

- Q.30 Explain heating and cooling arrangements for compression moulds .
- Q.31 Give advantage of positive compression mould over semi positive compression mould.
- Q.32 Discuss Z-type of cooling connection.
- Q.33 Explain any two plastic materials used in blow moulding along with their properties.
- Q.34 Give difference between feed block and multi manifold die used for co extrusion.
- Q.35 What is pinch off? Explain its importance.

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain side feed, spider type and spiral mandrel type blown film dies used blown film extrusion, with their advantages and disadvantages.
- Q.37 Discuss flat film extrusion process with complete diagram, representing various type of dies used in the process
- Q.38 Discuss:
- Selection criteria for compression moulding machine.
  - Advantages and disadvantages of compression moulds.

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Roll No. ....

### 6<sup>th</sup> Sem / Plastic Engineering, Chem Engg. (Spl Polymer Tech.)

#### Subject:- Design of Dies and Mould-II

Time : 3Hrs.

M.M. : 100

#### SECTION-A

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

- Q.1 \_\_\_\_\_type of mould is used in Compression moulding ?
- One-plate mould
  - Two-plate mould
  - Three-plate mould
  - Four-plate mould
- Q.2 Function of mould runner is to \_\_\_\_\_?
- Vent trapped air
  - Provide entry into the mould cavity
  - Define mould parting line
  - Provide path to the mould gates
- Q.3 Which part is used to shape the parison in blow moulding process?
- Die
  - Mould
  - Punch
  - Cup
- Q.4 Which part is an opening at the entrance of the cavity?
- Runner
  - Gate
  - Sprue
  - Core

- Q.5 Which die enable the material to enters centrally and forwarded away  
 a) Side feed die                      b) Spider die  
 c) spiral mandrel type   d) Bottom feed die
- Q.6 Which tool is used for making external threads ?  
 a) Tap                                      b) Die  
 c) Reamer                                d) Drill bit
- Q.7 Which type of mould requires accurate weighed charge material in compression moulding ?  
 a) Flash mould                      b) Positive mould  
 c) Landed mould                      d) Semi-positive mould
- Q.8 What is the purpose of guide pillars in compression moulding process ?  
 a) To retain the Shape   b) To maintain pressure  
 c) To improve Distance d) To ensure alignment
- Q.9 Which material is used for making blow moulds ?  
 a) Mild steel                              b) Aluminium  
 c) Stainless steel                      d) High Carbon Steel
- Q.10 Which of the following process makes epoxy mould?  
 a) Casting                                b) Machining  
 c) Hot press moulding   d) Injection moulding

#### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Define function of sprue bush.
- Q.12 \_\_\_\_\_ is the connecting member between gate and sprue bush.

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- Q.13 Striper plate ejection method is suitable for thin wall box type moulding (True/False )
- Q.14 Tap gate is mostly used to avoid undesirable jetting on the moulded part .(True/False )
- Q.15 Vents are provided for easy removal of entrapped air inside mould .(True/False)
- Q.16 \_\_\_\_\_ and \_\_\_\_\_ are the main elements of mould .
- Q.17 Name the two materials used for blow moulding process.
- Q.18 Give two functions of band heaters .
- Q.19 \_\_\_\_\_ die is ued for wire coating.
- Q.20 Mould closing and opening depends on size of the component .(True/False)

#### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain die used for making plastic rods.
- Q.22 Explain various types of die material used in extrusion dies.
- Q.23 Explain die head assembly for blow mould.
- Q.24 Explain neck design for injection blow mould
- Q.25 Give comparison between compression and transfer moulding process.
- Q.26 Explain heating and temperature control systems for dies .
- Q.27 Discuss parison thickness control in blow moulds.
- Q.28 Explain die swell.
- Q.29 Explain integral pot transfer mould .

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