



Daffodil International University
Faculty of Engineering
Department of Textile Engineering
Program: B.Sc. in Textile Engineering
Midterm Examination, Semester: Summer-2026

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: 27.12.2026, 2:00 PM

Course Title: Yarn Manufacturing-II

Total Marks: 25

[All questions in a set must be answered together]

Set-A

1. Answer any **Four (4)** of the following **Five (a to e)** [*CO-1, PO-1, C/L-2*] $4 \times 4 = 16$

- ☒ a) Explain the technical data and recent developments of Super Lap Former.
- ☒ b) Briefly describe the faults and causes of comber machine and finally mention three major points to overcome these faults.
- ☒ c) Explain why required number of machine passage is used between carding and comber.
- ☐ d) Illustrate a timing diagram with respect to the index wheel in the combing machine.
- ☒ e) Explain an appropriate measurement of adjusting noil percentage and explain with a necessary diagram.

Set-B

☒ Answer all the questions [*CO-2, PO-2, C/L-3*] $4.5 \times 2 = 9$

- ☒ a) Find out the total number of comber machines for 5 tons per day whose parameters are given: feed/nip=5.6mm, nip/min=380, sliver weight- 70 grain/yard, lap weight=1120grain/yds, no. of doubling=8, efficiency=91%, noil%=13.
- ☒ b) A Super lap former running with the following parameters. Find out the draft & production per shift in pounds. Assume that,
No. of creel = 3, Winding speed = 125 yds/min, sliver hank is 0.12 Ne, Lap weight =1100 grain /yd, Doubling =11 cans/creel, Efficiency =88%

5000 yd / d