## Printed Pages—2

## **EME022**

(Following Paper ID and Roll No			•			,
PAPER ID: 140656 Roll No.						
•					,	

#### B.Tech.

# (SEM. VI) THEORY EXAMINATION 2013-14

## ADVANCED WELDING TECHNOLOGY

Time: 2 Hours

Total Marks: 50

Note: Attempt all questions.

- 1. Write brief notes on any **four** of following:
- $(4\times3\frac{1}{2}=14)$
- (a) Importance of Schaeffler diagram.
- (b) MIG versus TIG welding.
- (c) Advantages and disadvantages of friction welding.
- (d) Describe Electron beam welding. State its application.
- (e) Describe Plasma arc welding. State it advantages.
- (f) Explain the process of gas cutting.
- 2. Attempt any two parts:

 $(6 \times 2 = 12)$ 

- (a) State the advantages and disadvantages of Explosive welding.
- (b) Describe Dry underwater welding. State its advantages.
- (c) Write a short note on metallising.

EME022/DQJ-21727

[Turn Over

3. Attempt any two parts:

 $(6 \times 2 = 12)$ 

- (a) Describe Distortion and Porosity as weld defects.
- (b) List various non destructive testing methods. Describe Liquid penetrant test.
- (c) Describe the Residual Life Assessment in brief.
- 4. Attempt any two parts:

 $(6 \times 2 = 12)$ 

- (a) What is HAZ in welding? Why weld usually fails in HAZ?
- (b) What do you mean by heating rate and cooling rate. How it affects the properties of weld.
- (c) Write note on Design of weld.

15675

EME022/DOJ-21727