

- Q.29 What are the various safety measures practiced in welding in radio active zones?
- Q.30 Write advantages of welding.
- Q.31 Write the effect of welding parameters.
- Q.32 Explain SMAW process with diagram.
- Q.33 Write the methods to prevent electric shocks in welding.
- Q.34 Enlist various safety protection devices for Cutting operations.
- Q.35 Write short note on weldability of carbon steel.

## SECTION-D

**Note:** Long Answer type question. Attempt any two questions. (2x10=20)

- Q.36 Explain the weldability of Stainless steel and aluminum in details.
- Q.37 Explain the X-ray inspection method in details.
- Q.38 Explain the block sequence and cascade sequence method.
- b)

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4th Sem., Branch : Mechanical Engg. (Fabrication Tech)  
Subject : Fabrication Process-I

**Time : 3 Hrs.**

**M.M. : 100**

## SECTION-A

**Note:** Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 What is used as a terminal in an electrical circuit for the purpose of producing an electric arc?
- a) Flux                                  b) Electrode
- c) Weld                                  d) Inert gas
- Q.2 Which of the following is formed by the heating of a metal surface?
- a) CO<sub>2</sub>                                  b) Nitrate
- c) Oxide                                  d) Carbon
- Q.3 Which of the following is not a type of flux?
- a) Fused Flux                              b) Mechanically mixed Flux
- c) Bonded Flux                            d) Washer Flux
- Q.4 Which of the following is usually present as metal powder
- a) Aluminum                              b) Calcium
- c) Carbon                                  d) Molybdenum
- Q.5 The capacity of a material to be welded under certain conditions is
- a) Ability                                  b) Weldability
- c) Weld mechanics                        d) Welding

- Q.6 Which process cannot join dissimilar metals  
 a) Welding                      b) Brazing  
 c) Soldering                    d) None of the above
- Q.7 The non Destructive testing of weld is  
 a) Dye penetration          b) Magnetic test  
 c) Ultrasonic                  d) All of the above
- Q.8 \_\_\_\_\_ is a ratio between basic and acid compounds(oxides and fluorides) of which the flux is composed.  
 a) Flux index                  b) Basicity index  
 c) Acidity index              d) None of the above
- Q.9 Arc blow occurs in  
 a) Gas welding  
 b) Arc Welding when straight polarity is used  
 c) Gas cutting  
 d) None
- Q.10 The inspection weldment is carried out by \_\_\_\_\_ process  
 a) Magnetic test              b) Hydraulic test  
 c) Metal test                  d) All of the above

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 \_\_\_\_\_ is the material used in electrode coating.  
 Q.12 Write two characteristics of inert gases in welding.  
 Q.13 Define weldability.

- Q.14 Name two method to control distortion in weldment.  
 Q.15 What is meant by ASME 831.3?  
 Q.16 Expand MIG.  
 Q.17 Write two functions of electrode coating.  
 Q.18 Expand SMAW.  
 Q.19 \_\_\_\_\_ is the function of electrode coating.  
 Q.20 Two methods of welding inspection are \_\_\_\_\_ and \_\_\_\_\_.

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain the role of various flux ingredients.  
 Q.22 What are the causes of development of distortion and residual stresses in welding?  
 Q.23 Explain different type of welding inspection methods.  
 Q.24 What is the procedure of dye penetrant method?  
 Q.25 Explain any 5 welding codes.  
 Q.26 What are the effects of fumes of human health? Explain the protection method.  
 Q.27 Explain the effect of chromium and nickel in welding fumes.  
 Q.28 What are the uses of welding codes? Why they are followed?