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

Course Code: 0723-215	**Course Title: Fabric Manufacturing I**
Time: 2 hours.	**Course Teacher: FH**
Total Marks: 40	**Level-2, Term-1 (E1 & E2)**

Answer all the Questions.

01. Show the units of a slasher sizing machine with suitable sketch and explain the units. [06] [CO-2, PO-1, C/L-2]

02. Explain the sizing weaving curve and summarize the controlling points of sizing machine? [05] [CO-2, PO-1, C/L-2]

03. Compare weaving and knitting & show the advantages of knitting over weaving. [CO-2, PO-1, C/L-2] [05]

04. Measure the required (a) the weight of size material (b) size take up % (c) Count of sized yarn for a weaving factory for an order weight of sized beam is 92.5 lbs. and the Beam have 1250 yards yarn whose yarn count before sizing was 50 Ne, if total number of ends in the beam is 3500. [CO-3, PO-2, C/L-5] [06]

05. Explain the characteristic of single jersey fabric and show its end uses. [CO-2, PO-1, C/L-2] [04]

06. Illustrate the knitting action of the latch needle with suitable sketch. [CO-2, PO-1, C/L-2] [05]

07. a) Calculate the production per shift in kg of a plain single jersey knitting machine of 32-inch diameter, 28 gauge, having 90 feeders and 2.80 mm stitch length produced by 36/1's and the machine operates in 24 RPM (Assume another parameter if necessary). [03+02]
b) Calculate total number of needles of the machine from the above data. [CO-3, PO-2, C/L-5]

08. Interpret "24 Guage" and explain the needle specifications: Vota78.60G.02. [CO-2, PO-1, C/L-2] [04]