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Total Pages : 03

**J-FB-22-00205**

**B. Tech. EXAMINATION, 2022**

Semester I (CBCS)

WORKSHOP TECHNOLOGY

ME-103

*Time : 2 Hours*

*Maximum Marks : 40*

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*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

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**Note :** Attempt *Four* questions in all, selecting *one* question from each Sections A, B, C and D. Missing data if any can be assumed suitably.

**Section A**

1. Explain how the various alloying elements affect the properties of steel. 10

2. How and where is Cast Iron produced ? Differentiate between grey and white cast iron. Also give their uses. 10

### Section B

3. Define Hot Working and Cold Working. Write properties, advantages, disadvantages and limitations of Hot Working Process. 10
4. What is Press-Work ? Classify the press work process. 10

### Section C

5. List the elements of Gating system and explain with a neat sketch. 10
6. Briefly explain composition of moulding sand, and what are the properties moulding sand should possess ? 10

### Section D

7. What is the working principle of lathe machine ? Define various operations performed on lathe. 10

8. Explain the following :

- (a) What are different sheet metal joints ?
- (b) Compare AC and DC welding.
- (c) Briefly explain Production System.
- (d) Soldering and Brazing Processes. 4×2½=10