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Reg. No.

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Seventh Semester

Branch: Mechanical Engineering

WELDING TECHNOLOGY (Elective I) [M]

(Old Scheme—Prior to 2010 Admissions)

[Supplementary/Mercy Chance]

Time: Three Hours

Maximum: 100 Marks

Part A

Answer all questions. Each question carries 4 marks.

- 1. Differentiate brazing and soldering.
- 2. Explain Forge welding.
- 3. List and brief different types of flames.
- 4. Briefly explain welding of stainless steel.
- 5. How electrodes are classified?
- 6. What is meant by reverse polarity?
- 7. PAW. Brief.
- 8. What are the application of special welding process?
- 9. List the common defects in welding.
- 10. Brief HAZ.

 $(10 \times 4 = 40 \text{ marks})$

Part B

Answer all questions.
Each question carries 12 marks.

11. What are the advantages and limitations of welding? Explain.

(12 marks)

Or

12. (a) Sketch and explain seam welding.

(6 marks)

(b) Sketch and explain flash butt welding.

(6 marks)

13. Explain the preparation of acetylene gas and storing.

(12 marks)

Or

Turn over

 $[5 \times 12 = 60 \text{ marks}]$

14. (a) Explain the applications of oxy-acetylene welding. (6 marks) (b) Discuss the safety rules in welding. (6 marks) 15. (a) Explain with neat sketch "SMAW". (8 marks) (b) What is meant by flux? (4 marks) Or16. Write a note on electric arc welding power source, advantage, limitations. (12 marks) 17. (a) Sketch and explain ultrasonic welding. (6 marks) (b) Briefly explain cold welding process. (6 marks) Or18. With a neat sketch explain Electro slag welding process. (12 marks) 19. What is residual stress in welding and explain the relieving and its control. (12 marks) Or20. Write a note on need of inspection of welded joints with suitable example. (12 marks)

