Q.27 What is back pressure? What is its significance?

Q.28 Give any two faults, their causes and remedies in rotomoulding process.

Q.29 Write the formula to calculate tonnage of an injection moulding machine for a shallow product.

Q.30 What is parrison programming? Why it is required?

Q.31 Define and give difference between line pressure and injection pressure.

Q.32 Write two defects in blow moulding product. Give their causes and remedies.

Q.33 How multiwalled product is made by using rotomoulding machine?

Q.34 What do you mean by optimization of cycle in injection moulding process?

Q.35 How heating cycle is accomplished in injection moulding machine?

SECTION-D

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

Q.36 Define any five faults, give their causes and remedies in injection moulding process.

Q.37 Compare any three parameters and properties of hollow product. Taking injection moulding, Blow moulding and rotational moulding as their manufacturing process.

Q.38 Write a stepwise procedure to form bottles using injection blow moulding. Write down the names of all machines involved.

No. of Printed Pages : 4 182252

Roll No. .....

5th Sem. / Plastic Technology

Subject:- Plastic Processing Techniques - III

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Shot capacity as compare to shot weight

a) Should be equal
b) Should be equal or more than
c) Should be less than
d) Both a & b

Q.2 Rotomolding technique produces

a) Highly stressed products
b) Low stress products
c) Almost stress free product
d) None of above

Q.3 Injection blow moulding process uses

a) Die b) Mould
c) Both die and mould d) None of above

Q.4 If we increase melt temperature in injection moulding machine, then they required injection pressure

a) increases b) decreases
c) remains same d) none of above

Q.5 Which method is used to make deep and big sized hollow moulding?

a) Injection moulding
b) Compression moulding
c) Blow moulding
d) Rotational moulding

Q.6 Parison is the term used in

a) Injection blow moulding
b) Extrusion blow moulding
c) Rotational moulding
d) All of above

Q.7 Hopper throat should be kept

a) Cool b) Heated
c) Insulated d) None of above

Q.8 The compression ratio of screws for thermoset materials should be

a) 1:1 b) 2.5:1
c) 4.5:1 d) 5:1

Q.9 Which type of water tanks are desirable

a) Highly stressed b) Mildly stressed
c) Almost stress free d) None of above

Q.10 The L/D ratio of screw for injection moulding process is normally upto

a) 22:1 b) 16:1
c) 36:1 d) 30:1

SECTION-B

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

Q.11 Define process.

Q.12 Why plastics materials are preheated before processing?

Q.13 Expand the term IBM.

Q.14 Can round shape hollow products be made by rotomoulding?

Q.15 Expand the term PLC.

Q.16 Dies are used in injection moulding process.

Q.17 Expand the term CNC.

Q.18 Thermoset materials can be processed by rotomoulding. (T/F)

Q.19 Define screw.

Q.20 Define hopper.

SECTION-C

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

Q.21 Define shot weight and shot capacity.

Q.22 Write down step by step procedure to shut down injection moulding machine.

Q.23 What is difference between parrison and perform? Define each also.

Q.24 How will you calculate the charge required for a given product using rotational moulding machine?

Q.25 What is sagging of parrison? How is it controlled?

Q.26 Write shuttle method of Extrusion blow moulding.