

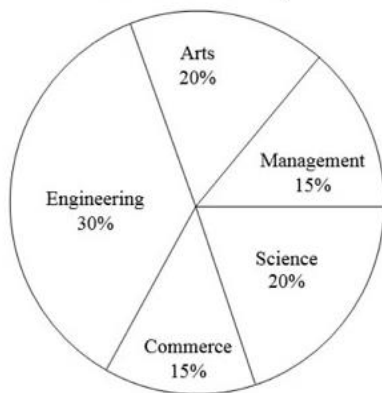
GATE Aptitude Practice Questions Ratio and Proportion

Q.No. 1 The ratio of 'the sum of the odd positive integers from 1 to 100' to 'the sum of the even positive integers from 150 to 200' is _____.

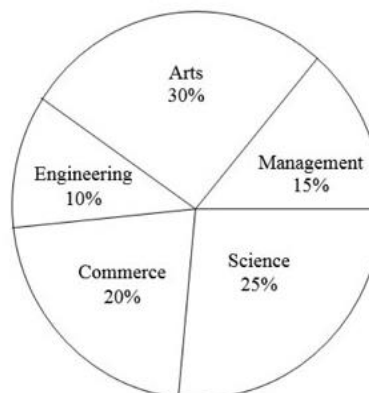
- (A) 45 : 95
- (B) 1 : 2
- (C) 50 : 91
- (D) 1 : 1

Q.No. 2 The two pie-charts given below show the data of total students and only girls registered in different streams in a university. If the total number of students registered in the university is 5000, and the total number of the registered girls is 1500; then, the ratio of boys enrolled in Arts to the girls enrolled in Management is _____.

Percentage of students enrolled in different streams in a University



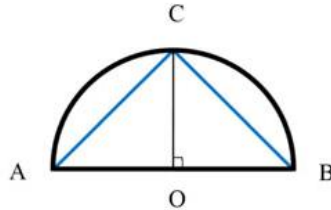
Percentage of girls enrolled in different streams



- (A) 2 : 1
- (B) 9 : 22
- (C) 11 : 9
- (D) 22 : 9

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- Q.No. 3 Given a semicircle with O as the centre, as shown in the figure, the ratio $\frac{\overline{AC} + \overline{CB}}{\overline{AB}}$ is _____, where \overline{AC} , \overline{CB} and \overline{AB} are chords.



- (A) $\sqrt{2}$
(B) $\sqrt{3}$
(C) 2
(D) 3

- Q.No. 4 A person divided an amount of Rs. 100,000 into two parts and invested in two different schemes. In one he got 10% profit and in the other he got 12%. If the profit percentages are interchanged with these investments he would have got Rs.120 less. Find the ratio between his investments in the two schemes.

- (A) 9 : 16 (B) 11 : 14 (C) 37 : 63 (D) 47 : 53

- Q.No. 5 In a party, 60% of the invited guests are male and 40% are female. If 80% of the invited guests attended the party and if all the invited female guests attended, what would be the ratio of males to females among the attendees in the party?

- (A) 2:3 (B) 1:1 (C) 3:2 (D) 2:1

- Q.No. 6 Two alloys A and B contain gold and copper in the ratios of 2:3 and 3:7 by mass, respectively. Equal masses of alloys A and B are melted to make an alloy C. The ratio of gold to copper in alloy C is _____.

- (A) 5:10 (B) 7:13 (C) 6:11 (D) 9:13

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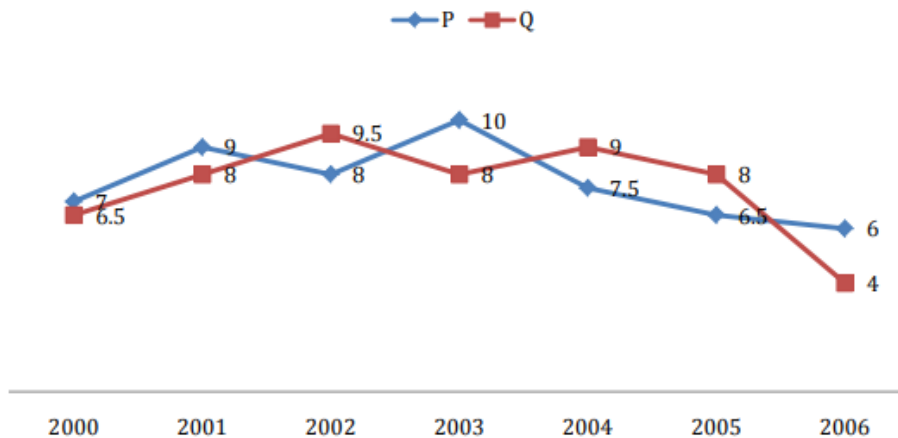
Q.No. 7

In the summer, water consumption is known to decrease overall by 25%. A Water Board official states that in the summer household consumption decreases by 20%, while other consumption increases by 70%.

Which of the following statements is correct?

- (A) The ratio of household to other consumption is 8/17
- (B) The ratio of household to other consumption is 1/17
- (C) The ratio of household to other consumption is 17/8
- (D) There are errors in the official's statement.

Q.No. 8 Two finance companies, P and Q, declared fixed annual rates of interest on the amounts invested with them. The rates of interest offered by these companies may differ from year to year. Year-wise annual rates of interest offered by these companies are shown by the line graph provided below.



If the amounts invested in the companies, P and Q, in 2006 are in the ratio 8:9, then the amounts received after one year as interests from companies P and Q would be in the ratio:

- (A) 2:3
- (B) 3:4
- (C) 6:7
- (D) 4:3

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Q.No. 9 *P, Q, R* and *S* are working on a project. *Q* can finish the task in 25 days, working alone for 12 hours a day. *R* can finish the task in 50 days, working alone for 12 hours per day. *Q* worked 12 hours a day but took sick leave in the beginning for two days. *R* worked 18 hours a day on all days. What is the ratio of work done by *Q* and *R* after 7 days from the start of the project?

- (A) 10:11 (B) 11:10 (C) 20:21 (D) 21:20

Q.No. 10 *S, M, E* and *F* are working in shifts in a team to finish a project. *M* works with twice the efficiency of others but for half as many days as *E* worked. *S* and *M* have 6 hour shifts in a day, whereas *E* and *F* have 12 hours shifts. What is the ratio of contribution of *M* to contribution of *E* in the project?

- (A) 1:1 (B) 1:2 (C) 1:4 (D) 2:1

Q.No. 11

A cube of side 3 units is formed using a set of smaller cubes of side 1 unit. Find the proportion of the number of faces of the smaller cubes visible to those which are NOT visible.

- (A) 1 : 4 (B) 1 : 3 (C) 1 : 2 (D) 2 : 3

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Q.No: 12 The total exports and revenues from the exports of a country are given in the two pie charts below. The pie chart for exports shows the quantity of each item as a percentage of the total quantity of exports. The pie chart for the revenues shows the percentage of the total revenue generated through export of each item. The total quantity of exports of all the items is 5 lakh tonnes and the total revenues are 250 crore rupees. What is the ratio of the revenue generated through export of Item 1 per kilogram to the revenue generated through export of Item 4 per kilogram?



- (A) 1:2 (B) 2:1 (C) 1:4 (D) 4:1

Q.No. 13 The ratio of male to female students in a college for five years is plotted in the following line graph. If the number of female students in 2011 and 2012 is equal, what is the ratio of male students in 2012 to male students in 2011?



- (A) 1:1 (B) 2:1 (C) 1.5:1 (D) 2.5:1

Answer Key

Q.No.	Ans.
1	C
2	D
3	A
4	D
5	B
6	B
7	D
8	D
9	C
10	B
11	C
12	D
13	C

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