

# **PIE CHARTS – CLASS 2**

The pie chart, given here represents the number of valid votes obtained by four students who contested election for school leadership. The total number of valid votes polled was 720.

1 What was the minimum number of votes obtained by any candidates?

A 100 B 110 C 120 D 130

2 Who was the winner?

A Sivaraman B Paramjeet C Yasin D Vishwanath

3 By how many votes did the winner defeat his nearest rival?

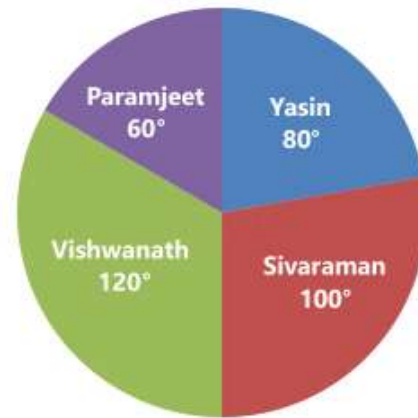
A 40 B 45 C 48 D 50

4 What is the ratio between the minimum votes gainer and the maximum vote gainer?

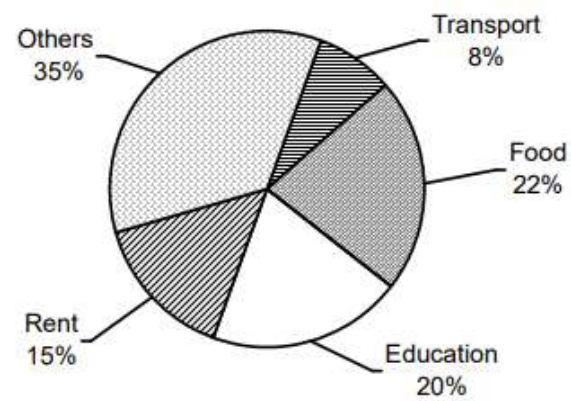
A  $\frac{1}{3}$  B  $\frac{1}{2}$  C  $\frac{2}{3}$  D  $\frac{2}{5}$

5 No. of votes by which Yasin is lagging behind of Vishwanath.

A 150 B 175 C 80 D 187



The following pie chart represents the break up of Raju's monthly expenses.



Q1. If Raju spent ₹4,500 more on food and transport together than he spent on rent, then find his monthly expenses (in ₹).

(A) 15,000 (B) 25,000 (C) 30,000 (D) 35,000

Q2. If Raju increased his savings, which is currently 10% of his income, by 20% and reduced his expenses by 20%, then his savings would be what percentage of his expenses?

(A) 10% (B) 12.5% (C) 15% (D)  $16\frac{2}{3}\%$

Q3. Raju spent 20% of his expenditure on 'others' on entertainment. This amounted to ₹2,100. Find his expenditure on education.

(A) 4,500 (B) 5,000 (C) 6,500 (D) None of these

Q4. Find the angle made by the expenditure on rent and 'others' put together.

(A)  $120^\circ$  (B)  $160^\circ$  (C)  $180^\circ$  (D)  $210^\circ$

Q5. As prices dropped, Raju's expenditure on clothes dropped by 10%. As a result of this, his expenditure on 'others' decreased from ₹10,500 to ₹10,290. What percentage of his expenditure on 'others' was spent on clothes?

(A) 10% (B) 12% (C) 15% (D) 20%

The following pie chart represents the distribution of the students in a batch of a Business school who got placed in companies in various sectors.

All students of the batch got placed and it is also known that each student got placed in exactly one company and that each company belonged to only one sector.

1. What percentage of the total students got placed in the software or the manufacturing sector?

(A) 12.5% (B) 25% (C) 27.5% (D) 50%

2. If the number of students who were placed in the banking sector was 51, then how many students were there in the batch?

(A) 340 (B) 330 (C) 333 (D) 350

3. If 25% of the students who were placed in the consulting sector had instead been placed in the retail sector, then what percentage of the total students of the batch would have been placed in the retail sector?

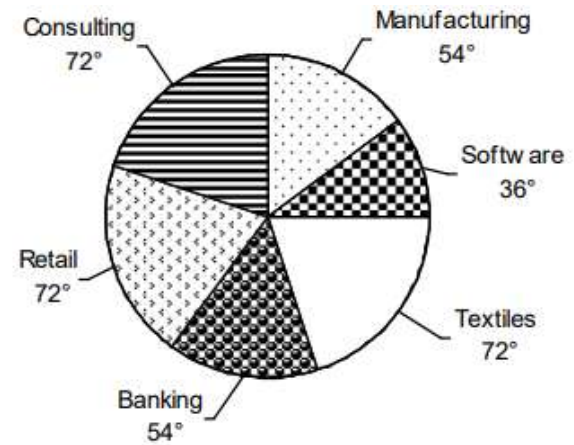
(A) 20% (B) 18% (C) 25% (D) 33%

4. If the number of students who were placed in consulting companies exceeded those placed in software companies by 72, then the number of students in the batch who were placed in manufacturing companies is?

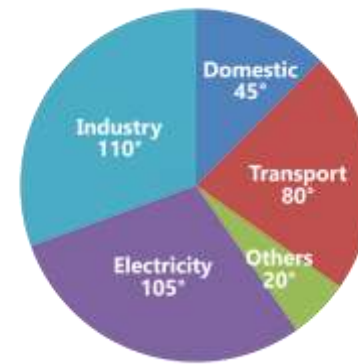
(A) 54 (B) 72 (C) 108 (D) 144

5. If 20% of the students who got placed in software companies opted out of placements and a new pie chart is drawn for students who accepted placements, then the percentage of the students of the batch who accepted jobs in software companies is (assume that all other students accepted placements) \_\_\_\_\_.

(A) 7% (B) 7.5% (C) 7.8% (D) 8.2%



The basic fuel expenditure of a country is dominated by four major uses - Domestic, Transport, Industry and Electricity. In 1992, the total amount of energy used was equivalent to 600 million tonnes of coal.



Q1. The energy consumed for other purposes is approximately what percentage of total energy consumed for the other four major uses in 1992 was?

A 5% B 6% C 20% D 33%

Q2. What is difference between energy used for domestic purposes and other purposes in the country in 1992?

A 35.33 million tonnes of coal B 41.67 million tonnes of coal  
C 52.75 million tonnes of coal D Can't be determined

Q3. The difference between the fuel consumption of Industry and Transport in 1992 was equal to?

A 30 million tonnes of coal B 45 million tonnes of coal  
C 50 million tonnes of coal D 57 million tonnes of coal

Q4. If the energy requirement of electricity in 1992 were 350 million tonnes, the amount of additional primary energy required would be?

A 600 million tonnes of coal B 1200 million tonnes of coal  
C 1810 million tonnes of coal D 2100 million tonnes of coal

Q5. If instead of coal, oil has been used in industry purposes and if 1 tonne of coal is equivalent to  $\frac{3}{4}$  tonnes of oil, what approximate amount of oil will be required in industry?

A 132.6 million tonnes B 134.6 million tonnes  
C 126 million tonnes D None of these

1. In the case of which of the types of employees was there a decrease from 1995 to 1996?

A A, D and E      B D and E      C Only D      D Only E

2 If 176 A type employees are additionally recruited in 1996, approximately, what will be the new percentage of A type employees?

A 20      B 30      C 25      D 35

3 The number of C type employees in 1996 was what per cent of the number of B type employees in 1995?

A 90      B 110      C 45      D 80

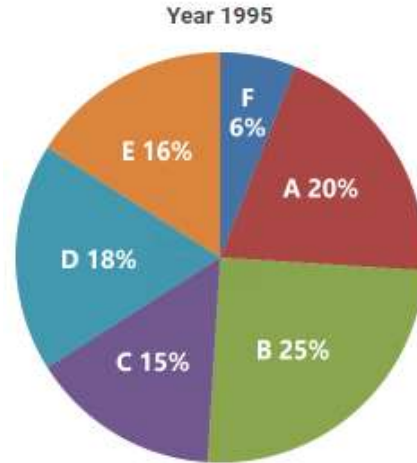
4 What was the difference in the number of D type employees in 1995 and A type employees in 1996?

A Nil      B 18      C 54      D 36

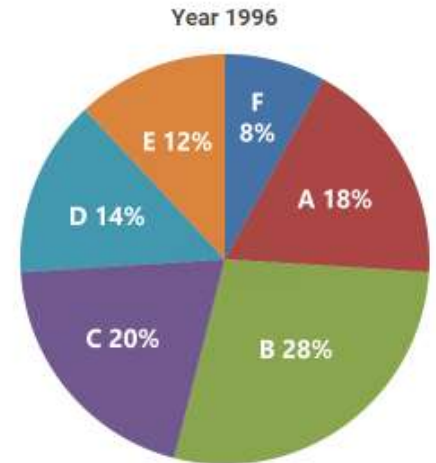
5 What was the difference in the number of C type employees between 1995 to 1996?

A 240      B 360      C 120      D 160

Percentage of different types of Employees in an organization in two years



Total number of employees = 1600



Total number of employees = 1800

The pie chart, given here shows the amount of money spent (in degrees) on various sports by a school administration in a particular year.

Q1. If the money spent on football was Rs. 9000, how much more money was spent on hockey than football?

A 11000 B 11500 C 12000 D 12500

Q2 If the money spent on football was Rs. 9000, what amount was spent on cricket?

A 31000 B 31500 C 32000 D 32500

Q3 If the money spent on football is Rs. 9000, what was the total amount spent on all sports?

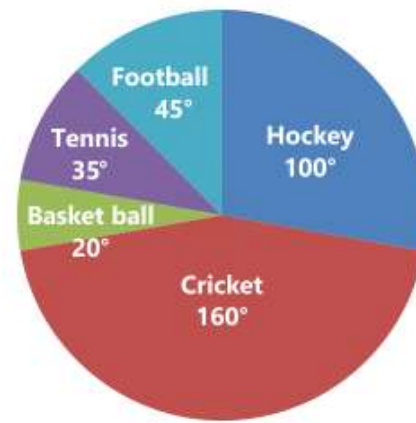
A 73000 B 72800 C 72500 D 72000

Q4 If Rs. 9000 were spent on football then the money spent on Tennis is what % of money spent on Basketball?

A 175% B 250% C 275% D 300%

Q5 If total money spent on all sports is Rs. 5040 then what is the difference between the money spent on Hockey and Football.

A Rs. 450 B Rs. 550 C Rs. 770 D Rs. 850



The following pie chart represents the number of votes cast for different political parties in an election in the year 2017. The total number of votes cast in that election is 2,44,000.

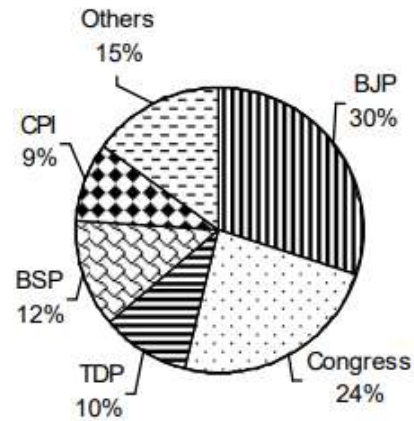
Q1. If the number of votes cast for the BJP is 20% more than that in the previous election, then what is the difference between the number of votes cast for that party in this election and the previous one?

Q2. If out of the total votes cast for the Congress party, 6000 votes were found to be invalid, then how many valid votes were cast for the party?

Q3. By what percentage is the total votes cast for the Congress party more than that for 'Others'?

Q4. The total number of votes cast for the CPI forms what percentage of the total number of votes cast for the BSP?

Q5. If the number of votes cast for the TDP in 2017 is 20% less than that in the previous election, which was 10% of the total votes cast in that year, then how many votes were cast in total in the previous election?





The following pie chart represents the production of major crops in a particular region 'x' in the year 2016.

6. If the total production of wheat and rice together in 2016 is 88% more than that in the previous year, then what was the total production (in million tonnes) of wheat and rice in 2015?

(A) 30 (B) 20 (C) 25 (D) 35

7. In 2016, by what percentage is the production of rice more than that of wheat?

(A) 30% (B) 25% (C) 24% (D) 35%

8. If in the next year, the production of rice increases by 25% and the total production of crops increases by 15%, then what will be the total production (in million tonnes) of the given crops (except rice) in that year?

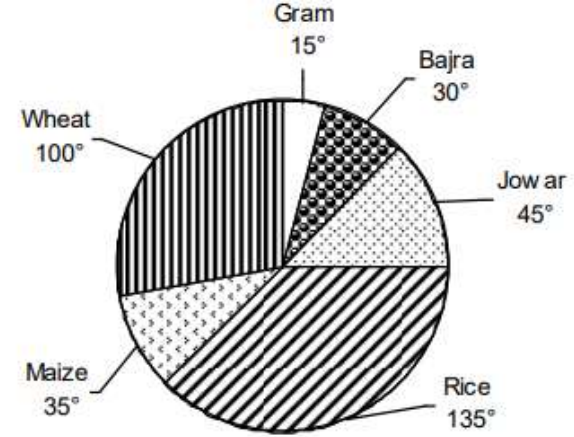
(A) 42 (B) 46.35 (C) 48.25 (D) 49.05

9. If in 2016, half of the wheat got spoiled due to rain and 25% of the remaining wheat got spoiled due to improper storage, then what would be the approximate angle made by the wheat left, if a new pie chart is drawn, all other values remaining the same?

(A)  $37.5^\circ$  (B)  $40.2^\circ$  (C)  $35.4^\circ$  (D)  $45^\circ$

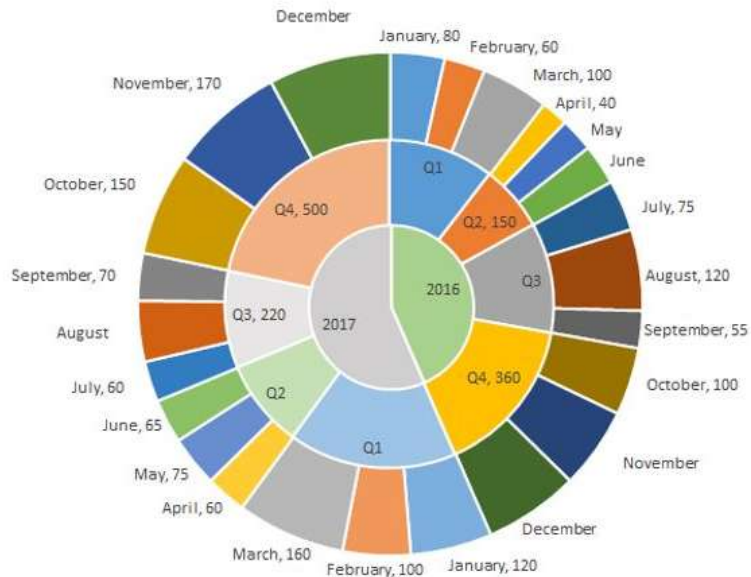
10. Due to a mistake, the production of rice in 2016 had been under quoted by 40%. If this mistake is corrected, then wheat contributed what percentage of the production of major crops in that year?

(A) 27.42% (B) 24.82% (C) 14.37% (D) 22.22%



**Total production = 72 million tonnes**

The multi-layered pie-chart below shows the sales of LED television sets for a big retail electronics outlet during 2016 and 2017. The outer layer shows the monthly sales during this period, with each label showing the month followed by sales figure of that month. For some months, the sales figures are not given in the chart. The middle-layer shows quarter-wise aggregate sales figures (in some cases, aggregate quarter-wise sales numbers are not given next to the quarter). The innermost layer shows annual sales. It is known that the sales figures during the three months of the second quarter (April, May, June) of 2016 form an arithmetic progression, as do the three monthly sales figures in the fourth quarter (October, November, December) of that year.



Q1. What is the percentage increase in sales in December 2017 as compared to the sales in December 2016?

- a. 28.57      b. 22.22      c. 50.00      d. 38.46

Q2. In which quarter of 2017 was the percentage increase in sales from the same quarter of 2016 the highest?

- a. Q1      b. Q3      c. Q4      d. Q2

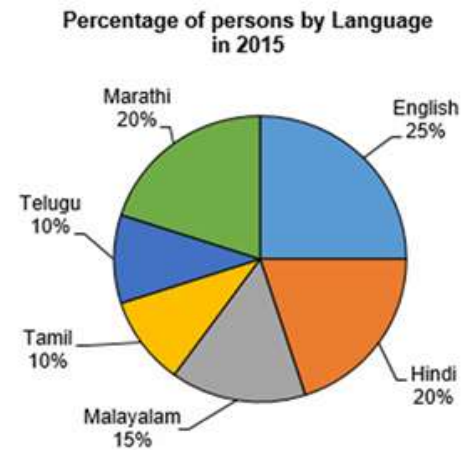
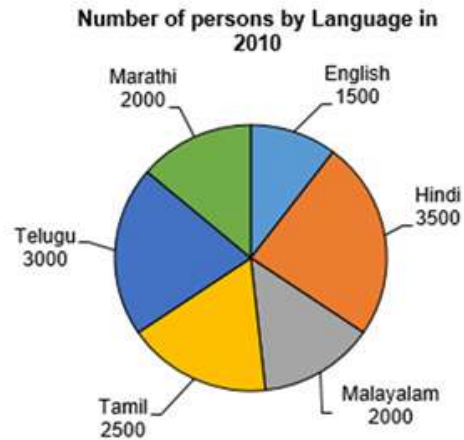
Q3. During which quarter was the percentage decrease in sales from the previous quarter's sales the highest?

- a. Q2 of 2017      b. Q1 of 2017      c. Q4 of 2017      d. Q2 of 2016

Q4. During which month was the percentage increase in sales from the previous month's sales the highest?

- a. March of 2017      b. October of 2017  
c. October of 2016      d. March of 2016

Each person living in a certain city speaks exactly one language among six different languages – English, Hindi, Malayalam, Tamil, Telugu and Marathi. The first pie chart below gives the number of persons in the city who speak each language at the beginning of 2010. The second pie chart gives the exact percentage breakup of the number of persons who speak each language at the beginning of 2015. It is known that, between 2010 and 2015, no person learned to speak another language and there were no births or deaths in the city. However, some persons in the city might have moved out of the city and/or some persons from outside the city might have moved into the city. Every person who moved into the city speaks exactly one of the six languages.



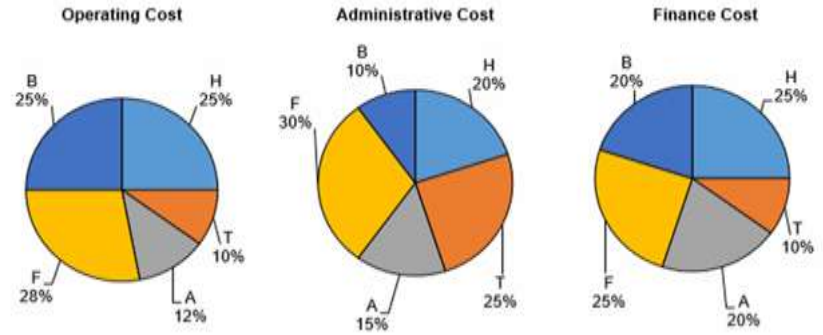
Q1. If the number of persons who speak Hindi remained the same during the given period, what is the minimum number of persons who would have moved out of the city?

Q2. If no person moved out of the city between 2010 and 2015, what is the minimum number of people who speak Malayalam that must have moved into the city?

Q3. If no person moved out of the city between 2010 and 2015, what is the minimum number of people that must have moved into the city?

Q4. If no person moved into the city between 2010 and 2015, what is the minimum number of people that must have moved out of the city?

Trunami Inc is a conglomerate comprising five companies – Hurricase, Tiefone, Avalunch, Famints and Blizz. The Total Cost incurred by each of the five companies in any year can be divided into three components– Operating Cost, Administrative Cost and Finance Cost. The first pie chart given below provides, for the year 2017, the Operating Cost of each company as a percentage of the total Operating Cost of the five companies, while the second and the third pie charts provide similar percentage breakups for the Administrative Cost and Finance Cost respectively for 2017. In the pie charts below, each company is represented by the first letter of its name.



It is also known that the Total Cost was the same for exactly three of the five companies during 2017. All the questions that follow are related to the costs of the five companies in the year 2017.

Q1. For how many companies is its Finance Cost as a percentage of its Total Cost greater than 39%?

- a) 1   b) 2   c) 3   d) None of the above

Q2. How many of the five companies have a Finance Cost that is greater than the Operating Cost of Famints?

- a) 1   b) 2   c) 3   d) 4

Q3. What is the ratio of the Administrative Cost of Famints to the Operating Cost of Hurricase?

- a) 3   b) 3.12   c) 3.24   d) 3.36

Q4. If the Administrative Cost of Avalunch is Rs.29.25 lakh, what is the Operating Cost of Famints?

- a) Rs.20 lakh   b) Rs.21 lakh   c) Rs.22 lakh   d) Rs.23 lakh