17347

15116

3 Hours / 100 Marks Seat No. | | | | | | | | |

Instructions : *(1)* ***All*** *questions are* ***compulsory****.*
(2) Answer ***each*** *next main question on a* ***new*** *page.*
(3) Illustrate your answers with neat sketches ***wherever*** *necessary.*
(4) Figures to the ***right*** *indicate* ***full*** *marks.*
(5) Mobile Phone, Pager and any other Electronic Communication devices are ***not*** *permissible in Examination Hall.*

Marks

1. Attempt **any ten** : **20**

a) What is meant by bast fibre ? Give two examples.
b) Give any two physical properties of polyethylene fibre.
c) What is gelatinisation temperature ? What is it for maize starch ?
d) What is the objective of shearing and cropping ?
e) Give any two physical properties of silk fibre.
f) State the applications of polypropylene fibre.
g) Draw the chemical structure of starch.
h) What is the importance of gray fabric inspection ?
i) Write the chemical structure of cotton fibre.
j) State the advantages of synthetic fibres.
k) Give the processing flow chart for gray fabric.
l) What is the function of antistatic agent ?
m) State the applications of polyacrylonitrile fibre.
n) Draw a neat labelled diagram of Roller singeing machine.

2. Attempt **any four** : **16**

a) Describe the morphological structure of cotton fibre.
b) Explain the chemical properties of polyester fibre.
c) Explain the classification of softner.
d) Describe copper plate singing method for cotton fabric.
e) Describe the method for determination of viscosity of starch.
f) Compare the batch wise processing and continuous processing of textile fabric.

Marks

3. Attempt **any four** : **16**

a) What is meant by degumming of silk ? Explain any one method for degumming.

b) Give the comparison between Nylon 6 and Nylon 6,6.

c) Explain the method for evaluation of iodine value for softner.

d) Explain the process of enzymatic desiring for grey cotton.

e) Explain the chemical properties of adhesives.

f) State the advantages of sodium chlorite bleaching on cotton.

4. Attempt **any four** : **16**

a) Describe the manufacturing process for viscose rayon fibre.

b) Explain the chemical properties of lycra fibre.

c) Enlist the sizing ingredients with their functions.

d) Explain hydrogen peroxide bleaching for cotton fabric.

e) Explain the terms saponification of oils in seeming process.

f) Explain the properties of an ideal softner.

5. Attempt **any four** : **16**

a) Describe the morphological structure of wool fibre.

b) Describe the method for manufacturing of polyester fibre.

c) Describe the size formulation of cotton fabric.

d) Explain the chemical recipes for scanning and bleaching of polyester fabric.

e) Enlist the names of antiseptic agents for textile fabrics with their application methods.

f) Describe the gas singeing method for gray fabric.

6. Attempt **any four** : **16**

a) Describe Kier Boiler operation for scanning of cotton fabric.

b) Explain the size paste formulation for polyester/cotton blend fabric.

c) Describe the life cycle of silk worm.

d) What is meant by setting ? Explain any one method for retting of jute fibre.

e) Explain the physical and chemical properties of Nylon 6 fibre.

f) Explain the classification of textile fiber based on Nature and Origin.
