BAR GRAPHS – Class 2

The following bar graph provides the total population, the total number of females and the total number of literates in eight countries, A through H:

Q1. In how many countries is the total number of illiterates greater than the number of males?

Q2. In how many countries are the percentage of males and the percentage of illiterates both greater than 60%?
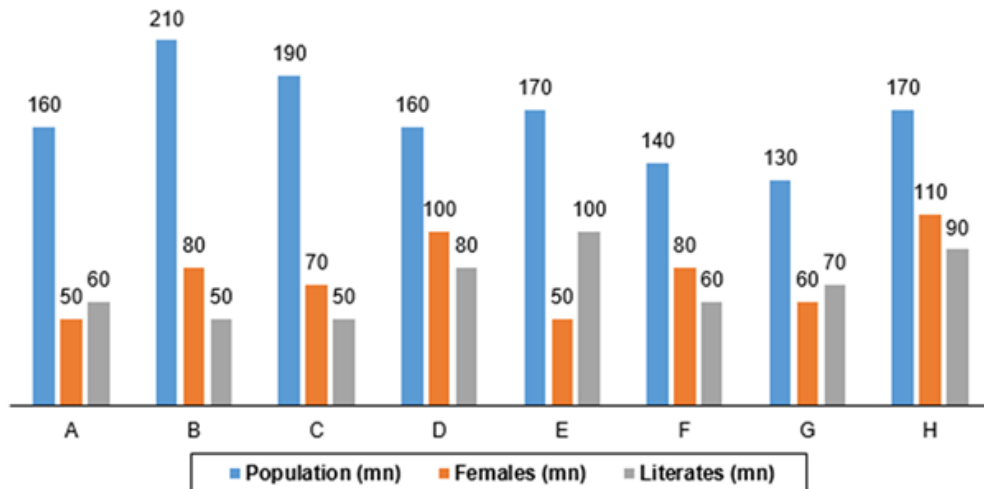 a) 3   b) 4   c) 5   d) 6

Q3. The minimum number of literate females in any country is at most
  a) 20 mn.   b) 25 mn.   c) 30 mn.   d) 0.

Q4. The minimum number of illiterate males in any country is at most
  a) 50 mn.   b) 60 mn.   c) 90 mn.   d) 80 mn.

Population (mn)   Females (mn)   Literates (mn)

Praveen was the manager of a clothes shop and he collected information regarding the number of customers visiting his shop during a period of 10 days, Day 1 through Day 10.
In the following graph, the bars represent the number of customers who visited the shop on each day and the line represents the number of customers who made a purchase on each day as a percentage of the number of customers who visited the shop on that day:

Q1. On which day did the highest number of customers make a purchase?
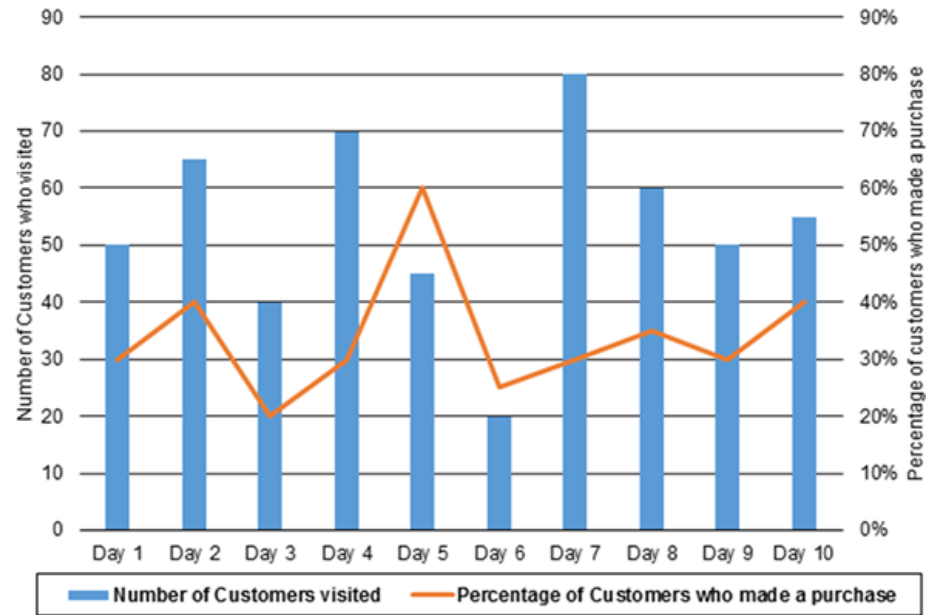 a) Day 2   b) Day 5   c) Day 7   d) Day 10

Q2. On which of the following days is the number of customers who made a purchase on that day as a percentage of the number of customers who made a purchase on the previous day the highest?
 a) Day 4   b) Day 2   c) Day 7   d) Day 10

Q3. On how many days did at least 35 customers who visited the shop not make any purchase?

Q4. What is the approximate per-day average number of customers who visited the shop but did not make any purchase during the given period?
 a) 34   b) 36   c) 37   d) 35

The following graph provides the percentage change in the revenue of a company in each year for a period of 15 years, from 2003 to 2017, as compared to the previous year:

Q1. The ratio of the revenue of the company in 2009 to that in the year 2016 is

a) 2 : 1.   b) 20 : 11.   c) 40 : 21.   d) 5 : 3.

Q2. If the revenue of the company did not exceed Rs.100 mn in any year during the given period, the revenue of the company in 2013 can be at most
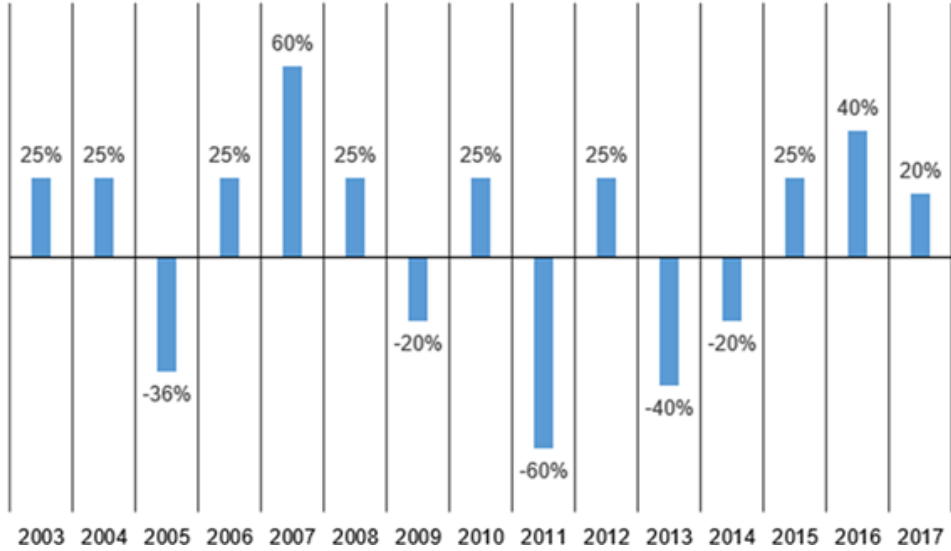
a) Rs.40 mn.   b) Rs.30 mn.   c) Rs.80 mn.   d) None of the above

Q3. If, among the given 15 years, there was a period of five consecutive years during which the revenue of the company in none of the five years exceeded Rs.200 mn, the maximum possible revenue of the company in any of the 15 years is approximately

a) Rs.397 mn.   b) Rs.300 mn.   c) Rs.200 mn.   d) Rs.400 mn.

Q4. If in each year in which the revenue of the company exceeded its revenue in the year 2003 by 30% or more, the company donated 10% of its revenue in that year to a charity, and the company donated a total of Rs.7,605,000 to charity during the given period, what is the revenue of the company in the year 2014?

a) Rs.4,320,000   b) Rs.5,070,000   c) Rs.4,550,000   d) Rs.5,575,000

The National Movie Association conducted a study to analyse the commercial success of six films. The study gathered information about the Budget of each of these films, and their respective Box Office Collections. The Budget of a film comprises all the costs involved in producing the film. The Box Office Collection of a film is the revenue generated by the film only through ticket sales. The following bar-chart presents this information for each of the six films.

Q1. If the average price of each ticket is $1.5 and each person has watched any movie only once, approximately how many people would have watched the movie â€˜Jolly Good Yearâ€™?
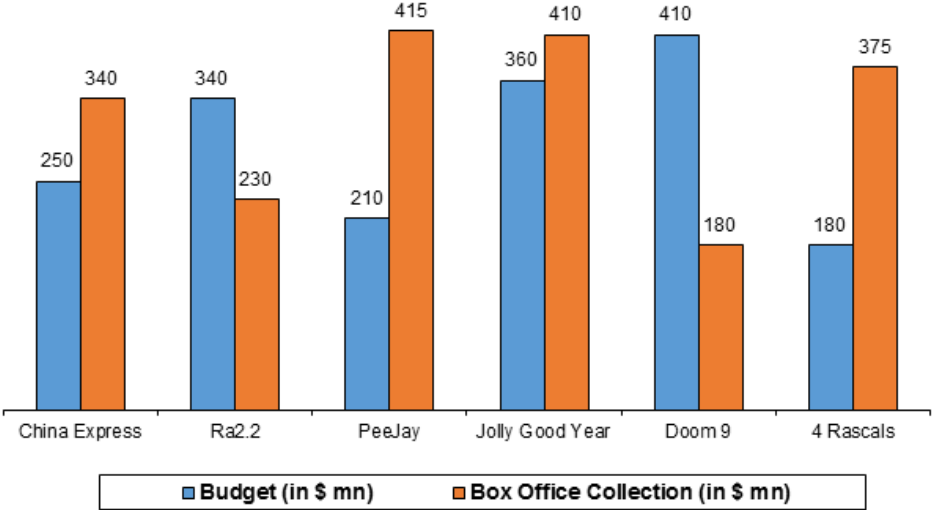 a) 615 million   b) 273 million   c) 277 million   d) 620 million

Q2. For which film is its Box Office Collection as a percentage of its Budget the highest?
  a) 4 Rascals   b) PeeJay   c) Doom 9   d) China Express

Q3. The study found that the revenue generated from the audio sales for each film was equal to exactly 20% of its respective Budget. What would be the difference (in $mn) between the Budget and the total revenue (which is the sum of the Box Office Collection and revenue from audio sales) for Ra2.2?

Q4. Only the movies with Box Office Collections higher than their Budgets have to pay a tax, which is equal to 27% of the difference between the respective Box Office Collection and Budget. If the tax paid by PeeJay as a percentage of the total tax paid by all the six movies is x%, find x.
Enter your answer as a decimal value, rounded off to two decimal places.

Bar chart data:

Film	Budget (in $ mn)	Box Office Collection (in $ mn)
China Express	250	340
Ra2.2	340	230
PeeJay	210	415
Jolly Good Year	360	410
Doom 9	410	180
4 Rascals	180	375

A survey was conducted across four regions to find the distribution of vehicles of each colour. The graph given below represents, for each colour, the number of vehicles of that colour in each of the four regions as a percentage of the total number of vehicles of that colour across the four regions.

Q1. For which region is the ratio of the number of White vehicles to the number of Black vehicles in that region the highest?
 a) North America   b) Europe   c) Asia   d) South America

Q2. If, in each region, there are at least 10000 vehicles of any colour, what is the minimum number of vehicles in South America?
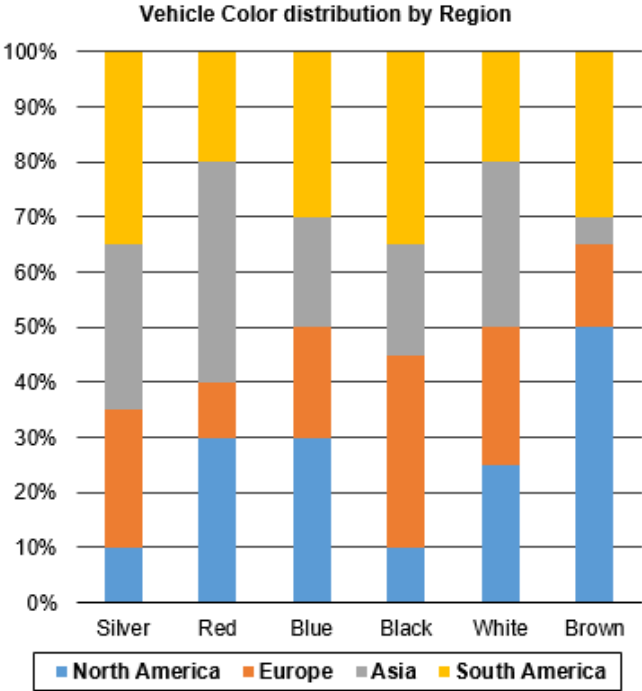
Q3. Across the four regions, the total number of Silver, Red, Blue, Black, White and Brown vehicles are in the ratio 1 : 2 : 1 : 3 : 2 : 1. The number of Red vehicles across the four regions is 100,000.
What is the difference between the total number of vehicles in Europe and the total number of vehicles in Asia?

Q4. Across the four regions, the total number of Silver, Red, Blue, Black, White and Brown vehicles are in the ratio 1 : 2 : 1 : 3 : 2 : 1. The number of Red vehicles across the four regions is 100,000.
Which of the following statements is definitely true?
 a) The number of Blue vehicles in Europe is twice that of Silver vehicles in South America.
 b) There are equal number of Silver and Black vehicles in North America.
 c) There are more number of Red vehicles in Asia than vehicles of any other colour.
 d) The number of Brown vehicles in North America is more than that of Black vehicles in South America.

Vehicle Color distribution by Region

North America   Europe   Asia   South America

ELITES GRID

Each of the four athletes - Sachin, Virat, Rahul and Harbhajan competed in the National Athletic Meet in each of the four different events - 100m, 200m, 400m and 800m. In each event, these athletes finished in the top four positions.
No athlete finished any two events in the same position.
I. The athlete who finished first in 100 m finished fourth in 800m.
II. The athlete who finished second in 200 m finished third in 400m and first in 800 m.
III. Virat finished second in 100 m and Rahul is not the last one to finish in 200 m.
IV. Sachin finished after Virat in 200 m and 800 m.

Q1. Who is the fourth to finish 200m?[TITA]
Q2. Who is the first to finish 400m?[TITA]
Q3. Who is the third to finish 800m?[TITA]
Q4. Who is the second to finish 200m?[TITA]
(Mention '0', if your answer is cannot be determined for any question)