

Q.21 Write short note on Natural Dyes.

Q.22 What are effects of bonding on different dye with fiber?

### **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions.  $(2 \times 8 = 16)$

Q.23 Write down a complete note on coal tar fractional distillation.

Q.24 Draw a complete chart of classifications of dyes and explain each of them with structures.

Q.25 What are the various forces which are responsible for dyeing behavior of various dyes on different fabrics?

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**2nd Sem. / Textile Processing**

**Subject : Dyestuff Chemistry**

Time : 3 Hrs.

M.M. : 60

### **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory  $(6 \times 1 = 6)$

Q.1 Direct dye makes \_\_\_\_\_ bond with cellulose fibers.

- a) Covalent bond
- b) Vander wall forces of attraction
- c) Ionic Bond
- d) None of these

Q.2 Name fiber which act as solvent for disperse dye.

- a) Polyester
- b) Wool
- c) Silk
- d) Cotton

Q.3 Which is not a water soluble dyes?

- a) Disperse dyes
- b) Acid dye
- c) Direct dyes
- d) Reactive dyes

Q.4 Nitrogenation is introduction of \_\_\_\_\_ group.

- a)  $-\text{H}_2\text{O}$
- b)  $-\text{NO}_2$
- c)  $-\text{NH}_2$
- d)  $-\text{Cl}$

Q.5 A compound containing chromophore is called

- a) Alkali
- b) Dyestuff intermediates
- c) Chromogen
- d) Pigments

Q.6  $\text{Na}_2\text{CO}_3$  is

- a) Acid
- b) Alkali
- c) Dye
- d) None of these

## SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory.  $(6 \times 1 = 6)$

Q.7 Direct dye is having affinity for polyester.  
(True/False)

Q.8 The first synthetic dye invented was basic dye.  
(True/False)

Q.9 Azo benzene is not a dye. (True/False)

Q.10 Is there any difference between auxo-chromes and chromo-phores. Yes or No?

Q.11 Ionic bond and H-bond both are same or not?

Q.12 Does each dye is having polar group or non-polar group?

## SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions.  $(8 \times 4 = 32)$

Q.13 Give in brief history of synthetic dyes.

Q.14 Write a short note on bathchromic effect.

Q.15 Explain in brief Diazotisation and coupling.

Q.16 Write structure of Nitro dyes, Nitroso dyes, Azo dyes, Indigo dyes, Anthraquinone dyes.

Q.17 What is koach acid and Tobias acid in details?

Q.18 What is colour? What happens when light falls on substrate?

Q.19 Explain in details light theory of colour. Explain in brief the process of Nitration.

Q.20 What are the characteristics of dye molecule for colouration of textile?