

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2172804

Date: 06/05/2017

Subject Name: Garment Processing

Time: 02.30 PM to 05.00 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** (a) Describe the process of enzymatic desizing of garments using suitable machine. Also discuss the points of trouble shooting in garment desizing. **07**
- (b) Elaborately, discuss the process of stone washing of denim garments with various steps involved in process cycle. **07**
- Q.2** (a) Differentiate between enzymes Amylase and Cellulase. Explain with principle the process of producing worn out look using enzymes. **07**
- (b) i) Discuss various problems of stone washing with probable solutions. **04**
ii) Discuss about the color removal activity of Cellulase enzymes on denims as a function of pH. **03**
- OR**
- (b) Explain the purpose of denim bleaching. Describe the process of denim bleaching using hypochlorite treatment. **07**
- Q.3** (a) Discuss the principle, process and troubleshooting involved in permanganate treatment of denim garments. **07**
- (b) Describe the process of oxidative desizing denim garments and compare it with that of enzymatic desizing. **07**
- OR**
- Q.3** (a) Discuss the technical aspects involved in neutralization step carried out after decolorization process of denim garments. **06**
- (b) Enlist various types of garment washing/dyeing machines available. Describe in detail any one of them with design features, working principle, merits and demerits. **08**
- Q.4** (a) Justify the use of pigment colors in garment dyeing. Describe the process of garment dyeing with pigment colors. **07**
- (b) Describe the technological aspects and process of transfer printing of garments. **07**
- OR**
- Q.4** (a) Discuss the process and technical aspects of dyeing Spandex varieties of garments. **07**
- Q.4** (b) Describe the process of garment dyeing with reactive dyes using tumble dyeing machine. **07**
- Q.5** (a) In brief explain about UV and anti microbial finishing of garments. **07**

- (b) Discuss the principle and methods of any two types of dry processing techniques popularly used for localized fading of garments. **07**

OR

- Q.5** (a) Discuss in detail about various types of equipments used to impart final durable press finish to garments with principle and significance and application. **07**
- (b) Discuss various major quality control areas in processing of garments. **07**
