

RRB PO PRE MEMORY BASED HELD ON 09/09/2017 QUANTITATIVE APTITUDE (QUESTION PAPER)

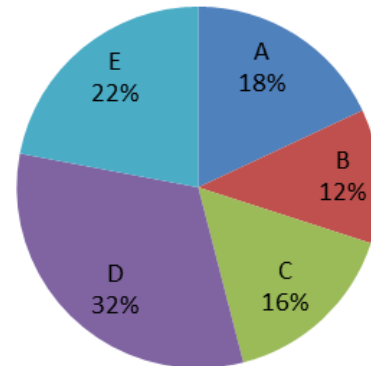
Directions (41-45): What should come in place of the question mark (?) in following number series problems?

- Q41. 190, 94, 46, 22, ?, 4
 (a) 12 (b) 14 (c) 10
 (d) 8 (e) None of these
- Q42. 5, 28, 47, 64, 77, ?
 (a) 84 (b) 86 (c) 89
 (d) 88 (e) None of these
- Q43. 7, 4, 5, 12, 52, ?
 (a) 424 (b) 428 (c) 318
 (d) 440 (e) None of these
- Q44. 6, 4, 5, 11, 39, ?
 (a) 159 (b) 169 (c) 189
 (d) 198 (e) None of these
- Q45. 89, 88, 85, 78, 63, ?
 (a) 30 (b) 34 (c) 36
 (d) 32 (e) None of these
- Q46. There are 3 consecutive odd numbers and 3 consecutive even numbers. The smallest even number is 9 more than largest odd number. If the square of average of all the 3 given odd number is 507 less than the square of the average of all the 3 given even number, what is the smallest odd number.
 (a) 11 (b) 13 (c) 17
 (d) 19 (e) 9
- Q47. A can complete a task in 15 days B is 50% more efficient than A. Both A and B started working together on the task and after few days B left task and A finished the remaining $\frac{1}{3}$ of the given work. For how many days A and B worked together.
 (a) 3 (b) 5 (c) 4
 (d) 6 (e) 2
- Q48. A boat can travel 9.6 km downstream in 36 min. If speed of the water current is 10% of the speed of the boat in downstream. How much time will boat take to travel 19.2 km upstream.
 (a) 2 hours (b) 3 hours (c) 1.25 hours
 (d) 1.5 hours (e) 1 hour
- Q49. A started a business with a initial investment of Rs. 1200. 'X' month after the start of business, B joined A with on initial investment of Rs. 1500. If total profit was 1950 at the end of year and B's share of profit was 750. Find 'X'
 (a) 5 month (b) 6 month (c) 7 month
 (d) 8 month (e) 9 month
- Q50. Ratio between curved surface area and total surface area of a circular cylinder is 3 : 5. If curved surface area is 1848 cm³ then what is the height of cylinder.

- (a) 28 (b) 14 (c) 17
 (d) 21 (e) 7

Directions (51-55): Given below is the pie chart which shows the percentage distribution of a book 'XYZ' publishes in 5 different stores.

Total books = 550



- Q51. If number of female who bought the books in store E are 21 more than number of males who bought books from same store then find the number of females who bought book in store E.
 (a) 75 (b) 78 (c) 71
 (d) 68 (e) 73
- Q52. Find the central angle for the book D.
 (a) 117.5° (b) 115.2° (c) 112.8°
 (d) 108.5° (e) 118.8°
- Q53. If total books of another publisher 'MNP' is 20% more than books of 'XYZ' publisher then what will be total books sold by store A and B for publisher 'MNP'. Percentage-distribution for different stores for MNP remains same as for 'XYZ'
 (a) 200 (b) 178 (c) 181
 (d) 186 (e) 198
- Q54. What is the ratio of total books sold by store A and C together to the total books sold by store D and E together
 (a) 17 : 27 (b) 18 : 29 (c) 21 : 28
 (d) 22 : 23 (e) 24 : 29
- Q55. What is the difference between average of book sold by store A and E together and average books sold by store C and D together?
 (a) 33 (b) 11 (c) 22
 (d) 44 (e) 20
- Directions (56-60):** In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer
 (a) if $x > y$ (b) if $x \geq y$
 (c) if $x < y$ (d) if $x \leq y$
 (e) if $x = y$ or no relationship can be established.
- Q56. I. $x^2 + 9x + 20 = 0$ II. $y^2 = 16$

- Q57. I. $x^2 - 7x + 12 = 0$ II. $3y^2 - 11y + 10 = 0$
 Q58. I. $x^2 - 8x + 15 = 0$ II. $y^2 - 12y + 36 = 0$
 Q59. I. $2x^2 + 9x + 7 = 0$ II. $y^2 + 4y + 4 = 0$
 Q60. I. $2x^2 + 15x + 28 = 0$ II. $2y^2 + 13y + 21 = 0$
 Q61. Train A completely crosses train B which is 205 m long in 16 second. If they are travelling in opposite direction and sum of speed of both are 25 m/s. then find the difference (in meter) between lengths of both trains.
 (a) 5 (b) 6 (c) 8
 (d) 10 (e) 12
 Q62. A trader mixes 14 kg rice of variety A which costs Rs. 60/kg with 18 kg of quantity of type B rice. He sells the mixture at Rs. 65/Kg and earns a profit of $\frac{100}{3}\%$. Then what was the cost price of type B rice.
 (a) 30 (b) 20 (c) 40
 (d) 50 (e) 45
 Q63. Present age of A is 3 years less than present age of B. Ratio of B's age 5 year ago and A's age 4 year hence is 3 : 4 then find present age (in years) of A.
 (a) 20 (b) 17 (c) 23
 (d) 26 (e) 29
 Q64. A bag contains 6 Red, 5 Green and 4 Yellow coloured balls. 2 balls are drawn at random after one another without replacement then what is the probability that atleast one ball is Green.
 (a) $\frac{2}{3}$ (b) $\frac{4}{5}$ (c) $\frac{3}{8}$
 (d) $\frac{4}{7}$ (e) $\frac{2}{7}$
 Q65. Cost price of B is 200 more than cost price of A. B is sold at 10% profit and A is sold at 40% loss and selling price of A and B are in the ratio 4 : 11. If A is sold at 20% loss then what will be selling price of A.
 (a) 320 (b) 400 (c) 240
 (d) 160 (e) 360

Directions (66-70): Read the following table carefully and answer the following questions—

No. of students and % of students passed out of those who appeared are given for two subjects from year 2001 to 2005 in a college XYZ.

Year	Statistics		Economics	
	No. of students appeared	% of students passed	No. of students appeared	% of students passed
2001	2200	45%	4200	40%
2002	2700	55%	3800	45%
2003	2500	35%	2600	60%
2004	3200	65%	4800	55%
2005	4800	60%	2200	50%

- Q66. Find the average number of students who were failed in Economics in year 2002 and year 2003 together?
 (a) 1435 (b) 1565 (c) 1720
 (d) 1590 (e) None of these

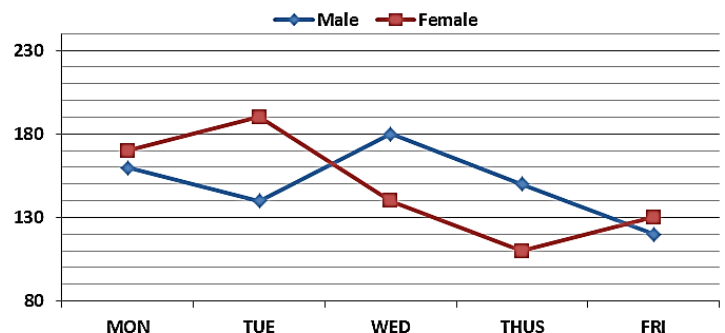
- Q67. Number of students failed in Statistics in the year 2003 is what % of the number of students failed in Economics in the same year?
 (a) 145.75% (b) 150% (c) 156.25%
 (d) 158.25% (e) None of these
 Q68. Find the ratio between the total number of students appeared in Economics from 2002 to 2004 together and the total number of students appeared in Statistics from year 2003 to 2005 together?
 (a) 13 : 14 (b) 14 : 13 (c) 15 : 16
 (d) 16 : 15 (e) None of these
 Q69. Find the difference between the total number of students passed in Statistics from year 2002 and total number of students failed in Economics from year 2005.
 (a) 690 (b) 385 (c) 485
 (d) 550 (e) 610
 Q70. Find the average number of students appeared in Economics from year 2001 to 2004 together?
 (a) 3090 (b) 3015 (c) 3060
 (d) 3075 (e) 3850

Direction (71-75): What approximate value should come in place of question mark (?) in the following questions? (Note: You are not expected to calculate the exact value)

- Q71. ?% of $(5284.89 \div 7.08) = 986.01 - 533.06$
 (a) 42 (b) 39 (c) 74
 (d) 65 (e) 60
 Q72. $(1041.84 + ?) \div 3.02 = 1816.25 \div 4.01$
 (a) 442 (b) 337 (c) 385
 (d) 268 (e) 320
 Q73. 69.3% of $445.12 \div 14.06 = 623.08 \div ?$
 (a) 28 (b) 19 (c) 21
 (d) 33 (e) 37
 Q74. $?^2 + 114.09 - 24.06 \times 5.14 = 163.19$
 (a) 7 (b) 13 (c) 11
 (d) 15 (e) 19
 Q75. $768.16 \div 11.87 \times \sqrt{257} - 58.05 = ?$
 (a) 1033 (b) 1175 (c) 966
 (d) 880 (e) 975

Directions (76-80): Study the following line graph carefully and answer the following questions.

Number of males and number of females are given. They are visiting a place from Monday to Friday.



- Q76. Find the ratio of the total number of males visited the place on Tuesday and Thursday together to the total number of females visited the place on Monday and Friday together?
 (a) 29 : 30 (b) 30 : 29 (c) 25 : 26
 (d) 26 : 25 (e) None of these
- Q77. Total number of males and females together visited the place on Tuesday are what percent more/less than the total number of male and females together visited the place on Thursday?
 (a) $26\frac{12}{13}\%$ (b) $25\frac{3}{13}\%$ (c) $26\frac{3}{13}\%$
 (d) $25\frac{7}{13}\%$ (e) None of these
- Q78. Find the difference between the total number of females visited the place from Monday to Wednesday and the total number of males visited the place from Wednesday to Friday?
 (a) 30 (b) 60 (c) 40
 (d) 50 (e) None of these
- Q79. If on Saturday the number of males and number of females increased by 25% and 20% respectively as compared to that on Friday then find the total number of males and females together visited the place on Saturday?
 (a) 196 (b) 306 (c) 316
 (d) 206 (e) 216
- Q80. Total number of males and females visited the place on Monday and Tuesday together is how much more than the total number of males and females visited the place on Thursday and Friday together?
 (a) 175 (b) 125 (c) 150
 (d) 160 (e) 130

