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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(ME) (2011 Batch) (Sem.-3)

MANUFACTURING PROCESSES-I

Subject Code : BTME-305

Paper ID : [A1142]

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 has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

SECTION-A

I. Write short notes on :

- a) What is Thermit Welding?
- b) What do you understand by directional solidification?
- c) What are core prints?
- d) The tool used for lifting the pattern from the mould is called
- e) Flux is used in Soldering to
- f) Define Weldability.
- g) Write the difference between Runner and Riser.
- h) What effect does the carbon content of steel have on weldability?
- i) Differentiate between consumable and non consumable electrode.
- j) Write differences between Brazing and Soldering.

SECTION-B

2. Why a core is used in casting process? Explain the process of core making step by step with sketches.
3. Explain Centrifugal casting with a neat diagram. Discuss its applications also.
4. Explain in detail about Friction stir welding with neat sketch.
5. Give the classifications of manufacturing processes. Discuss with the examples.
6. Discuss various welding defects. Write the causes for these defects. Mention their remedies.

SECTION-C

7. Enumerate the various materials used for making patterns, state their applications, and essential points to be considered while deciding the type of pattern.
8. Explain in detail about TIG welding process with neat sketch. What are the merits and demerits? Write its applications.
9. Explain destructive and non destructive testing for casting and welding processes.