 sq.cm  
 (c) 308 cm (d) 37 sq.cm  
 (e) None of these
158.  $\sqrt{x} = 17$  implies that  $3x + 21$  equals  
 (a) 666 (b) 777  
 (c) 888 (d) 999  
 (e) None of these
159. An outlet empties  $2/7$  of a tank in 6 minutes. To empty the remaining content it would further take .....  
 (a) 42 minutes (b) 21 minutes  
 (c) 15 minutes (d) 12 minutes  
 (e) None of these
160. Hari deposits Rs. 25 every month in a recurring deposit scheme for 2 years. The actual period for which Rs.25/- earns interest is  
 (a) 24 years (b) 50 years  
 (c) 25 years (d) 2 years  
 (e) None of these
161. Solve :  $324^2 - (324 \times 124)$   
 (a) 64,800 (b) 1,64,800  
 (c) 1,05,476 (d) 1,04,976  
 (e) None of these



162. To a certain number 7 is added. The sum is multiplied by 5, the product is divided by 9 and 3 is subtracted from the quotient. If the result is 12, what is the number?
- (a) 24 (b) 20  
(c) 40 (d) 48  
(e) None of these
163. If 40 metres of muslin and Rs. 60 cash can be given in exchange for 36 metres of silk at Rs. 5 per metre, what is the price of muslin per metre?
- (a) Rs. 4 (b) Rs. 6  
(c) Rs. 3 (d) Rs. 2  
(e) None of these
164. A woman sells to the first customer half of her stock and half an apple, to the second customer half of her remaining stock and half an apple and so also to a third and to a fourth customer. She finds that she has now 15 apples left. How many had she at first?
- (a) 250 (b) 350  
(c) 155 (d) 255  
(e) None of these
165. Gold is 19 times as heavy as water and copper 9 times as heavy as water. Find the proportion in which these two metals should be mixed, so that the mixture is 13 times as heavy as water.
- (a) 5 : 3 (b) 2 : 3  
(c) 3 : 2 (d) 3 : 5  
(e) None of these
166. A's earnings are to B's in the ratio of 3 : 4 while B's is to C's as 7 : 8. If their total earnings come to Rs. 405, find how much each earns?
- (a) Rs. 105, Rs. 140, Rs. 160  
(b) Rs. 110, Rs. 135, Rs. 160  
(c) Rs. 120, Rs. 125, Rs. 160  
(d) Rs. 115, Rs. 130, Rs. 160  
(e) None of these
167. A man engages a servant on the understanding that he would get Rs. 88 and a turban after a year's service. He served only for 9 months and received the turban and Rs. 64. What is the price of the turban?
- (a) Rs. 8 (b) Rs. 12  
(c) Rs. 16 (d) Rs. 24  
(e) None of these
168. What is the exchange value in dollars of Rs. 137.75 when the rate of exchange is Rs. 4.75 to a dollar?

- (a) 27 dollars (b) 29 dollars  
(c) 28 dollars (d) 27.50 dollars  
(e) None of these
169. The sum up to 40 terms of the series  $1 - 1 + 1 - 1 + 1 \dots$  is
- (a) 1 (b) -1  
(c) 0 (d) 40  
(e) None of these
170. The value of  $a^2 + b^2 + c^2 + 2ab - 2bc - 2ca$ , when  $a = 1, b = 2, c = 2$  is
- (a) 9 (b) 4  
(c) 1 (d) 6  
(e) None of these
171. I spent Rs. 105 for a new pant and shirt. If the cost of 2 pants equals the cost of 3 shirts then, the expense on the shirt alone is
- (a) Rs. 84 (b) Rs. 42  
(c) Rs. 64 (d) Rs. 34  
(e) None of these
172. My age before twelve years was one-third of my age after twelve years from now. If so, my present age is
- (a) 16 years (b) 20 years  
(c) 24 years (d) 36 years  
(e) None of these
173.  $a^3 + b^3 + c^3 = 3abc$  when  $a + b + c$  equals
- (a)  $abc$  (b) 0  
(c) 1 (d)  $a^2 + b^2 + c^2$   
(e) None of these
174. The H.C.F. (Highest Common Factor) of 63 and 84 is
- (a) 7 (b) 9  
(c) 21 (d) 42  
(e) None of these
175. Which of the following has the smallest value?
- (a)  $5/8$  (b)  $7/12$   
(c)  $8/15$  (d)  $11/20$   
(e)  $18/37$
176. You have a ten-rupee, a five-rupee, a two-rupee and a one-rupee note. A salesman shows you several articles each at different price and any one of which you could purchase with your notes without receiving change. What is the largest number of articles he could have shown you?
- (a) 8 (b) 10  
(c) 13 (d) 15  
(e) 21

177. Five candidates run for office in a club that has a membership of 356. What is the least number of votes the successful candidate must receive to be victorious?
- (a) 69 (b) 70  
(c) 13 (d) 72  
(e) 21
178. A merchant buys cloth at Rs. 1.60 per yard. What price per yard should be marked on the cloth so that he may sell it at a discount of 20% from the marked price and still make a profit of 20% of the selling price?
- (a) Rs. 2 (b) Rs. 2.24  
(c) Rs. 2.40 (d) Rs. 2.50  
(e) Rs. 2.60
179. A dealer paid Rs. 60 for a desk. He wishes to put a price tag on it so that he could offer his customers discount of 10% of the price marked on the tag and still make a profit of 20% of the cost. What price should he mark on the tag?
- (a) Rs. 72 (b) Rs. 78  
(c) Rs. 79.20 (d) Rs. 80  
(e) Rs. 85
180. The ratio of boys to girls in a senior class is 5 : 3. If  $\frac{9}{10}$  of the boys may graduate and all the girls may or may not graduate. What is the maximum part of the senior class that may graduate?
- (a)  $\frac{3}{5}$  (b)  $\frac{7}{8}$   
(c)  $\frac{15}{16}$  (d)  $\frac{2}{3}$   
(e) None of these
181. A picture in an art museum is six feet width and eight feet long. If its frame has a width of six inches, what is the ratio of the area of the frame to the area of the picture?
- (a) 8 : 21 (b) 5 : 16  
(c) 1 : 16 (d) 16 : 5  
(e) 16 : 31
182. A stock rises  $\frac{3}{8}$  one day but drops  $\frac{1}{2}$  of the original the following day. How much must it rise on the next day to have an average rise of  $\frac{1}{8}$  for the three day period?
- (a)  $\frac{1}{16}$  (b)  $\frac{1}{8}$   
(c)  $\frac{1}{4}$  (d)  $\frac{1}{2}$   
(e)  $\frac{3}{8}$
183. Father is 30 years old and his son is 3 years old. Father will be 5 times old as his son in
- (a)  $3\frac{3}{4}$  years (b)  $6\frac{1}{2}$  years  
(c)  $11\frac{1}{4}$  years (d) 37 years  
(e) 38 years
184. At 10.00 a.m. water begins to pour into a cylindrical can 14 inches high and 4 inches in diameter at the rate of 8 cubic inches every 10 minutes. At what time will it begin to overflow? (use  $\pi = \frac{22}{7}$ )
- (a) 11.10 a.m. (b) 11.40 a.m.  
(c) 12.40 p.m. (d) 1.40 p.m.  
(e) 2.40 p.m.
185. A much travelled man has spent  $\frac{1}{3}$  of his life in England,  $\frac{1}{6}$  in Spain,  $\frac{1}{4}$  in Italy,  $3\frac{1}{2}$  years in France and  $\frac{1}{5}$  in Germany, where he is now living. If the present year is 1984, in what year was he born?
- (a) 1900 (b) 1857  
(c) 1914 (d) 1910  
(e) None of these
186. A cyclist makes a long journey, maintaining an even pace throughout. When he reached a point after covering one-fifth of the distance, it was 10.50 a.m. He started at 10.30 a.m. What will be the time when he reaches his destination?
- (a) 12.10 p.m. (b) 11.30 a.m.  
(c) 12 noon (d) 1.00 p.m.  
(e) None of these
187. Rama is twice and Krishna 5 times as old as Khanna. Two years ago, Krishna was twice as old as Rama and Khanna together. Now the age of Krishna is
- (a) 6 years (b) 12 years  
(c) 30 years (d) 36 years  
(e) None of these
188. The length and breadth of a rectangular field are in the ratio of 5 : 3. Its area is 1500 sq. mts. Find the cost of fencing the field at Rs. 1 per metre.
- (a) Rs. 400 (b) Rs. 160  
(c) Rs. 55 (d) Rs. 80  
(e) None of these
189. The length, breadth and height of a room are in the ratio of 7 : 5 : 4. The area of the four walls of the room is 864 sq.m. Find the area of the floor of the room.
- (a) 315 sq.m. (b) 405 sq.m.  
(c) 500 sq.m. (d) 740 sq.m.  
(e) None of these



190. The area of a square field is 0.16 hectares. It is surrounded on the outside by a path of width  $3\frac{1}{2}$  m. Find the cost of turfing the pathways at 25ps. per sq.m.?
- (a) Rs. 152.25      (b) Rs. 152.75  
(c) Rs. 162.50      (d) Rs. 142.50  
(e) None of these
191. The difference between circumference of a circle and its diameter is 135 feet. Find the area of the circle.
- (a) 3000 sq.ft.      (b) 3118.5 sq. ft.  
(c) 3204 sq.ft.      (d) 3104 sq.ft.  
(e) None of these
192. The outer length, breadth and height of a box without a lid are 60 cms, 34 cms, 24 cms respectively. The thickness of the plank is 2 cms. The weight of 1 cubic centimetre is 0.8 gram. Find out the weight of the empty box.
- (a) 9000 grams      (b) 8500 grams  
(c) 7800 grams      (d) 9600 grams  
(e) None of these
193. Two towers are 35 m. and 50 m. height and 20m. apart on level ground. Find the length of the rope connecting their tops.
- (a) 15 m.      (b) 20 m.  
(c) 25 m.      (d) 30 m.  
(e) None of these
194. A palm tree breaks at a height of 16 metres and the upper part, still attached to the lower falls down, the top touching the ground at a distance of 12 metres from the foot. What is the height of the tree?
- (a) 25 metres      (b) 16 metres  
(c) 36 metres      (d) 41 metres  
(e) 20 metres
195. The height of the flower above the water level of a tank is 2 metres. It is pulled aside and comes to 8 metres from its original position and the top of the flower touches the water. Find the depth of the tank.
- (a) 15 metres      (b) 16 metres  
(c) 18 metres      (d) 20 metres  
(e) None of these
196. Two motor cars leave the same place at the same time; one runs at 40 kms. towards north and the other at 30 kms. east. What will be the distance between them after they run for 3 hours without altering the speed?
- (a) 120 kms.      (b) 140 kms.  
(c) 150 kms.      (d) 200 kms.  
(e) None of these
197. A person purchased a chair at Rs.70 and spent Rs.17 on repair and paid fifty paise to coolie. He sold the chair at Rs.100. What is his margin of profit?
- (a) 12.5%      (b) 14%  
(c)  $14\frac{2}{7}\%$       (d) 15%  
(e) None of these
198. A man sold two watches at Rs.100 each. On one hand, he earned 10% while on the other, he lost 10%. In the deal, he incurred
- (a) no gain, no loss  
(b) a loss of 10%  
(c) a loss of 1%  
(d) a gain of 1%  
(e) a loss of Rs.  $2\frac{2}{99}$
199. A person purchased 10 apples at Rs. 4 per apple. 2 were not eatable. By selling the rest, he wanted to earn 25% profit on the whole. He should sell each apple at .....
- (a) Rs. 6.25      (b) Rs. 5  
(c) Rs. 5.50      (d) Rs. 4  
(e) None of these
200. Two varieties of wheat costing Rs.3.50 per kg. and Rs.3.20 per kg. are to be mixed, so that the cost price of the mixture is Rs.3.30 per kg. The ratio at which they should be mixed is
- (a) 3 : 2      (b) 2 : 3  
(c) 1 : 2      (d) 2 : 1  
(e) None of these