ALPHA COLLEGE OF ENGINEERING & TECHNOLOGY DEPARTMENT OF DIPLOMA MECHANICAL ENGINEERING

FABRICATION TECHNOLOGY (3361905) 6TH SEM DIPLOMA MECHANICAL

FREQUENTLY ASKED QUESTION

INTRODUCTION

- 1. Explain need and scope of fabrication technology in industries.
- 2. Explain concept and importance of weldability.(MAY-11,DEC-11)
- 3. Discuss various factors affecting the weldability. (MAY-2014,13)
- 4. Classify power source and give its advantages and applications. (DEC-14)

DRAWING INTERPRETATION

- 5. Give different locations and positions used in welding.
- 6. Give the various symbols and nomenclature used in welding processes.
- 7. Explain: What is Weld Test Plan (WTP) and Shop Weld Plan (SWP).
- 8. Explain need and area of applications for different codes used in fabrication industries.
- 9. Explain applications of weld square butt, groove, fillet, plug, with sketches
- 10. Explain Types of joint butt, lap, corner, tee and edge
- 11. What is edge preparation ? State its need and advantages in brief.(may-2011,dec-2011)

Fabrication Processes and Safety.

- 12. Explain Preheating method and applications .
- 13. Explain Post Weld Heat Treatment (PWHT) method. and applications and selection criteria of PWHT
- 14. Define Arc welding parameters-setting criteria:

i. Voltage.

ii. Current.

- iii. Welding speed.
- iv. Welding feed.
 - v. Arc length.
- 15. What is Ultrasonic welding? Explain with neat sketches.
- 16. Write short note on
 - i) Laser beam welding. (may-11,13)
 - ii) Electron beam welding.
- 17. Explain Welding automation.
- 18. Compare plasma arc welding and TIG welding.(may-13,sep-13,dec-2014)

19. INSPECTION AND TESTING

- 20. Explain common weld defects with their causes and remedies.
- 21. Explain concept of thermal distortion.
- 22. Explain types of thermal distortion.
- 23. Explain methods and equipments used to reduce thermal distortion.
- 24. Explain the concept of weld quality and factors affecting it.
- 25. Explain the stages of inspection.
- 26. Explain the impact, bend and hardness test of destructive testing.
- 27. Explain magnetic particle testing and ultrasonic testing of NDT.
- 28. Explain liquid penetrant and eddy current testing of NDT.
- 29. Explain various surface preparation methods.
- 30. Explain various surface finishing methods.
- 31. Explain surface colour coating by brush, roller and spray applications.

INSTALLATION, ERECTION AND COMMISSIONING

- 32. Explain erection steps for common fabrication structure.
- 33. Explain erection steps for piping.
- 34. Explain erection steps for equipment to be fabricated.
- 35. Explain installation and commissioning procedures for plant machineries and fabricated equipment.

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