

**B.Tech. MECHANICAL ENGINEERING
(BTMEVI)**

01185

Term-End Examination

June, 2012

BIME-009 : PRODUCTION TECHNOLOGY - I

Time : 3 Hours

Maximum Marks : 70

Note : Attempt any seven questions. All the questions are to be answered in English language only.

1. What are the main characteristics which a good moulding sand should possess ? How these characteristics influence the performance of moulding sand during moulding and casting. 10
2. What are the functions of pattern ? How are the patterns classified ? Discuss any two types of patterns. 10
3. What do you understand by Gas welding ? Describe in brief the equipment required for oxy-acetylene gas welding. 10
4. Explain the process of soldering and brazing. 10

5. Discuss the following methods of hot working process : 10
(a) Rolling (b) Forging.
6. Sketch and describe the different types of rolling mills. 10
7. Define the following terms in cold working of metals : 10
Drawing, Shearing, Blanking, Bending, and Spining.
8. Explain the Wire Drawing Process in detail. 10
9. Discuss Magnetic Pulse Forming Process in detail. 10
10. Write short notes on *any two* of the following : 2x5=10
(a) Gas flames used in oxy - acetelyne gas welding.
(b) Defects in castings.
(c) Thermit welding.
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