Total No. of Questions : 12]

SEAT No. :

P1070

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[4659]-133
B.E. (Production)
a - PLASTIC ENGINEERING
(2008 Course) (Elective - I) (Semester -I) (411084)

Time : 3Hours] *[Max. Marks :100*

Instructions to the candidates:

1) ***Answers to the two sections should be written in separate answer books.***
2) ***Answer any three questions from each section.***
3) ***Neat diagrams must be drawn wherever necessary.***
4) ***Figures to the right side indicate full marks.***
5) ***Use of calculator is allowed.***
6) ***Assume suitable data, if necessary.***

SECTION-I

Q1) a) Explain basic chemistry of plastic material Structure. **[8]**

b) Explain coloring of plastic. **[10]**

OR

Q2) a) Explain common alloys and blends used in plastic. **[8]**

b) Explain classification of plastic. **[10]**

Q3) a) Explain injection molding cycle with suitable sketch. **[8]**

b) Explain use of cavity & core inserts with suitable example. **[8]**

OR

Q4) a) Explain any two ejection methods used in plastic molding. **[8]**

b) Explain any two cooling methods of Injection moulds. **[8]**

Q5) a) Explain vented barrel extruder with suitable sketch. **[8]**

b) Explain blown film extrusion with suitable sketch. **[8]**

OR

Q6) a) Explain special features of extrusion dies. **[8]**

b) Explain co-extrusion of films and sheets. **[8]**

P.T.O.

SECTION-II

Q7) a) Explain basic principles of blow moulding with suitable sketches. **[10]**

b) Explain injection blow with suitable sketches. **[8]**

OR

Q8) a) Explain extrusion blow molding processes with suitable sketches. **[8]**

b) Explain rotary injection blow molding with suitable sketches. **[10]**

Q9) a) Explain process factors in thermoforming. **[8]**

b) Explain straight vacuum forming technique. **[8]**

OR

Q10)a) Explain plug assist-forming thermoforming of PP sheets. **[8]**

b) Discuss maintenance required in thermoforming. **[8]**

Q11)a) Explain principle considerations for drilling and reaming operations in plastic. **[10]**

b) Explain i) polishing. ii) Trimming. **[6]**

OR

Q12)a) Explain trimming and routing of thermosetting and thermoplastics. **[10]**

b) Explain buffing and sawing in plastic. **[6]**

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