

**B.Sc. FOOTWEAR TECHNOLOGY
(BSCFWT)**

Term-End Examination

December, 2013

BFWE-018 : POLYMER TECHNOLOGY - I

Time : 3 hours

Maximum Marks : 70

Note : Attempt any five questions.

Each question carry equal marks.

1. Explain the characteristic features w.r.t 14
advantages, disadvantages and applications of
the following :
SBR, NBR, EVA and NR.

2. (a) Write down a diagrammatic description of
Reaction Injection Moulding(RIM) machine
for manufacturing of polyurethane. 7+7=14
(b) Mention the advantages and disadvantages
of PU as soling material.

3. (a) What are the monomers used for bulk
production of EVA ? 5+9=14
(b) Write down various characteristic
properties and applications of EVA.

4. (a) What are the various chemical raw materials
of a rubber compound ?
(b) List down in sequential manner, addition
of these chemicals in Rubber and mention
their uses. 7+7=14

5. Briefly describe the following : **3.5x4=14**
- (a) Sources of polymers
 - (b) Thermal response
 - (c) Line structure
 - (d) Tacticity
6. (a) Discuss some properties that make polymers useful material. **7+7=14**
- (b) Show how do they result from unique features of polymer structure such as high molecular weight.
7. (a) Explain the macromolecular concept for manufacturing polymers with suitable examples. **7+7=14**
- (b) Write down the comparative characteristics of rubber, plastics and fibers on the bases of their physical properties and applications.
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