

Roll No.

24089

**B. Tech 3rd Semester (AUE)
Examination – December, 2017**

MANUFACTURING METHODS

Paper : AUE-207-F

Time : Three Hours] [Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt **five** questions in all, selecting **one** question from each Section. Question No. **1** is **compulsory**. All questions carry equal marks.

- 1. (a)** Define mould, permanent, mould and die casting mould. $2.5 \times 8 = 20$
- (b) What is purpose of feeding a casting ?
- (c) Define welding.
- (d) Define rack angle.
- (e) On what types of works the process of chemical machining is best suited ?
- (f) What is overcutting in EDM process ?
- (g) What is Forging ?
- (h) Define Lancing.

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SECTION – A

2. What are the basic rules to be followed for good casting design ? Also give the classification of manufacturing process. 20
3. With the help of neat sketch explain the principal working of Centrifugal casting. 20

SECTION – B

4. Explain the principal of Arc welding. Differentiate between TIG and MIG welding. 20
5. Describe the commonly used attachment on Lathe. 20

SECTION – C

6. Discuss the principal and application of Electro discharge machining with the help of neat sketch. 20
7. Discuss the need for unconventional machining processes. What do you understand by PLASMA ? What is its application in production technology ? 20

SECTION – D

8. Give the classification of forming processes. Also discuss the advantages and limitations of powdered metals. 20
9. With the help of neat sketch explain the principal of spinning. Also give its advantages. 20