

### SECTION-C

**Note:** Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Explain the importance of soft water in dyeing.
- Q.4 With neat diagram describe the working of hank dyeing machine.
- Q.5 Write short note on history of dyes and dyeing.
- Q.6 Explain natural and mineral dyes.
- Q.7 Describe the mercerization process in a chain mercerizes.

No. of Printed Pages : 4

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**3<sup>rd</sup> Sem. / Textile Design**

**Subject : Dyeing Technology - I**

Time : 3 Hrs.

M.M. : 100

### SECTION-A

**Note:** Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1 a) What do you understand by PH?
- b) What is dope dyeing?
- c) What are the impurities in wool fibres
- d) What is oxidative bleaching
- e) What is scouring
- f) What are natural dyes
- g) How can you maintain constant PH of an aqueous solution.
- h) Explain hank dyeing.
- i) What is desizing.

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032532

- j) What is package dyeing?
- k) In what different forms yarn can be dyed?
- l) What are desirable properties of dye?
- m) How is polypropylene fibre is dyed?
- n) What is fibre dyeing?
- o) Explain bleaching.
- p) Classify synthetic dyes with example
- q) What is the purpose of preparatory wet processing?
- r) What is singeing of textile materials?

### SECTION-B

**Note:** Short answer type questions. Attempt any ten parts  
10x4=40

- Q.2
- i) Write recipe and condition of acid desizing.
  - ii) Explain importance of PH in dyeing.
  - iii) How will you carry out rot stripping.

- iv) Classify dyes with respect to most popular ways and give commercial name of dyes in each case.
- v) Derive the expression of PH for an acid.
- vi) How will you bleach polyester fabric.
- vii) How the caustic is recovered cytes mercerisation?
- viii) What is the principle of oxidative bleaching
- ix) Enlist various ways in which hardness of water can be expressed.
- x) Compare fibre dyeing and stock dyeing.
- xi) How will you determine the amount of excess  $H_2O_2$  in bleached material.
- xii) Write the basic mechanism of dyeing protein fibre with acid dyes.
- xiii) What is the stage of which PC blended fabric is singed and why?
- xiv) Write recipe and condition of enzymatic desizing.