Karunya University

(Karunya Institute of Technology and Sciences)

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

Model Question Paper

Subject Title: WELDING TECHNOLOGY **Time: 3 hours**

Subject Code: 09ME226 **Maximum Marks: 100**

Answer ALL questions

PART – A (10 x 1 = 10 MARKS)

1. Differentiate between brazing and braze welding process.
2. What is penetration?
3. Define dilution.
4. Why is flux needed in welding?
5. Name any two types of weld joints.
6. What is weldability?
7. Name any four weld defects.
8. What are the factors that cause slag inclusion?
9. Write few advantages of EBW process.
10. What is friction welding?

PART – B (5 x 3 = 15 MARKS)

11. Write the advantages of GMAW process.
12. Explain the concept of submerged arc welding.
13. Write the principle of plasma arc welding.
14. What are the effects of gases in welding?
15. What are the main factors affecting the welding design?

PART – C (5 x 15 = 75 MARKS)

16. Explain in detail with relevant diagrams the GTAW process.

(OR)

17. Explain the shielded metal arc welding with neat sketch.

18. Explain the welding symbol with an example.

(OR)

19. Write notes on preheating and post weld heat treatments and its effect on the weld properties.

20. Write brief notes on welding of cast iron.

(OR)

21. Write brief notes on distortion and stress relieving of weldments.

22. Explain in detail about radiographic inspection of weldments.

(OR)

23. Explain in detail about liquid penetrant testing.

24. Explain the electron beam welding process with relevant figures.

(OR)

25. Explain the working principle of laser beam welding.