



Reg. No. : .....

Name : .....

**Fourth Semester B.Tech. Degree Examination, April/May 2012  
(2008 Scheme)**

**Branch : MECHANICAL ENGINEERING  
08.404 : Manufacturing Process (MN)**

Time : 3 Hours

Max. Marks : 100

**PART – A**

Answer **all** questions.

**(10x4=40 Marks)**

1. What is meant by skin dried mould ? Give its application.
2. Name any two allowances provided on the pattern and state the reasons why they are provided.
3. Why are organic binders preferred in core making ?
4. Briefly explain the application of chaplets.
5. Why is the tungsten inert gas welding preferred for welding aluminium plates ?
6. State the functions of flux coating of electrodes used in manual metal arc welding process.
7. What is meant by of weldability of metal ?
8. How do you compare forged component with cast component ?
9. Give a line diagram of the various process involved in the manufacture of the steel sheet starting from the ingot.
10. Differentiate between coining and embossing.



**PART – B**

Answer **one** full question from **each** Module.

**(20×3=60 Marks)**

**Module – I**

11. a) Name the common material used for pattern making. Give its advantages and disadvantages.
- b) Explain with neat sketch, the working of a true centrifugal casting.
12. a) What are the common defects in casting ? Explain the remedies.
- b) Write notes on investment mould casting.

**Module – II**

13. Distinguish between arc and gas welding processes from the point of view of heat contraction, temperature, ease of operation and running cost.
14. a) Explain with sketch the working of spot welding process.
- b) Describe with sketch submerged arc welding give its application.

**Module – III**

15. a) With the help of a neat sketch. Explain pneumatic hammer.
- b) Explain, with the help of a sketch rolling of seamless tubes.
16. Explain the following with neat sketch :
  - i) Metal spinning
  - ii) Wire drawing
  - iii) Hot extrusion
  - iv) Forge welding.