

B.Sc. FOOTWEAR TECHNOLOGY (BSCFWT)

Term-End Examination

June, 2015

00344

BFWE-044 : POLYMER TECHNOLOGY

Time : 3 hours

Maximum Marks : 70

Note : *Attempt any five questions. All questions carry equal marks.*

1. What are the various classes of polymers ?
Describe any one type of polymer with suitable examples. 14

2. Describe the functions of the following equipments used during polymer processing and draw neat diagrams for the following : 14
 - (a) Kneader
 - (b) Injection Moulding

3. Discuss the characteristics and advantages of the following : 7+7
 - (a) PVC
 - (b) PU

4. Explain the production of PVC unit sole with the help of a flow chart. 14

5. Explain the processing characteristics and sequence of application of the following ingredients added during mixing of elastomers : 14

(a) Reinforcing Fillers

(b) Antioxidants

(c) Accelerators

(d) Process Aids

6. What are the ingredients used for EVA midsole compound ? Describe each ingredient. Also discuss the applications of EVA in footwear industry. 14

7. Write the characteristics and applications of the following : $4 \times 3 \frac{1}{2} = 14$

(a) EPDM Rubber

(b) Polystyrene

(c) NBR Rubber

(d) Chloroprene Rubber (Neoprene)