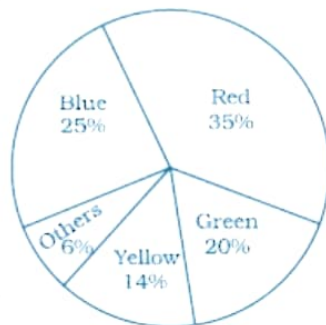


Multiple Choice Questions

- The height of a rectangle in a histogram shows the
 - Width of the class
 - Upper limit of the class
 - Lower limit of the class
 - Frequency of the class
- A geometric representation showing the relationship between a whole and its parts is a
 - Pie chart
 - Histogram
 - Bar graph
 - Pictograph
- In a pie chart, the total angle at the centre of the circle is
 - 180°
 - 360°
 - 270°
 - 90°
- The range of the data 30, 61, 55, 56, 60, 20, 26, 46, 28, 56 is
 - 26
 - 30
 - 41
 - 61
- Which of the following is not a random experiment?
 - Tossing a coin
 - Rolling a dice
 - Choosing a card from a deck of 52 cards
 - Throwing a stone from a roof of a building
- What is the probability of choosing a vowel from the alphabets?
 - $\frac{21}{26}$
 - $\frac{5}{26}$
 - $\frac{1}{26}$
 - $\frac{3}{26}$
- In a school only, 3 out of 5 students can participate in a competition. What is the probability of the students who do not make it to the competition?
 - 0.65
 - 0.4
 - 0.45
 - 0.6

Students of a class voted for their favourite colour and a pie chart was prepared based on the data collected.

Observe the pie chart given below and answer questions 8 – 10 based on it.



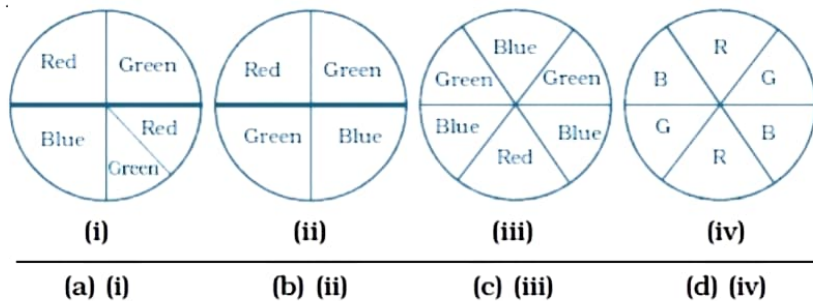
- Which colour received $\frac{1}{5}$ of the votes?
 - Red
 - Blue
 - Green
 - Yellow
- If 400 students voted in all, then how many did vote 'Others' colour as their favourite?
 - 6
 - 20
 - 24
 - 40
- Which of the following is a reasonable conclusion for the given data?
 - $\frac{1}{20}$ th student voted for blue colour
 - Green is the least popular colour
 - The number of students who voted for red colour is two times the number of students who voted for yellow colour
 - Number of students liking together yellow and green colour is approximately the same as those for red colour.

11. Listed below are the temperature in °C for 10 days.

-6, -8, 0, 3, 2, 0, 1, 5, 4, 4

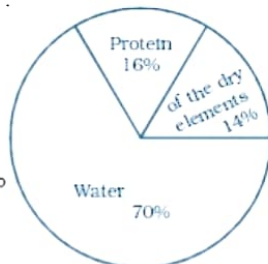
What is the range of the data?

- (a) 8 (b) 13°C (c) 10°C (d) 12°C
12. Ram put some buttons on the table. There were 4 blue, 7 red, 3 black and 6 white buttons in all. All of a sudden, a cat jumped on the table and knocked out one button on the floor. What is the probability that the button on the floor is blue?
- (a) $\frac{7}{20}$ (b) $\frac{3}{5}$ (c) $\frac{1}{5}$ (d) $\frac{1}{4}$
13. Rahul, Varun and Yash are playing a game of spinning a coloured wheel. Rahul wins if spinner lands on red. Varun wins if spinner lands on blue and Yash wins if it lands on green. Which of the following spinner should be used to make the game fair?

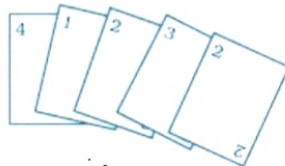


14. In a frequency distribution with classes 0-10, 10-20 etc., the size of the class intervals is 10. The lower limit of fourth class is
- (a) 40 (b) 50 (c) 20 (d) 30
15. A coin is tossed 200 times and head appeared 120 times. The probability of getting a head in this experiment is
- (a) $\frac{2}{5}$ (b) $\frac{3}{5}$ (c) $\frac{1}{5}$ (d) $\frac{4}{5}$
16. Data collected in a survey shows that 40% of the buyers are interested in buying a particular brand of toothpaste. The central angle of the sector of the pie chart representing this information is
- (a) 120° (b) 150° (c) 144° (d) 40°
17. Monthly salary of a person is Rs. 15000. The central angle of the sector representing his expenses on food and house rent on a pie chart is 60°. The amount he spends on food and house rent is
- (a) Rs. 5000 (b) Rs. 2500 (c) Rs. 6000 (d) Rs. 9000

18. The following pie chart gives the distribution of constituents in the human body. The central angle of the sector showing the distribution of protein and other constituents is



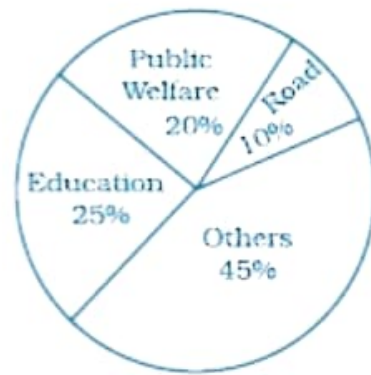
19. Rohan and Shalu are playing with 5 cards as shown in the figure. What is the probability of Rohan picking a card without seeing, that has the number 2 on it?



- (a) $\frac{2}{5}$ (b) $\frac{1}{5}$ (c) $\frac{3}{5}$ (d) $\frac{4}{5}$

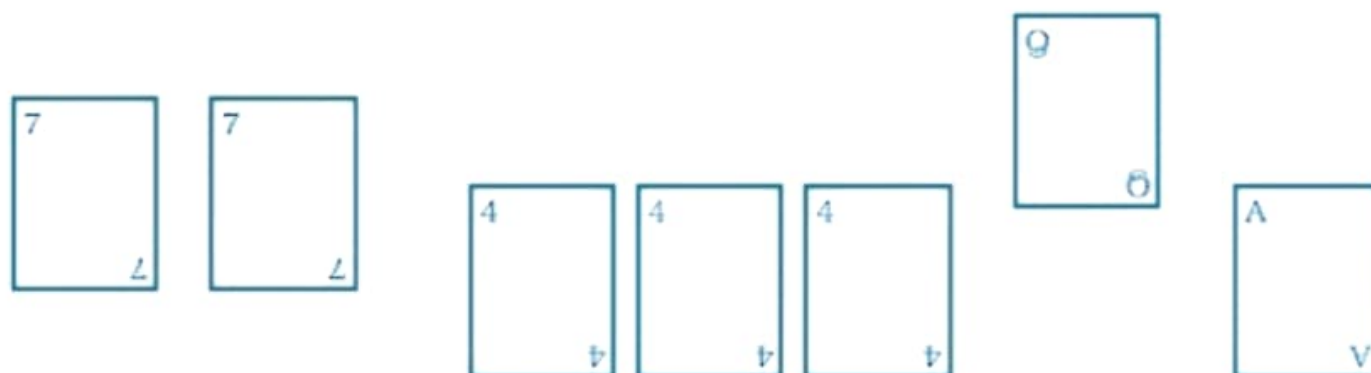
The following pie chart depicts the expenditure of a state government under different heads.

- (i) If the total spending is 10 crores, how much money was spent on roads?
- (ii) How many times is the amount of money spent on education compared to the amount spent on roads?
- (iii) What fraction of the total expenditure is spent on both roads and public welfare together?



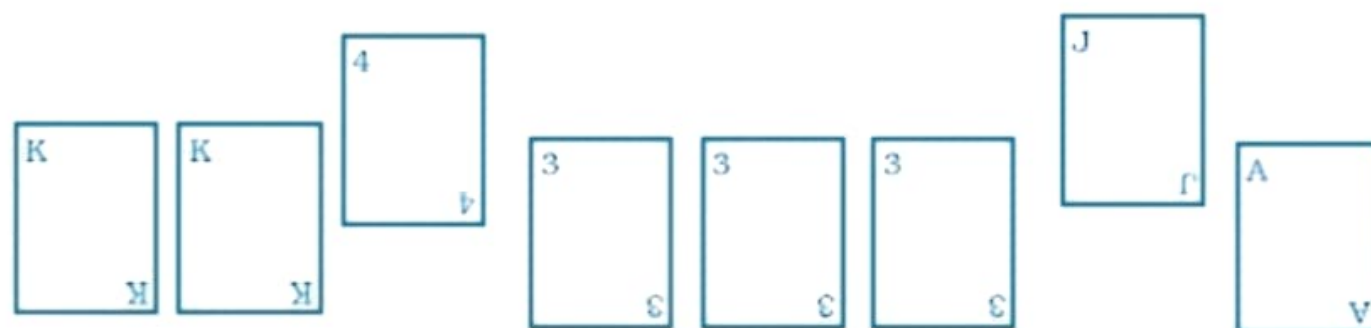
Playing cards

(a) From a pack of cards the following cards are kept face down:



Suhail wins if he picks up a face card. Find the probability of Suhail winning?

(b) Now the following cards are added to the above cards:



What is the probability of Suhail winning now? Reshma wins if she picks up a 4. What is the probability of Reshma winning?