| INDIAN SCHOOL AL WADI AL KABIR |  |  |
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| Class: XI | Department: SCIENCE 2024-25 <br> SUBJECT: ENGINEERING GRAPHICS | Date of <br> submission:30.04.2024 |
| Worksheet No: 1 <br> WITH ANSWERS | UNIT 1: RECTILINEAR FIGURES | Note: |
| NAME OF THE STUDENT | CLASS \& SEC: XI C/G | ROLLE NO. |

## MULTIPLE CHOICE QUESTIONS

1. To show the hidden edges which type of line is used?
a) Continuous thick line
b) Centre line
c) Dashed line
d) Hatching line
2.In Metric system the standard-length measure is $\qquad$
a) Yard
b) Meter
c) Centimeter
d) Millimeter
3.Continuous thick line is used to denote $\qquad$
a) Visible edges
b) Axis line
c) Leader line
d) Projection line
4.The axis of a circle is denoted by which type of lines---------
a) Continuous thick lines
b) Centre line
c) Continuous thin lines
d) Double dashed lines
5.Mini drafter is a combination of $\qquad$
a) Scale and compass
b) Compass and divider
c) Scale and protractor
d) Protractor and compass
6.In an equilateral triangle all angles are equal to ---------
a) 45 degree
b) 60 degree
c) 90 degree
d) 120 degree
7.The size of a A 2 drawing sheet is $\qquad$
a) $841 \times 1189$
b) $594 \times 841$
c) $420 \times 594$
d) $210 \times 297$
2. Identify the symbol of first angle projection

a)

b)

c)

d)
3. 



Identify the polygon in the given figure?
a) Pentagon
b) Hexagon
c) Octagon
d) Trapezium
10. Match the LIST I with LIST II

| List I - Name of the figure | List II - No: of sides |
| :--- | :--- |
| 1.Triangle | i.5 |
| 2. Pentagon | ii.4 |
| 3. Square | iii. 8 |
| 4. Octagon | iv.3 |

a) 1-iii, 2-iv, 3-i, 4-ii
b) 1-i, 2-iii, 3-ii, 4-iv
c) 1-iv, 2-i, 3-ii, 4-iii
d) 1-ii, 2-i, 3-iv, 4-iii

## DESCRIPTIVE TYPE QUESTIONS

1. Construct a regular hexagon on a base line of 40 mm .
2. Construct a Right-angled Triangle ABC , having its hypotenuse $\mathrm{AC}=60 \mathrm{~mm}$ and altitude AB $=40 \mathrm{~mm}$.
3. Construct an Isosceles Triangle QPR, having each of its sides $=50 \mathrm{~mm}$ and base $=40 \mathrm{~mm}$.
4. Construct an equilateral triangle of 40 mm sides.
5. Construct a Triangle $A B C$, having its base $B C=50 \mathrm{~mm}$, side $A B=40 \mathrm{~mm}$, side $A C=60 \mathrm{~mm}$.
6. Construct a rectangle ABCD having its base $\mathrm{AB}=60 \mathrm{~mm}$ and its side $\mathrm{AD}=40 \mathrm{~mm}$.
7. Construct a Trapezion or Kite ABCD , having its diagonal $\mathrm{AC}=50 \mathrm{~mm}$, its adjacent sides AD and AB each equal to 30 mm and CD and CB equal to 40 mm .
8. Construct a regular pentagon with base side $=30 \mathrm{~mm}$.
9.Construct a square of 50 mm sides.
9. Divide a straight-line AB , proportionate to seven equal parts.

| ANSWER KEY - MULTIPLE CHOICE QUESTIONS |  |
| :--- | :--- |
| 1 | c. Dashed lines |
| 2 | b. Meter |
| 3 | a. Visible edges |
| 4 | b. Centre lines |
| 5 | c. Scale and protractor |
| 6 | b. 60 degree |
| 7 | c. 420 X 594 |
| 8 | a. |
| 9 | b. Hexagon |
| 10 | c. 1 -iv, 2-i, 3-ii, 4-iii |

## Answers - Descriptive Type Questions

1. 


(Hint: On a base line AB cut arcs equally with 30 mm and draw a circle with center O and radius OA , cut arcs equally on the circle, join all points.).
2.

A

3.
(Hint: $\mathrm{QP}=\mathrm{QR}=50 \mathrm{~mm}, \mathrm{PR}=40 \mathrm{~mm}$ )
4.

${ }^{\mathrm{B}}$ (Hint: $\mathrm{CA}=\mathrm{AB}=\mathrm{CB}=40 \mathrm{~mm}$ )
5.

(Hint: $\mathrm{AB}=40, \mathrm{AC}=50, \mathrm{BC}=60$, using compass)
6.

(Hint: $\mathrm{AB}=60, \mathrm{AD}=40$, Construct perpendicular from both points A and B$).$
7.

(Hint: Diagonal $\mathrm{AC}=50, \mathrm{AB}=\mathrm{AD}=30, \mathrm{CD}=\mathrm{CB}=40 \mathrm{~mm}$ )
8.

(Hint: Construct a regular pentagon on a base line $\mathrm{AB}=30 \mathrm{~mm}$, using compass)
9.

C
D

(Hint: Construct perpendiculars from points A and B , take equal measurement of 40 mm and cut arcs to get a square).
10.

(Hint: Using Copy angle method)

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