

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2023****Subject Code:3172914****Date:08-12-2023****Subject Name: Technology of Denim Manufacturing****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

Q.1	(a) What are the special features of denim fabric?	03
	(b) Write briefly about the fibres used in manufacturing denim fabric.	04
	(c) Discuss in detail about the denim manufacturing process.	07
Q.2	(a) What are elastic denim yarns?	03
	(b) Which are the seams and stitches mainly used during sewing of denim fabric?	04
	(c) State and explain the different types of washes of jeans.	07
OR		
	(c) Discuss in detail about the weaving process of denims.	07
Q.3	(a) Write briefly about the types of denim fabric.	03
	(b) Compare beam warping and ball warping.	04
	(c) Explain the spinning of yarn for denim.	07
OR		
Q.3	(a) What are structured denim yarns?	03
	(b) State the features of magazine creel used in warping.	04
	(c) Discuss the recent developments in Indian denim industry.	07
Q.4	(a) Which are the needles mainly used in sewing denim fabric?	03
	(b) What is the slasher dyeing process?	04
	(c) With a neat sketch explain the rope dyeing process.	07
OR		
Q.4	(a) What is beam dyeing?	03
	(b) Write briefly about dyeing with non indigo dyes.	04
	(c) Discuss about the indigo dyes and sulphur dyes used in denim manufacturing.	07
Q.5	(a) Write briefly about dyeing of jeans.	03
	(b) How is denim finishing carried out?	04
	(c) Discuss about the digital printing process of jeans.	07
OR		
Q.5	(a) What is knitted denim?	03
	(b) Write in brief about the sewing of denim fabric.	04
	(c) Explain the quality assurance activities carried out in the denim manufacturing industry.	07
