

FIRST SEMESTER EXAMINATION 2021-2022
MECHANICAL MAINTENANCE

PAPER-1

STD : XI
DATE : 18/11/2022

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 used for holding the job.
(bench vice, try square, spring caliper)
- b) _____ is used for cutting grooves in metal
(file, hammer, crosscut chisel)

True or False and correct it, if false

- c) The solid frame hacksaw is in which length cannot be changed _____
- d) Sledge hammer are lighter than hand hammer _____.

Match the following

'A'

- e) square file
f) triangular file

'B'

- a) less than included angles
b) circular corners.
c) 90° corners

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

(6)

- a) Draw a neat sketch of outside and inside caliper.
- b) Explain scribe block with neat sketch.
- c) Explain scraper with neat sketches.

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

(6)

- a) Enlist different types of files with neat sketch.
- b) Explain hacksaw with neat sketch.
- c) Divide a 125mm line into 6 equal parts.

Q.4 Answer the following (any three)

(6)

- a) Explain external micrometer with neat sketch.
- b) Explain Vernier caliper with neat sketch.
- c) Explain drilling and tapping operation with neat sketch.
- d) Draw an angle bisector of acute and obtuse angle.

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

(6)

- a) Explain tenon saw with neat sketch.
- b) Enlist different types of hammer.
- c) Explain spring calipers with neat sketch.
- d) Draw a neat sketch v-block.

Q.6 Answer the following (any two)

(12)

- a) Differentiate between hardwood and soft wood
- b) Explain benchvice with neat sketch.
- c) Enlist different types of holding tool,striking tool,cutting tool,marking and measuring tool used in fitting.