Set of assignments for Natural dye course:

Set-1

- 1. How old is the natural dyeing practices in India?
- 2. What causes dyes to appear colored?
- 3. Give the classification of natural dyes according to their color?
- 4. Explain what are Chromophore and Auxochrome taking a particular example.
- 5. Why are Azo dyes banned globally?
- 6. What marked the advent of Synthetic dyes?
- 7. What are the appropriate conditions needed for the oxidation of synthetic dyes?
- 8. What are the various chromatographic and spectroscopic methods used in the
 - identification of natural dyes?
- 9. What are the innovative methods of extraction for natural dyes?
- 10. What are the advantages of using natural dyes?
- 11. Ayurved uses a large number of natural dyes in its formulation, give a few
 - examples to prove this statement.
- 12. How can metal mordant be replaced in natural dyeing and with what other
 - treatment can similar results of dyeing be achieved?
- 13. How does a natural dye qualify to be a good dye source?
- 14. How does one prepare the RFD (Ready for Dyeing) textile material for natural
 - dyeing?
- 15. How are banned amines analyzed in dyed fabrics?

Set-2

- 1. Which natural dyes were used in ancient times, name them
- 2. How will you describe dyes and their color in scientific termas?
- 3. What are the different natural dyes in terms of their structure?
- 4. Give an example of Indigoid dye with its structure.
- 5. What are the usual symptoms of chemical sensitivity of dyes?
- 6. Why were natural dyes pushed out of market when synthetic dyes captured the
 - market?
- 7. How does the oxidation of a number of dyes in predominantly aqueous
 - systems by Tetra-phenylporphyrinato manganese(III) imidazole take place?

- 8. What are the various chromatographic and spectroscopic methods used in the identification of natural dyes?
- 9. Which of the two solvent is more appropriate for natural dye extraction—water

or methanol?

- 10. What are the problems encountered in the use of vegetable/natural dyes?
- 11. How can you establish the medicinal properties of natural dyes?
- 12. What is the role of mordanting in natural dyes?
- 13. What is the role of agitation during dyeing while using natural dyes?
- 14. What is meant by meta-mordanting?
- 15. What are the parameters for establishing ecofriendliness of natural dyes?