Total No. of Pages : 2

Register Number :

Name of the Candidate :

DIPLOMA EXAMINATION DECEMBER 2013.

(WELDING ENGINEERING AND TECHNOLOGY)

130 — ALLIED AND ADVANCED WELDING TECHNIQUES

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions. $(5 \times 20 = 100)$ All questions carry equal marks.

- 1. (a) Explain with a neat sketch of Induction and Dip brazing.
 - (b) Write short notes on selecting a flux filler material and its placement for brazing.
- 2. (a) Discuss in detail about soldering joint design.
 - (b) Write down the difference between hot plate and ultrasonic soldering.
- 3. (a) Explain with a neat sketch of adhesive bonding.
 - (b) Write short notes on coating built up and hard facing.
- 4. (a) Write down the advantages, limitation and application of thermit welding
 - (b) Explain in detail about the problems and remedies occurred during under water welding.
- 5. (a) Explain laser beam welding with a neat sketch.
 - (b) Write the application, advantages and limitation of thermal cutting process.
- 6. (a) Discuss in detail about plasma and tungsten arc cutting.
 - (b) Describe the process that is most suitable for melting localized area and removing the molten metal with high velocity.
- 7. (a) Briefly discuss the various applications of powder spraying and its limitations.
 - (b) Explain in detail about different material coated by detonation gun spraying techniques.
- 8. (a) Explain the principle and operation of metal powder cutting.
 - (b) What are the different types of cladding technique? Explain any two.

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