Q.30 What is register ring. Why it is used in moulds.

Q.31 Define and give difference between integer mould and bolster plate mould.

Q.32 Write any two mould materials. Give two properties and two applications of each.

Q.33 How will you cool the moulding of glass filled nylon. Why you will do so.

Q.34 Define and draw any two type of register rings.

Q.35 What are chillers. Why they are used in plastics processing industry.

SECTION-D

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

Q.36 Why ejector system is used in moulds, With a neat sketch define following

a) D shaped ejector pin.

b) Blade type ejector pin.

Q.37 Write down and define various parts of following

a) Feed system

b) Mould alignment system

Q.38 What are undercuts. With a neat sketch give the classification of undercuts.

5th Sem / Plastic, Chem Engg. (Spl. Polymer Engg.)
Subject:- Design of Dies and Moulds - I

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Dies gives

a) 1D Product b) 2D product

c) 3D product d) 4D Product

Q.2 Cavity give_____ shape to the product

a) Internal b) External

c) Both d) None of above

Q.3 Sprue puller is a part of

a) Impression b) Parting surface

c) Feed system d) Ejection system

Q.4 Cores are normally clamped with

a) Fixed platen b) Moving platen

c) Back side of machine d) None of above

Q.5 The difference between the two plate mould and three plate mould is based on

a) Number of plates b) Number of openings

c) Type of machine d) All of above

Q.6 Guide pillar is a part of

a) Locating system b) Feed system

c) Ejection system d) Cooling system

Q.7 Split moulds have minimum

a) One parting line b) Two parting lines

c) Three parting lines d) Four parting lines

Q.8 Runner less moulds are also called

a) Two plate moulds b) Three plate moulds

c) Four plate moulds d) Hot runner moulds

Q.9 In an injection mould, Water is used in the

a) Feed system b) Ejection system

c) Parting surface d) Cooling system

Q.10 In the term MC steel. The term M stands for

a) More b) Medium

c) Much d) Maximum

SECTION-B

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

Q.11 Define core.

Q.12 Define mould.

Q.13 Define hot runner moulds.

Q.14 Define register ring.

Q.15 Define runner.

Q.16 Define cold slug well.

Q.17 Give the difference between mould and die.

Q.18 What is the full form of MC steel.

Q.19 Define Compressive strength.

Q.20 Define gate.

SECTION-C

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

Q.21 Write and define any two desirable properties of material used in the fabrication of mould.

Q.22 Write a note on runnerless mould. Write one benefit and one shortcoming of runnerless mould.

Q.23 With a neat and labeled sketch, write down a note on ejector plate assembly.

Q.24 What is balanced runner system. Draw a neat sketch to show the balanced runner system for a four impression mould.

Q.25 What is efficiency of runner. Calculate the efficiency of square runner.

Q.26 Define parting surface. Give its types.

Q.27 What is weld line. How one can minimize its effect.

Q.28 What are moulds vents. Why they are necessary in the mould.

Q.29 Define guide pillar and guide bush.