

FIRST SEMESTER EXAMINATION 2024

MECHANICAL MAINTENANCE

PAPER-2

STD : XI

DATE: 26/10/2024

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)

- a) The standard color for the acetylene cylinder is _____.
(black, maroon, green)
- b) _____ is used as filler metal in brazing.
(spelter, resin, solder)

State "True or False" and correct it, if false

- c) Arc is never stable in AC arc welding _____.
- d) The standard color for the oxygen cylinder is green _____.

Match The Pairs

'A'

'B'

- | | |
|-----------------|----------------------|
| e) seam welding | 1. point electrodes |
| f) spot welding | 2. Disc electrodes |
| | 3. square electrodes |

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

(6)

- a) Explain knuckle thread with neat sketch.
- b) Differentiate between AC arc and DC arc welding.
- c) Explain straight and reverse polarity with sketch.

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

(6)

- a) Draw a neat sketch of oxyacetylene welding cylinder set.
- b) Explain straight and reverse polarity with sketch.
- c) Write short note on Welding Torch with neat sketch.

Q.4 Answer the following (any three)

(6)

- a) Explain seam welding with neat sketch.
- b) Enlist different types of ARC welding process.

c) Explain different types of welding joint with neat sketch.

d) Explain spot welding with neat sketch.

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

(6)

a) Write about care for storage and handling of gas cylinders.

b) Draw a neat sketch of oxy-acetylene welding set.

c) Write the advantages of MIG welding.

d) Explain procedure of soldering.

Q.6 Answer the following (any two)

(12)

a) Differentiate between AC arc welding and DC arc welding.

b) Explain the different types of flames in gas welding with neat sketch.

c) Define lead, pitch, crest, root, thread angle with respect to thread.