

FIRST SEMESTER EXAMINATION 2024 -25
MECHANICAL MAINTENANCE
PAPER-1

STD: XI

DATE: 25/10/2024

ROLL No. : ____

MARKS: 40

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 checking and drawing right angles.
(mortise gauge, Try square, French curve)
- b) _____ is soft wood.
(sai, teak , pine)

True or False and correct it, if false

- c) Mortise gauge is used to scribe two parallel line _____
- d) Sledge hammer are lighter than hand hammer _____.

Match the following

'A'

- e) Firmer chisel
- f) Mortise chisel

'B'

- a) delicate work
- b) wider cuts
- c) deep cuts

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

(6)

- a) Draw a Involute of SQUARE of side 30mm.
- b) Enlist different types of striking tools. Explain mallet with neat sketch.
- c) Explain any four types of lines used in engg drawing

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

(6)

- a) Explain Interchangeability.
- b) Explain varnishing and polishing.
- c) Enlist different drawing instrument and draw a neat sketch of drawing board.

Q.4 Answer the following (any three)

(6)

- a) List common varieties of Indian timber.
- b) Draw a neat sketch of any two types of chisel
- c) Draw a neat sketch of cross section of log and label the parts.
- d) 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 characteristics of Indian timber.
- b) Explain Tenon saw with neat sketch.
- c) Explain firmer chisel with neat sketch
- d) Draw a neat sketch of different wood defect

Q.6 Answer the following (any two)

(12)

- a) Differentiate between Hardwood and Softwood.
- b) Explain any two carpentry joints with neat sketch.
- c) Draw conventional representation of glass, wood, mirror, concrete, I-section, t-section.