

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VIII EXAMINATION – SUMMER 2016****Subject Code:182602****Date:16/05/2016****Subject Name:Belts, Hoses & Footwear Technology (Department Elective II)****Time:10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** Answer the following. (14)
- (i) Write the classifications of Hoses according to pressure ratings.
  - (ii) Which are the factors affect the flow characteristics of Hoses?
  - (iii) State the importance of Breakers for Conveyor Belt construction.
  - (iv) Write about the Troughability.
  - (v) What do you mean by Aminolysis? Which material has stability toward it?
  - (vi) Importance of Yarn Twisting construction for V-Belt.
  - (vii) Which materials are used for manufacturing of Shoe Lasts? Which one is widely used? Why?
- Q.2** (a) Write the Composition, Use and Properties of PBI Woven Fabric and Cambrelle Non Woven Fabric which are used as Shoe material. (07)
- (b) Short note on Water Jet cutting system used in Footwear industry. (07)
- OR**
- (b) Discuss in detail about Hand Made Footwear. (07)
- Q.3** (a) Define the term Braiding Pitch. Explain in detail about the determination of Braiding Pitch. (07)
- (b) Discuss the Test method for Oil Suction & Discharge Hose. (07)
- OR**
- Q.3** (a) Describe in detail about the manufacturing of molded Hoses by lead press curing method. (07)
- (b) Describe about Care & Maintenance for Steam hose. (07)
- Q.4** (a) Short Note on Spliced joint for Conveyor Belt. (05)
- (b) Write about Steel Cord construction for Conveyor Belt. (05)
- (c) Explain the Multi-Ply construction of Conveyor Belt. (04)
- OR**
- Q.4** (a) How you can increase the Heat resistance & Oil resistance of Conveyor belt? Discuss in detail. (07)
- (b) Explain in detail about Conveyor belt strength calculations. (07)
- Q.5** (a) Discuss the Main Points in Cord Processing for V Belt. (07)
- (b) Short Note on Mechanical Properties of Cord for manufacturing of V Belt. (07)
- OR**
- Q.5** (a) Explain the building process for Raw Edged V Belt. (07)
- (b) Short Note on Types of Grinding Stones for production of V Ribbed belt. (07)

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