

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

**Term-End Examination
December, 2012**

BIME-009 : PRODUCTION TECHNOLOGY-I

Time : 3 hours

Maximum Marks : 70

Note : Answer any ten questions. All questions carry equal marks.

1. What is meant by core prints ? Explain why they are provided in the mould. 7
2. Explain the method of determining the moisture content in a moulding sand. 7
3. How does cold rolling differ from hot rolling in terms of the process and product ? Why is the strength of a rolled part considered usually better than a cast piece ? 7
4. Distinguish clearly between drop forging and press forging processes with reference to the process and products obtained. 7

5. Explain with sketches the differences between direct and indirect extrusion. 7
6. Explain various steps in cold chamber die casting and compare it with hot chamber die casting on the basis of operating parameters and properties of the product. 7
7. What are various allowances given to a pattern ? Explain with sketch. 7
8. Explain briefly with neat sketch the process of wire drawing. 7
9. What is the role played by clay in a moulding sand ? What is the method adopted for determining the clay content in a moulding sand ? 7
10. Explain how a grinding wheel is specified. Differentiate between Honing and Lapping. 7
11. Differentiate between punching and blanking ? Give examples of each. 7
12. Describe the method of high velocity forming of metals. Give applications and limitations of the forming process. 7