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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(AE) (2012 to 2017) (Sem.-3)

MANUFACTURING PROCESS

Subject Code : BTAE-304

M.Code : 54112

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt ANY FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt ANY TWO questions.

SECTION-A**1. Answer briefly :**

- a) What is allowance? Briefly explain any two allowances.
- b) Discuss in brief any two types of patterns.
- c) What is centrifugal casting?
- d) What do you mean by core baking?
- e) What are the functions of coatings on shielded electrodes?
- f) What is thermit welding?
- g) What is rolling?
- h) Explain deep drawing.
- i) Draw the sketch of broach.
- j) What do you mean by the term LASER?

SECTION-B

2. Briefly explain the steps involved in shell mould casting process with the help of neat diagram.
3. Briefly explain submerged arc welding process.
4. With a neat sketch explain the process of rolling.
5. Sketch a double column vertical boring machine and explain its working.
6. Discuss in brief the working principle of abrasive water jet machining with the help of neat sketch.

SECTION-C

7.
 - a) Sketch and explain MIG welding Process along with its application.
 - b) Explain the process of electron beam welding with the help of suitable sketch and also give its applications.
8.
 - a) Explain briefly with neat sketches different processes of extrusion and also discuss their relative merits and demerits.
 - b) Draw a neat sketch of milling cutter and explain in short, its main elements.
9. Discuss in detail the principle of operation of chemical machining with the help of neat sketch. Also write its advantages, disadvantages and limitations.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.