

xiv) Write briefly about weldability of aluminum.

xv) What are the various codes related to welding.

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 Explain in detail various types of coatings and their functions.

Q.4 Write short note on :

- a) Basicity index
- b) Role of flux in gradients.

Q.5 Explain in detail the weldability test of stainless steel.

Q.6 Explain the principle and procedure of ultrasonic test with a neat sketch.

Q.7 Write short notes on:

- a) Visual inspection
- b) Coding of heavy coated electrodes.

No. of Printed Pages : 4

Roll No.

127243/117241

4th Sem. / Mech. Engg (F.T)

Subject : Fabrication Processes-I

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

Q.1 a) What is a flux.

b) What is a fabrication process.

c) What is an electrode.

d) Classify electrodes.

e) Name any two type of coating used for welding electrode.

f) Name any two inert gases used in welding.

g) Define weldability

h) What is weld bead.

i) Define distortion.

(60)

(4)

127243/117241

(1)

127243/117241

- j) What are residual stresses.
- k) What are the methods to control distortion in weldment.
- l) Why tensile test is done on weldment.
- m) What is the purpose of bend test on welding metals.
- n) What is the effect of welding fumes and gases.
- o) What are the safety precautions against electric shocks during welding.
- p) What are fillers.
- q) What is the uses of gas cylinder in welding.
- r) How can eyes and face be protected during welding.

SECTION-B

Note: Short answer type questions. Attempt any ten parts
10x4=40

Q.2 i) Classify different types of fluxes.

- ii) Write short note on non corrosive flux.
- iii) Explain the characteristics of inert gases used in welding.
- iv) Explain the different aspects of welding.
- v) Why weldability test is performed.
- vi) What are the causes of residual stresses in weldment.
- vii) Explain briefly dye penetrant test done on weldment.
- viii) Explain X ray inspection test for weldment.
- ix) Explain preheating method used for controlling the residual stresses.
- x) What precautions are to be observed while welding non ferrous metals.
- xi) Explain the effect produced by radiation during welding.
- xii) Explain the precautions to be taken against noise during welding.
- xiii) Write a short note on chromium and nickel in welding fumes.

(2) 127243/117241

(3) 127243/117241