

Q.27 Selection of “materials for mold parts” and “heat treatment processes” has a significant role in economic production of plastic materials, Justify.

### **SECTION-D**

**Note :** Long Answer type question. Attempt any two questions. (2x25=50)

Q.28 Design and Draw a multi cavity semi positive type mold for anyone electrical item. (Assume dimensions)

Q.29 Design and draw a two cavity compression mould for a square block of 4.0m side and 0.50cm thickness, to be made from phenol formaldehyde resins with specific gravity 2.0 and bulk factor 1.5.

Q.30 Design and draw injection mould for soap case. (Assume dimensions).

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Roll No.....

5th Sem, **Branch :** Tool & Die

**Subject :** Plastic Mould Design & Drawing

**Time : 3 Hrs.**

**M.M. : 100**

### **SECTION-A**

**Note :** Multiple choice questions. All questions are compulsory. (10x1=10)

Q.1 Where does the granular molding material get loaded into?

- a) Barrel
- b) Hopper
- c) Pellets
- d) Split

Q.2 What is the maximum curing time required in a compression molding process?

- a) 2 minutes
- b) 3 minutes
- C) 4 minutes
- d) 5 minutes

Q.3 Which of the following cooling systems is used in injection moulding process to increase solidification rate of components made?

- a) Air Jet cooling system
- b) Water cooling system
- c) Cooling with free convection
- d) Cooling with fins

Q.4 Which of the following is not an application of blow molding process?

- a) Toy bodies
- b) Bottles

- c) Door liners            d) Pipes
- Q.5** A heavy surface finishing is always required for components made in injection moulding machine.  
 a) True                    b) False
- Q.6** The barrel is used for the opening and closing of the mold.  
 a) True                    b) False
- Q.7** During transfer moulding, plastic material is transferred into a chamber called \_\_\_\_\_.  
 a) Sprue                  b) Pot  
 c) Mould cavity          d) None
- Q.8** In compression moulding the curing time is \_\_\_\_\_.  
 a) Less                    b) Moderate  
 c) More                    d) None
- Q.9** Runner is a \_\_\_\_\_.  
 a) The path through which hot molten material comes out of the mold  
 b) The path through which hot molten material is poured  
 c) Connecting passage between mold and riser.  
 d) None of these
- Q.10** Sprue pins are tapered so that \_\_\_\_\_.  
 a) Pattern can be removed easily  
 b) Surface can be smoothen easily  
 c) The pins can be removed easily  
 d) None of these

## SECTION-B

- Note :** Very short answer type questions. Attempt any ten questions out of twelve questions. (10x2=20)
- Q.11** What is injection pressure?  
**Q.12** What do you meant by clamping force?  
**Q.13** Name two types of ejector grid.  
**Q.14** What are the types of injection mold?  
**Q.15** What is a three plate mold?  
**Q.16** What is gate?  
**Q.17** What is compression molding?  
**Q.18** What is extrusion?  
**Q.19** Name any two parts of compression mould.  
**Q.20** What is sprue.  
**Q.21** What is encapsulation?  
**Q.22** What is function of parting line?

## SECTION-C

- Note :** Short answer type questions. Attempt any four out of five questions. (4x5=20)
- Q.23** Explain feeding system used in injection molding?  
**Q.24** Write the main principles which has to be observed during transportation/ handing of mould.  
**Q.25** Describe the construction of multi-cavity mould with neat diagram.  
**Q.26** What is mould cycle?