MODEL QUESTION PAPER: 2021-22
FIRST TERMINAL EXAMINATION
ENGINEERING GRAPHICS

Max Marks: 40

CLASS: XI   **Duration: 1.5 HRS**

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Instructions:
i) Attempt all the questions.
ii) Follow the SP: 46-2003 codes.
iii) Missing and mismatching dimension if any may be assumed suitably.
iv) All dimensions are in millimeters.
v) Use both side of the drawing sheet, if necessary.
vi) Draw the margins and title box on the answer sheet
vii) Please check that this question paper contains 2 printed page.
viii) Please check that this question paper contains 8 questions.
ix) Please write down the Serial Number of the question before attempting it.

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Q.1 Answer the following questions. Print correct choice on your answer sheet **(5)**

1.For drawing of small components _____ scale is used.

2.___ compass is used for small circles.

3.Pencil leads are graded by the _____or _____of the lead.

4.As per BIS standard drawing sheets vary from __ to ___ _

5. French curves help to make a smooth curve joining the points marked (true/false)

Q.2 Draw an angle of 135° with the help of compass   **(5)**

OR

Divide a straight-line AB= 78 mm into two equal parts

Q.3 Construct a triangle ABC, having its altitude AD= 55 mm and its

two base angles equal to 40° and 65°   **(5)**

Q.4 Construct a quadrilateral ABCD having its side AB=45mm,

BC=55mm, CD=40mm, AD=60mm and AC=70mm. (5)

Q.5 Construct a regular hexagon with the help of compass given the length

of its side is 50 mm.

(5)

OR

Construct a regular pentagon with the help of protractor given the length

of its side is 50 mm.

Q.6 Draw an external common tangent to two intersecting and unequal circles,

with their radii as R 25 and R 15 with their centres 35 mm apart   **(5)**

OR

Draw an internal common tangent to two non intersecting and unequal circles,

with their radii as R 20 mm and R 15 mm and their centres 60 mm apart.

Q.7 Circumscribe a circle about a regular hexagon of side 20mm   (5)

Q.8 Inscribe a circle in a regular Octagon whose one side = 30 mm.   (5)