



Daffodil International University
Faculty of Engineering
Department of Textile Engineering
Program: B.Sc. in Textile Engineering
Midterm Examination, Semester: Fall-2025

Course Code: 0723-225

Credit Hours: 3.0

Time: 1.5 hours.

Name & Designation of the Examiner: Md. Mashud Raihan (MR), Assistant Professor

Date and Time of the exam: 23.10.2025, 2:00 PM

Course Title: Yarn Manufacturing-II

Total Marks: 25

Answer all the questions

36x24
2.10x6

1. Answer any five (5) of the following Six (a to f) [CO-1, PO-2, C/L-2] 5×4 = 20
- a) Relate the equation with increasing bobbin dia, bobbin speed will be decreases by mentioning their principles.
 - b) Describe the purpose of using a roving frame before a ring frame and explain its importance with a suitable example.
 - c) Summarize the recent developments in roving frame technology and explain their impact on the spinning process.
 - d) Demonstrate the principles of Servo Motor Drives for Drafting Rollers, and Flyers Work in a Speed Frame
 - e) Explain the working principle and procedure of Auto-Doffing System.
 - f) Summarize material faults, their causes and corrective solutions for the simplex machine.

2. Answer the question [CO-4, PO-2, C/L-3]

5

- a) Calculate the production in kg per day of 10 modern speed frame machines whose parameters are given below- Flyer speed 1160 rpm, no. of flyer 115, roving count 0.96 Ne, TM 1.3, and efficiency 94%.

TM = 1.3