SNS COLLEGE OF TECHNOLOGY
COIMBATORE-35

## DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND <br> MACHINE LEARNING <br> 19GET275 - VQAR-1

Try to solve the following pie chart questions and check your answers with the solution given here.

## Question 1:

The below pie chart shows the sale of different fruits in a day for a shop:


Answer the following questions based on the pie chart:
(i) If a total of 1200 kg of fruits were sold in a day, calculate the amount of bananas sold (in kg).
(ii) Find the difference between sales of grapes and oranges.
(iii) Calculate the central angle for others.
(i) Total amount of fruits sold $=1200 \mathrm{~kg}$
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Percentage of banana sold $=30 \%$
Amount of banana sold $=1200 \times(30 / 100)=360 \mathrm{~kg}$
(ii) Amount of grapes sold $=1200 \times(10 / 100)=120 \mathrm{~kg}$

Amount of oranges sold $=1200 \times(15 / 100)=180 \mathrm{~kg}$

Difference $=180-120=60 \mathrm{~kg}$
(iii) Amount of other fruits sold $=1200 \times 20=240 \mathrm{~kg}$

Central angle $=240 / 1200 \times 360^{\circ}=72^{\circ}$.
There are 60 students in a class, following table shows the data for of their result

| Result | First Class | Second Class | Third Class |
| :--- | :--- | :--- | :--- |
| Fail |  |  |  |
| Number of students | $35 \%$ | $45 \%$ | $15 \%$ |

Draw a pie chart for this information.

## Solution:

| Result | Percentage of students | Number of students | Central angle |
| :---: | :---: | :---: | :---: |
| First class | 35 | $60 \times 35 / 100=21$ | $\begin{aligned} & 21 / 60 \times 360^{\circ}= \\ & 126^{\circ} \end{aligned}$ |
| Second class | 45 | $60 \times 45 / 100=27$ | $\begin{aligned} & 27 / 60 \times 360^{\circ}= \\ & 162^{\circ} \end{aligned}$ |
| Third class | 15 | $60 \times 15 / 100=9$ | $9 / 60 \times 360=54{ }^{\circ}$ |
| Fail | 5 | $60 \times 5 / 100=3$ | $3 / 60 \times 360^{\circ}=18^{\circ}$ |
| Total | 100 | 60 | 360 ${ }^{\circ}$ |

The pie chart is -


Consumers were polled about their favourite ice cream flavours in a survey. Draw a bar graph for the following data:

| Flavour of Icecream | Frequency |
| :---: | :---: |
| Vanilla | 16 |
| Strawberry | 5 |
| Chocolate | 12 |
| Mint Chocolate | 3 |
| Others | 6 |

## Solution:

From the given data, we can observe the following:
Generally, we can draw the bar graph using the frequencies of different flavours. They are:

The frequency of vanilla flavour - 16
The frequency of strawberry flavour - 5
The frequency of chocolate flavour - 12
The frequency of mint chocolate - 3
The frequency of other ice cream flavours - 6 .
Now, draw the bar graph representing the different ice cream flavours on $X$-axis and frequencies on $Y$-axis.

Hence, the bar graph for the given data is drawn as follows:


