

FIRST SEMESTER EXAMINATION 2022 - 23
SUBJECT:- MECHANICAL MAINTENANCE
PAPER – II

STD. : XI

MARKS: 40

DATE : 23/11/2022

ROLL No. :

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.

Answer the following (Any Two)

(4)

- 1) **Fill in the blanks with appropriate words from those given below**
 - (a) Welding goggle is used to protect the eyes from _____ and infra red rays.
(ultra violet , pink, blue)
 - (b) Soldering filler metal is known as _____.
(holder, folder , solder)

State 'True' or 'False' and correct it, if false.

- (c) In gas welding the heat for welding is obtained by the combustion of a fuel gas.
- (d) The main uses of threads are for fastening, adjusting and transmitting power.

Match the Pairs:

"A"

"B"

- | | |
|------------|--|
| (e) Flank. | (i) The distance between the crest and the root. |
| (f) Depth | (ii) The surface between the crest and the root. |
| | (iii) The diameter at the crest of the thread. |

2) **Answer the following in about 8 to 10 lines each (Any Two)**

(6)

- (a) What is meant by gas welding?
- (b) Differentiate between soldering and brazing
- (c) Construct pentagon if diameter of circle is 60mm.

- 3) Answer the following in about 8 to 10 lines each (Any Two). (6)
- (a) Explain butt welding joint with diagram.
 - (b) Define 1) Lead.
2) Pitch.
3) Crest.
 - (c) Construct hexagon if one side of hexagon is 40mm.
- 4) Answer the following in about 5 to 6 lines each (Any Three) (6)
- (a) What is meant by soldering?
 - (b) Explain different method of brazing.
 - (c) Explain temporary fastening with diagram and label it.
 - (d) Construct an involute of square of 25 mm.
- 5) Answer the following in about 5 to 6 lines each (Any Three) (6)
- (a) What is procedure of brazing?
 - (b) Explain soldering flux.
 - (c) Explain right hand thread with diagram
 - (d) Draw neat sketch of external V thread.
- 6) Answer the following in about 5 to 6 lines each (Any Two) (12)
- (a) Explain Oxy acetylene gas welding with neat sketch and lable it
 - (b) Explain Oxy acetylene gas welding torch with neat sketch.
 - (c) Explain different types of Oxy acetylene gas welding flames with neat sketch.