Nalanda Collage - Colombo 10
Grade 09 - Third Term
Unit Test 27
Mathematics

## Scale Diagrams

## Part I

Answer all the questions.

1. Mention 3 characteristics of bearing.
2. Mention the location of 4 sub directions using bearing.
3. Find the bearing of B from A in following figures.

4. Using a protractor to measure the angles , illustrate each of the following bearings by drawing a figure.
i) Bearing of Q from P is $072^{\circ}$
ii) Bearing of B from A is $140^{\circ}$
iii) Bearing of $Y$ from $X$ is $192^{\circ}$
iv)Bearing of N from M is $275^{\circ}$
5. Find the actual length represented by 1 cm according to the given scales.
i) $1: 20000$
ii) $1: 500000$
iii) $1: 500$
iv) 1: 1000000

## Part II

1. Following sketch shows a rough plan of a carnival.


Describe the location of each place using bearing from merry-go-round.
2. In following diagram $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ are 3 harbors and a ship is to travel to those harbors.


If the ship started the journey from X and reached Y .Then sailed to Z and again directly sailed towards X, describe the route of the ship.
3. A pilot of a certain airplane which is scheduled to fly from $P$ has been instructed to fly 250 km on a bearing of $078^{\circ}$ and there onwards 150 km on a bearing of $170^{\circ}$ and reach Q . Sketch the above given route of the airplane.
i)By drawing a scale diagram choosing a suitable scale find,
a) Bearing of Q from P
b) Distance between P and Q
c) Bearing of P from $Q$
4.


The floor plan of a house to be constructed which is drawn to scale is shown above.
If the breadth of (2) is 4 m ;
a) Find the scale of the scale drawing
b) Find actual length and breadth of (1)

