

# ADITYA COLLEGE OF COMPETITIVE EXAMS

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## QUANTITATIVE APTITUDE

No. of Questions : 25 (51 - 75)

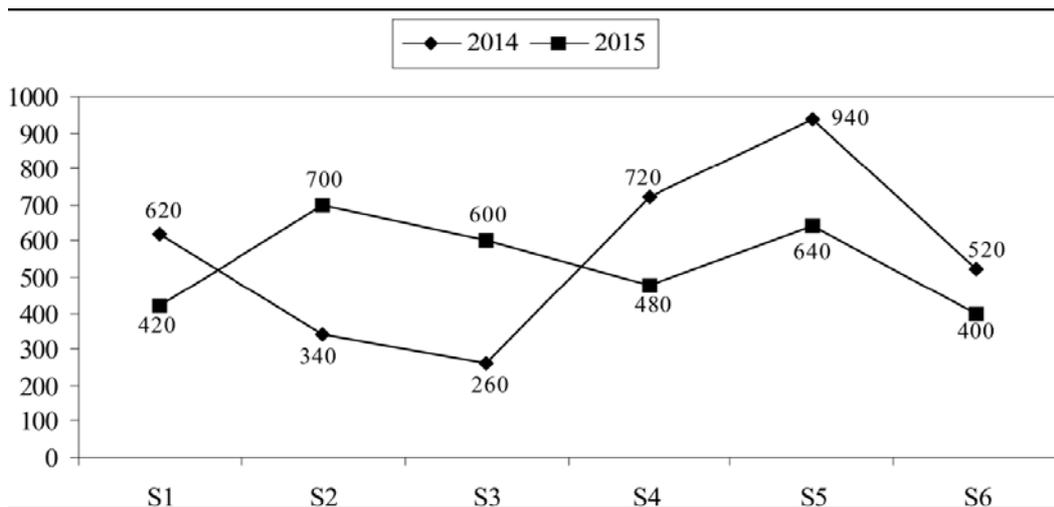
Marks : 25

Time : 20 minutes.

**Directions (51 - 55) :** What value should come in place of question mark (?) in the following questions?

51.  $(47)^2 - (15)^2 = ?$   
 1) 1894                      2) 1849                      3) 1948                      4) 1984                      5) None of these
52. 81% of 4915 = ?  
 1) 3819.15                      2) 3871.15                      3) 3981.15                      4) 3918.15                      5) None of these
53.  $25 \times 43 \div 5 = ?$   
 1) 215                          2) 220                          3) 205                          4) 251                          5) None of these
54.  $93 + 26 \times 3 - 51 = ?$   
 1) 201                          2) 102                          3) 120                          4) 210                          5) None of these
55.  $1682 \div 58 \times ? = 377$   
 1) 13                              2) 15                              3) 16                              4) 14                              5) None of these

**Directions (56 - 60) :** No of candidates who qualified in a given competitive examination from six states during two given years.



56. What is the average no. of candidates who qualified in the given competitive exam from state S2, S4, S5 and S6 in 2014 ?  
 1) None of these    2) 615                      3) 620                      4) 630                      5) 619
57. What is the respective ratio between total no. of candidates from state S5 in 2014 and 2015 together and total no. of qualified candidates from state S6 in 2014 and 2015 together ?  
 1) None of these    2) 79 : 46                      3) 79 : 48                      4) 73 : 23                      5) 79 : 53
58. No. of qualified candidates from state S4 in 2015 is approximately what percent less than the no. of qualified candidates from state S2 in 2015 ?  
 1) 31%                      2) None of these    3) 29%                      4) 37%                      5) 34%
59. Combining 2014 and 2015, if 20% of the appeared candidates from state S3 qualified in the given competitive exam, what was the total no. of appeared candidates from state S3 in 2014 and 2015 together?  
 1) 4200                      2) None of these    3) 4700                      4) 4100                      5) 4300
60. If no. of qualified candidates from state S1 increased by 15% from 2015 to 2016 and the no. of qualified candidates from state S1 is 2016, if 15% of appeared candidates then in 2016 how many candidates appeared from state S1 for the given competitive exam?  
 1) 3240                      2) 3430                      3) 3220                      4) None of these    5) 3620

**Directions (61 - 65) :** What should come in place of question mark (?) in the following number series?

61. 2, 7, 19, 45, 99, 209, ?  
 1) 413                      2) 331                      3) 231                      4) 531                      5) None of these
62. 7, 4, 5, 9, 20, 52.5, ?  
 1) 150.5                      2) 151.5                      3) 152.5                      4) 153.5                      5) None of these
63. 7, 13, 21, 31, 43, 57, ?  
 1) 64                      2) 68                      3) 70                      4) 73                      5) None of these
64. 6, 15, 20, 29, 34, ?  
 1) 38                      2) 39                      3) 40                      4) 41                      5) None of these
65. 1, 2, 12, 63, 316, ?  
 1) 1704                      2) 1705                      3) 1706                      4) 1708                      5) None of these
66. Two bullets were fired at a place at an interval of 28 minutes 30 seconds. A person approaching the firing point in his car hears the two sounds at an interval of 27 minutes. The speed of sound is 330 m/sec. what is the speed of the car ?  
 1) 44 km/hr                      2) 66 km/hr                      3) 64 km/hr                      4) 54 km/hr                      5) None of these
67. Two trains start at the same time from Allahabad and Kanpur and proceed towards each other at the rate 73 km and 47 km per hour respectively. When they meet, it is found that one train has travelled 13 km more than the other. Find the distance between Kanpur and Allahabad.  
 1) 70 km                      2) 60 km                      3) 75 km                      4) 65 km                      5) None of these
68. A man rows to a place 48 km distance and back in 14 hours. He finds that he can row 4 km with the stream in the same time as 3 km against the stream. Find the rate of the stream?  
 1) 1 km/hr                      2) 2 km/hr                      3) 1.5 km/hr                      4) 2.5 km/hr                      5) None of these
69. A certain amount of money at compound interest grows upto Rs 7520 in 15 years and upto Rs 7896 in 16 years. Find the rate percent per annum.  
 1) 10%                      2) 8%                      3) 5%                      4) 4%                      5) None of these
70. The number of seats in a cinema hall is increased by 30%. The price on a ticket is also increased by 5%. What is the effect on the revenue collected?  
 1) 36.5% increase    2) 35.5% increase    3) 35% increase    4) 36% increase    5) None of these
71. Two trains having equal lengths, takes  $\frac{1}{4}$  minutes and  $\frac{1}{6}$  minutes respectively to cross a pole. In what time will they cross each other when travelling in opposite direction (in seconds)? Given the length of each train is 420 meters. (Neglect the length of pole)  
 1) 18 sec                      2) 12 sec                      3) 20 sec                      4) 24 sec                      5) 10 sec
72. A car runs at the speed of 40 km/h when not serviced and runs at 65 km/h, when serviced. After servicing the car covers a certain distance in 5 h. How much approximate time will the car take to cover the same distance when not serviced?  
 1) 10                      2) 7                      3) 12                      4) 8                      5) 6
73. Find the speed of a boat in still water if the boat goes downstream 6 km and back to the starting point in 2 hours and the rate of flow of river water is 4 km/hr.  
 1) 8 km/hr                      2) 7 km/hr                      3) 12 km/hr                      4) 4 km/hr                      5) 6 km/hr
74. If the sum of upstream and downstream speed is 36 km/hr and the speed of the current is 3km/hr, then find time taken to cover 52.5 km in downward?  
 1) 2 hr                      2) 2.5 hr                      3) 3 hr                      4) 3.5 hr                      5) 4 hr
75. Two place P and Q are 160 km apart. A train leaves P for Q and at the same time another train leaves Q for P. Both the trains meet 5 hrs after they start moving. If the train travelling from P to Q travels 6 km/hr faster than the other train, find the speed of the faster train.  
 1) 19 km/hr                      2) 13 km/hr                      3) 21 km/hr                      4) Can't be determined                      5) None of these