Q.27 Write a short note on optimal design.

Q.28 Give a classification of software packages of cad.

Q.29 What is role of shrinkage and allowance in making drawing of a component ?

Q.30 What are the uses of data book in mould designing ?

Q.31 Draw neat sketch layout of cooling and heating in mould.

Q.32 Write short note on conceptual design .

Q.33 Write the main features and contents of mould design checklist.

Q.34 Prepare data sheet for mould design .

Q.35 Draw neat sketch layout of runner and gating system.

SECTION-D

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

Q.36 Explain the various parts, Components and systems of a mould with neat sketch . Give function and importance of each component also .

Q.37 Write the principles of lay out of cavities, feed system, layout of runner and gating system . Draw runner and gating system layout for a mould.

Q.38 What are the features need to be calculating before design calculations for a mould ? Describe each feature in detail .

2nd Year / Advance Diploma in Tool and Die Making
Subject:- Tool Design Practice-II (Plastic Moulds)

Time : 4 Hrs. M.M. : 100

SECTION-A

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

Q.1 The process of producing plastic components is moulds without the application of pressure is known as_____.

a) Moulding b) Laminating
c) Calendering d) Rotational Moulding

Q.2 How conceptual design begins

a) With predefined requirements and new concepts
b) With fabrication
c) With lofting
d) With cfd tests

Q.3 Plasticizers are considered ___ solvents.

a) Volatile b) Non-volatile
c) Both 1 & 2 d) None of the above

Q.4 Which type of moulding process is used with prefoams ?

a) Continuous blow moulding
b) Stretch blow moulding
c) Extrusion blow moulding
d) None of these

Q.5 Which is a process of manufacturing a hollow plastic part ?

a) Extrusion Moulding b) Injection Moulding
c) Blow Moulding d) Compression Moulding

Q.6 _____is know as day light ?

a) Distance between screw and barrel
b) Distance between screw and motor
c) Distance between the platens
d) Distance between the hopper and barrel

Q.7 Which type of polymer material is universally dark and opaque ?

a) Poly ethylene b) Poly carbonate
c) Poly styrene d) Phenol formaldehyde

Q.8 How does the piston in the clamping unit move ?

a) Hydraulic energy b) Pneumatic energy
c) Heat energy d) Suction

Q.9 The liquid metal that runs through the channels without friction in the mould obeys which of the following theorem ?

a) Bernoulli's theorem b) Clausius theorem
c) Helmholtz's d) Carnot's theorem

Q.10 The purpose of a fan gate is to_____

a) Speed solidification
b) Control injection speed
c) Spread material over a large area
d) Redirect the flow of material

SECTION-B

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

Q.11 Name any two mould parts.

Q.12 Name two different types of gates used in Injection moulding .

Q.13 Write use of drawing norms.

Q.14 Write the principle of components geometry .

Q.15 Write the use of information data sheet .

Q.16 Write use of information data sheet .

Q.17 Write one application of a software package .

Q.18 What is use of mould design ,

Q.19 Write the principle of components geometry .

Q.20 Define optimal design.

SECTION-C

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

Q.21 What are the information. required to make a mould design and factor on Which the design depends.

Q.22 Describe bill of material . What are its use ?

Q.23 Explain principle of drawing of mould lay out.

Q.24 Describe standard elements and give their nomenclature.

Q.25 Write a short note in drawing norms in making drawing of mould .

Q.26 Explain dimensions allowances .