

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-V EXAMINATION – WINTER 2025****Subject Code:3152903****Date:02-12-2025****Subject Name:Fabric Structure****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.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

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| Q.1 | (a) What information is obtained from Design, Draft & Peg-Plan? | 03 |
| | (b) Construct irregular hopsack on 10 threads. Also draw the Cross-sections for the same. | 04 |
| | (c) Base Twill is 3/3. Construct Herringbone Twill with herring bone draft from it and also construct the peg-plan Plan. | 07 |
| Q.2 | (a) Construct only design for 'Mayo'. | 03 |
| | (b) Explain, How to obtained Rib & Cord effect in plain weave. | 04 |
| | (c) Base Twill is 5/3. Construct zig-zag Twill with wavy draft from it and also construct the peg- Plan. | 07 |
| OR | | |
| | (c) Construct one design each for horizontal and vertical effect of Broken Twill. | 07 |
| Q.3 | (a) Construct only design for Brighton honey comb | 03 |
| | (b) Construct one design each of 27^0 and 75^0 | 04 |
| | (c) Construct design, draft and peg-plan of Honey comb weave with unequal cell formation. | 07 |
| OR | | |
| Q.3 | (a) What are characteristics of Towelling fabrics? Which weaves are used as Towelling weaves? | 03 |
| | (b) Construct one design each of 63^0 and 15^0 | 04 |
| | (c) Construct design, draft, peg-plan and cross-section of regular warp rib. | 07 |
| Q.4 | (a) Construct Design and cross-section for Plain bed ford cord. | 03 |
| | (b) Construct one design each of sateen and satin. | 04 |
| | (c) Construct design, draft and peg-plan of Diaper. | 07 |
| OR | | |
| Q.4 | (a) Construct only design for crepon bed ford cord. | 03 |
| | (b) List out different methods of constructing crepe weave. construct only design by superimposing method. | 04 |
| | (c) Construct design, draft and peg-plan for warp distortion. | 07 |
| Q.5 | (a) Explain difference between Jeans, Denim and Drill. | 03 |
| | (b) Construct only design for waved pique. | 04 |
| | (c) Explain with design stitching of warp figuring by means of Extra picks. | 07 |

OR

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| Q.5 | (a) Write short note on voile fabric | 03 |
| | (b) Construct only design for Diamond | 04 |
| | (c) Construct one design each of warp figuring and weft figuring | 07 |
