

FIRST SEMESTER EXAMINATION 2023

MECHANICAL MAINTENANCE

PAPER-1

STD : XI

DATE : 04/10/2023

ROLL No. : _____

MARKS: 40

TIME : 2 ½

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) _____ is a soft wood .
(kail , sal ,teak)
- b) _____ is used for sawing small curve in confined spaces
(compass saw, tenon saw, bow saw)
- True or False and correct it,if false**
- c) mallet is wooden headed hammer _____
- d) Trysquare is used for pulling out nails _____.

Match the following

'A'

'B'

- | | |
|------------------|-----------------------|
| e) mortise gauge | a) shape and cavities |
| f) Chisel | b) two parallel line |
| | c) intersecting line |

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

(6)

- a) Draw a neat sketch of Tenon saw and compass saw.
- b) Explain firmer chisel with neat sketch.
- c) Draw a neat sketch of wooden log .

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

(5)

- a) Enlist different types hard wood and soft wood
- b) write short note on polishing and varnishing
- c) Draw Pentagon of side 50 mm with arc method.

Q.4 Answer the following (any three)

(6)

- a) Enlist different types of drawing instruments
- b) Enlist different cutting tools .
- c) Draw a neat sketch of claw hammer ,try square, mallet.
- d) Enlist different types of chisels.

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

(6)

- a) Draw octagon inscribed in circle of 80 mm dia.
- b) Explain bridle joint.
- c) Enlist the types of fasteners.
- d) Draw a conventional representation of wood ,stack .

Q.6 Answer the following (any two)

(12)

- a) Explain vernier caliper and external micrometer with neat sketch.
- b) Differentiate between hard wood and soft wood.
- c) Explain mini drafter with neat sketch.