17550

16117

3 Hours / 100 Marks Seat No. | | | | | | | | |

Instructions : *(1)* ***All*** *questions are* ***compulsory****.*
(2) Illustrate your answers with neat sketches ***wherever*** *necessary.*
(3) Figures to the ***right*** *indicate* ***full*** *marks.*
(4) Assume suitable data, if ***necessary****.*

Marks

1. Attempt **any ten** : **20**

a) State principle of Rotomoulding. **2**

b) Why rpm of minor axis is less than major axis in rotomoulding. **2**

c) List moulding compounds used in compression moulding. **2**

d) What do you mean by degassing ? **2**

e) State any two defect, cause and remedies in compression moulding. **2**

f) Write function of transfer pot. **2**

g) Define calendering. **2**

h) Enlist the different configuration of calendering unit. **2**

i) Why pvc is calender rather than extrusion. **2**

j) State principle of blending. **2**

k) List down application of calendering sheet. **2**

l) Why plastic product required finishing and matching after processing. **2**

m) Enlist methods of surface treatment. **2**

n) For decoration of pen which decorative tech used ? **2**

2. Attempt **any four** : **16**

a) Describe the steps of rotomoulding process. **4**

b) Differentiate between hand operated and automatic compression moulding. **4**

c) With dig. explain pot type transfer moulding. **4**

d) Give trouble shooting guide for rotomoulding. **4**

e) Describe configurations of four roll calendering units with resp to working and suitability. **4**

f) Explain working of high speed blender with neat dig. **4**

P.T.O.

Marks

3. Attempt **any four** : **16**

a) State any four major limitations of transfer moulding. **4**

b) Why calender sheet is trimmed at edges ? **4**

c) Describe the heating system used in rotomoulding. **4**

d) Write down advantages and limitations of compression moulding. **4**

e) Explain the working of Batch type rotomoulding with neat dig. **4**

f) Compare compression and transfer moulding process. **4**

4. Attempt **any four** : **16**

a) State effect of preheating. **4**

b) Explain hot gas welding and state its any two applications. **4**

c) With neat sketch explain screw type transfer moulding. **4**

d) Elaborate the followings. **4**

a) Roll crowning b) Roll beneling

e) Describe construction and working of upstroke compression moulding. **4**

f) Draw neat sketch of joint design in adhesive bonding. **4**

5. Attempt **any four** : **16**

a) Describe embossing of calendering product. **4**

b) Write down electroplating process for decoration of plastics. **4**

c) How will you classify welding tech ? **4**

d) State the limitations and advantages of hot transfer process. **4**

e) Enlist types of flocks and describe mechanical flocking process. **4**

f) State the purposes of following. **4**

1) Filing 2) Grinding

3) Drilling 4) Buffing.

6. Attempt **any four** : **16**

a) Describe induction welding process with neat sketch and state its any two applications. **4**

b) Metal inserts are welded with plastics by ultrasonic welding. Justify. **4**

c) Describe corona discharge treatment with film. **4**

d) Explain vacuum metalizing tech used with plastics with neat dig. **4**

e) Write procedure for solvent cement by dope method. **4**

f) Describe rotograve printing with neat sketch. **4**
