

Course: B. Tech in Mechanical Engineering Sem: III  
Subject Name: Manufacturing Process-I Subject Code: BTMECC401  
Max Marks: 20 Date: 11/3/2019 Duration: 1 Hr.

Instructions to the Students:

1. Assume suitable data wherever required.
2. Draw figure wherever necessary.
3. Figure to right indicates full marks.

(Level/CO)

**Q.1 Solve all the Multiple Choice Questions**

Knowledge/CO1

1 X 6=

1. In casting, which of the following furnace is NOT used  
a) Puddling Furnace b) Crucible Furnace c) Cupola Furnace d) Induction Furnace

2. Which of the following casting process is known as counter gravity casting?  
a) Slush casting b) Vacuum casting c) Investment casting d) Sand casting

3. Defect in casting includes  
a) Hot tearing b) Cold tearing c) Chatter d) All of the above

4. Which of the following is NOT the rolling process  
a) Shape rolling b) Thread rolling c) Ring rolling d) Shell rolling

5. On small scale, mills which utilizes scrap material and that is melted in electric-arc furnaces, cast, and continuously rolled into specific lines of products is known as  
a) Two high mill b) Three high mill c) Four high mill d) Minimills

6. Extrusion ratio is  
a) ratio of the cross-sectional area of the billet to that of the extruded product  
b) ratio of the cross-sectional area of the extruded product to that of the billet

**Q.2 Solve Any Two of the following.**

(A) What is the difference between expandable mold & permanent mold? Enlist various types of casting process.  
( ) Explain any one process out of ring rolling or shape rolling.

Comprehension/CO1  
Comprehension/CO2  
Comprehension/CO2

(C) Which are the three principal extrusion defects?

**Q.3 Solve Any One of the following.**

(A) What is difference between hot chamber & cold chamber die casting? Explain any one process briefly.  
(B) How many types of mills can be used for rolling? Explain all of them with illustration.

Application/CO1  
Application/CO2

\*\*\* End \*\*\*