17567

16117

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 five** : **20**

a) Write the process stage flow chart for textile wet processing for 100% cotton woven fabric.
b) List objectives of singeing process and enlist the machines used for singeing process.
c) Explain 'Right First Time' concept in dyeing process of textiles.
d) State the norms of each process stage in printing.
e) Define BAN. How it is determined ?
f) Write procedure for determination of rubbing fastness of dyed fabric.
g) What is BOD ? How it is determined ?

2. Attempt **any two** : **16**

a) Explain the process control parameters in scouring and bleaching with hydrogen peroxide process for cellulosic fabrics.
b) State objectives of calendering. Enlist various calendering machines and explain any one calendering machine with process control parameters for effective finishing.
c) Explain the importance of light fastness property and measurement of light fastness by ISO method.

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

a) Define the terms process and quality control and state the necessity of process control in textile wet processing.
b) Write any two problems in mercerisation process and remedies for the same.
c) Explain the working principle and process control parameters for jet dyeing machine.
d) What are the objectives of finishing ? Describe any two new developments in finishing.
e) Differentiate optical whitening agents and bluing agents.
f) State objective of flame retardant treatment. How it is assessed ?

P.T.O.

Marks

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

a) Write importance of quality assurance. Explain the structure and functions of quality assurance department.

b) Describe continuous bleaching range along with process control parameters.

c) Explain the advantages and limitations of soft flow dyeing machine.

d) With neat sketch, explain working of sanforising machine in finishing.

e) What is objective of desizing ? How desizing efficiency can be calculated ?

f) How the washing fastness of dyed fabric can be checked by ISO methods ?

5. Attempt **any two**: **16**

a) Explain the working principle of continuous dyeing range. Write down the process control parameters for continuous dyeing range. Write the advantages and limitations of continuous dyeing range.

b) Describe working principle and process control parameters of flat bed printing machine. Write its advantages and limitations.

c) Describe the testing method for finished fabric

i) Crease recovery angle and

ii) Bending length

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

a) Write problems and remedies in rotary printing machine.

b) Explain the process control parameters for stenter machine in finishing.

c) Define copper number. How it is determined ?

d) How the sublimation fastness property can be checked of printed fabric ?

e) Describe the testing method for Iodine absorption of finished fabric.

f) Describe the method for determination the viscosity of the thickner.
