

### SECTION-C

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

- Q.3 How will you identify vat dyes on cotton.
- Q.4 Why synthetic dyes are called Coaltar dyes. What do we get on distillation of coaltar briefly explain.
- Q.5 How will you apply reactive dye on cotton rights its reaction with water and fabric.
- Q.6 What are factors that assist in dye stuff application.
- Q.7 How will you classify dyes according their chemical structure. Define CI Constitution Number and CI Generic names. Give chemical structures of few dyes.

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No. of Printed Pages : 4

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**4th Sem. / TP/TC**

**Subject : Die stuff Chemistry**

Time : 3 Hrs.

M.M. : 100

### SECTION-A

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

- Q.1 a) What are dyes?  
b) Define Auxochrome?  
c) What are natural dyes?  
d) Name some coupling components?  
e) What is Sulfonation?  
f) Synthetic dyes are also called \_\_\_\_\_.  
g) What are principles products of Coaltar distillation?  
h) Which groups are responsible for providing colour to dye. Name any two.

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- i) How Pigments differ from dyes?
- j) Name any two dyes used for dyeing of cotton?
- k) Give examples of insoluble dyes?
- l) Reactive dyes chemically react with cellulose in presence of \_\_\_\_\_.
- m) Define Cold brand reactive dyes?
- n) What are Leuco vat dyes?
- o) Give examples of any two Mordants?
- p) Give examples of natural dyes?
- q) Which synthetic dyes was first synthesised? Name its group also.
- r) Congo Red belongs to which class of dye.
- iii) How reactive dyes are applied on cotton?
- iv) Explain process of Nitration?
- v) What is role of Sodium by Carbonate in reactive dyeing?
- vi) Explain Diazotisation and coupling.
- vii) What are Intermediates? Write structure of any four.
- viii) What is role of sodium sulphide in sulphur dyeing.
- ix) Why after treatments are necessary in dyeing.
- x) Why alkali is required in reactive dyeing.
- xi) Discuss witt's theory of colour.
- xii) Briefly explain Tobias-Acid?
- xiii) How can we reduce wastage of reactive dyes.
- xiv)  $\text{Na}_2\text{CO}_3$  is required in reactive dyeing.
- xv) What are factors that affect adsorption of dyes stuff.

### SECTION-B

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

- Q.2
- i) Briefly discuss properties of Reactive Dyes.
  - ii) What are desirable properties of dye stuff.

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