

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – WINTER 2023****Subject Code:3152903****Date:20-12-2023****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.

- Q.1** (a) Explain the characteristics of plain weave. **03**
(b) Construct design, draft and peg plan of plain weave on 8*8. **04**
(c) What is Draft? Explain in detail types of draft. **07**

- Q.2** (a) Construct design of transposed twill by rearranging picks. **03**
(b) Construct design draft and peg plan of regular warp rib. **04**
(c) Base twill is 4/4. Construct zigzag twill with wavy draft from it and also construct the peg plan. **07**

OR

- (c) Explain how weft way distorted effect is obtained? **07**

- Q.3** (a) What is elongated twill? Construct twill on 63° **03**
(b) Explain the characteristics of sateen and satin. **04**
(c) Construct design, draft and peg plan of Huck-a-back weave. **07**

OR

- Q.3** (a) Construct diamond weave on 8*8 using diamond base. **03**
(b) Construct weft corkscrew weave on 7*7. **04**
(c) Construct design, draft and peg plan of mock leno weave. **07**

- Q.4** (a) Explain the characteristics of Brighton honey comb. **03**
(b) Construct diaper weave using any balance twill. **04**
(c) Construct design, draft and peg plan of irregular sateen weave on 12*12. **07**

OR

- Q.4** (a) Distinguish between simple and compound fabrics. **03**
(b) Construct design of Brighton honey comb weave. **04**
(c) With the help of an example, explain how weft figuring is obtained using continuous extra weft. **07**

- Q.5** (a) Explain with suitable diagram relative firmness of twill weave. **03**
(b) Construct design of mock leno weave on 12*12. **04**
(c) With the help of design, explain how crepe weave can be constructed using reversing principle. **07**

OR

- Q.5** (a) Draw design of ordinary honey comb on 8*8. **03**
(b) Construct design, draft and peg plan of devon huck a back. **04**
(c) Construct design & cross section for ordinary Bedford cord on 16*4. Also modify the design & cross section for obtaining more prominence of cords in the same. **07**
