BCM SCHOOL, BASANT AVENUE, DUGRI ROAD, LUDHIANA

CLASS IX

SUBJECT: MATHEMATICS

ASSIGNMENT -2 (MAY 2023-24)

CH:10 (HERON'S FORMULA) AND CH:12 (STATISTICS)

MCQ

Q1 An isosceles right triangle has area 200 cm². The length of it's hypotenuse is

| a) 20√2cm | b)10cm | c)10 √2cm | d) 30√2cm |
|-----------|--------|-----------|-----------|
|-----------|--------|-----------|-----------|

Q2 The area of equilateral triangle is $16 \sqrt{3}$ cm². Find its perimeter.

a) 40cm b)24cm c) 48cm d)60cm

Q3 What is the class mark of class interval 90-120

a) 90 b)105 c)115 d)120

ASSERTION/REASONING

Q4 Assertion: Range=Maximum value - Minimum value .

Reason: The range of first six multiples of 6 is 9.

(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

(b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).

(c) Assertion (A) is true but reason (R) is false.

(d) Assertion (A) is false but reason (R) is true.

Q5. Find the area of triangle whose perimeter is 180cm and two of it's sides are of length 80cm and 18cm. Also calculate the altitude of the triangle corresponding to the shortest side.

Q6. Find the cost of levelling the ground in the form of triangle having sides 26m, 28m, 30m at the rate of Rs3 per m^2 .

Q7. Draw a histogram for the following data :

| MARKS | 10-15 | 15-20 | 20-25 | 25-30 | 30-40 | 40-60 | 60-80 |
|------------|-------|-------|-------|-------|-------|-------|-------|
| NO. OF | 7 | 9 | 8 | 5 | 12 | 12 | 8 |
| CANDIDATES | | | | | | | |

CASE STUDY QUESTION

Q8. Covid-19 is short form of "Coronavirus disease 2019", the name of the disaster caused



by the SARS-CoV-2 coronavirus. It has spread so rapidly in many countries that World Health Organisation has declared it a pandemic. Various State Governments and Central Governments are trying hard measures to fight with this disease and for this several programmes were initiated by Delhi Government, one of which is placing hoardings on the roadsides all over the city in which some covid appropriate behaviour guidelines were written. These hoarding are in the shape of triangle with sides 13cm , 14cm and 15cm.

- i) Find the semi perimeter of the triangle
- ii) What type of triangle is this
- iii) Find the area of the triangle

