

**6th Sem.**  
**Branch : Mechanical Engg. (Tool & Die Design)**  
**Sub. : Forging and Casting Dies - Design and Drawing**

**Time : 3 Hrs.** **M.M. : 60**

**SECTION-A**

**Note: Multiple type Questions. All Questions are compulsory. (6x1=6)**

- Q.1 Upset forging is also known as \_\_\_\_\_. (CO1)  
a) Open die forging      b) Closed forging  
c) Impression die forging    d) Machine forging
- Q.2 Cast iron cannot be forged because (CO1)  
a) It is brittle  
b) It is of high compressive strength  
c) It has impurities  
d) All of the above
- Q.3 The process of shaping the metal by intermittent blows is known as (CO2)  
a) Rolling                  b) Drawing  
c) Forging                  d) Extrusion
- Q.4 In cold chamber die casting, the molten metal is forced into cavities by (CO3)  
a) Steam                  b) Compressed air  
c) Hydraulic pressure    d) None of the above

- Q.5 The method used for casting of non-ferrous metals is  
(CO4)
- a) Centrifugal casting      b) Sand casting
  - c) Die casting                d) None of the above
- Q.6 Hollow symmetrical and unsymmetrical parts are cast by  
(CO5)
- a) Die casting                b) Centrifugal casting
  - c) Gravity casting          d) Permanent mould casting

### **SECTION-B**

**Note:** Objective/Completion type questions. All questions are compulsory. **(6x1=6)**

- Q.7 Open die forging is also known as \_\_\_\_\_. (CO2)
- Q.8 \_\_\_\_\_ melting point alloys are generally cast hot chamber die casting. (CO3)
- Q.9 Centrifugal casting is a type of \_\_\_\_\_ mould casting. (CO3)
- Q.10 Sand blasting is used for \_\_\_\_\_. (CO4)
- Q.11 Uneven wall thickness is produced by \_\_\_\_\_ casting. (CO4)
- Q.12 \_\_\_\_\_ Parts are produced by semi-centrifugal casting. (CO5)

### **SECTION-C**

**Note:** Short answer type Questions. Attempt any eight questions out of ten Questions. **(8x4=32)**

- Q.13 Write a short note on Machine forging. (CO1)
- Q.14 Explain, in brief, close die forging. (CO1)

- Q.15 Write the disadvantages of close die forging. (CO2)
- Q.16 Write the advantages of open die forging. (CO2)
- Q.17 Name various die casting machines. (CO3)
- Q.18 Write the applications of true centrifugal die casting. (CO3)
- Q.19 Explain, in brief, pit furnace. (CO4)
- Q.20 How are casting cleaned? Explain in brief. (CO4)
- Q.21 Write the advantages of die casting. (CO5)
- Q.22 Write the functions of die forging machine. (CO5)

### **SECTION-D**

**Note:** Long answer questions. Attempt any two questions out of three Questions. **(2x8=16)**

- Q.23 Explain open die forging with the help of neat sketch. (CO1)
- Q.24 Design and drawing of pressure die casting. (CO3)
- Q.25 Explain with neat sketch, construction and working of cupola furnace. (CO5)