FIRST SEMESTER EXAMINATION 2025-26

MECHANICAL MAINTENANCE

PAPER-1

STD: XI **MARKS: 40**

DATE: 08/10/2025 **ROLL No. : _____** **TIME : 2 ½ HRS**

Instructions:

(1) All questions are compulsory.
(2) Figures to the right indicate full marks.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Use of drawing instruments, mathematical tables etc. is permitted.
(5) Assume suitable data, if necessary.

Q.1 Answer the following (any four) (4)

Fill in the blanks with appropriate words from those given below

a) _____used for drawing smooth curves in engineering drawing.
(mortise gauge, protractors , French curve)

b) _____ is the common type of plane used in carpentry.
(Rabbit plane, Trying plane, Jack plane)

True or False and correct it, if false

c) Deodar is a type of Hardwood. _____

d) Sledge hammer are lighter than hand hammer _____.

Match the following

'A'	'B'
e) Visible outlines	a) zigzag lines
f) Construction lines	b) continuous thick lines
	c) continuous thin lines

Q.2 Answer the following in about 8 to 10 lines each (any two) (6)

a) Draw a Involute of Equilateral triangle of side 30mm.
b) Explain bench vice with neat sketch.
c) Enlist different marking and measuring tools.

Q.3 Answer the following in about 8 to 10 lines each (any two) (6)

d) Explain Interchangeability.
e) Write characteristics of good Timber.
f) Explain G. clamp with neat sketch.

Q.4 Answer the following (any three) (6)

g) Explain Tenon saw with neat sketch.
h) Draw a neat sketch of any two types of chisel
i) Draw a neat sketch of Mini drafter.
j) Draw a neat sketch of Vernier caliper and label the parts.

Q.5 Answer the following in about 5 to 6 lines each (any three) **(6)**

a) Enlist different varieties of Indian timber.

b) Explain mallet with near sketch .

c) Draw a neat sketch of different wood defect

d) Give classification of engineering curves.

Q.6 Answer the following (any two) **(12)**

a) Draw conventional representation of glass, wood, mirror, concrete, I-section, t-section.

b) Draw involute of circle with 30mm diameter.

c) Differentiate between hardwood and softwood.