*Seat No.: _____* *Enrolment No._____*

# GUJARAT TECHNOLOGICAL UNIVERSITY

**BE- VII$^{th}$ SEMESTER–EXAMINATION – MAY/JUNE- 2012**

**Subject code: 172906** **Date: 29/05/2012**

**Subject Name: Knitting and Garment Technology**

**Time: 02:30 pm – 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)** Draw 2 colours, 2 needle repeat single jersey and 3 colours, 2 needle repeat double jersey designs. **07**

**(b)** Enlist various types of stitches used for making garments. Write in detail on class 100 and 300 stitches. **07**

**Q.2** **(a)** Answer following: **07**

(i) Calculate the marker efficiency for a 13 m long lay having 56 layers and 59" width of the fabric.
Avg area of pattern pieces = 0.20yds
Total no. of pattern pieces / garment = 12
Total no. of garment to be cut from 1 layer = 10.

(ii) A 100m fabric roll of width 150cm is found to have the following defects at the inspection stage :

| *Defect* | *Slub* | *Hole* | *Missing pick* | *Furkey* | *Shade variation* |
|---|---|---|---|---|---|
| Size | 2 mm | 1.1" | - | 5 mm | 10" |

Conclude if the fabric roll is acceptable or not(Acceptable if PPHSY<40).

**(b)** Discuss in brief the following **07**

i) Fabric grading system ii) Different parts of sewing needle

**OR**

**(b)** With sketch explain class 1, 2 and 3 seams. **07**

**Q.3** Write short note on following: **14**

(i) Feed dogs (ii) Fabric defect analysis and point grading system

**OR**

**Q.3** **(a)** Explain in detail various methods available for spreading. Elaborate more on use of traveling machine for spreading. **09**

**(b)** Write a short note on straight knife. **05**

**Q.4** **(a)** Write characteristics of Rib fabric. **07**

**(b)** Explain knitting cycle with sketch to produce plain fabric using latch needle. **07**

**OR**

**Q.4** **(a)** Define: (i) Stitch Density (ii) Knock Over (iii) Stitch length (iv) Tightness Factor **04**

**(b)** Explain different methods of producing knitted fabrics. Give comparison between warp and weft knitting. **06**

**(c)** Draw 2 x 2 rib fabric. **04**

**Q.5** Explain knitting cycle with sketch to produce tricot fabric. **14**

**OR**

**Q.5** With neat sketch, write salient features of following: **14**

(i) Pearl Fabric
(ii) Plain Fabric

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