

SARDAR PATEL UNIVERSITY
M.Sc.(H.Sc.)(III Sem.)(TC) Examination (CBCS)

Wednesday, 5/12/12

Time: 2.30 P.M. to 5.30 P.M.

PH03CTCL01: Textile Dyeing and Finishing

Maximum marks: 70

Note: Figures on the right indicate marks allotted to each question.

Q 1 Multiple Choice Question (Choose the correct answer)

(08)

1. Application of china clay on fabric is classified as a
 - (a) Durable mechanical finish
 - (b) Durable chemical finish
 - (c) Temporary filling finish
 - (d) Temporary chemical finish
2. The wavelength of visible light ranges from
 - (a) 390 nm to 700 nm
 - (b) 300 nm to 730 nm
 - (c) 370 nm to 700 nm
 - (d) 390 nm to 730 nm
3. Rods (nerve cells) present in the eyes are responsible for
 - (a) Vision at dusk or night
 - (b) Vision during day time
 - (c) Vision in artificial light
 - (d) Vision in colored light
4. A calander machine usually consist of ____ number of rollers.
 - (a) 2 to 11
 - (b) 3 to 12
 - (c) 4 to 13
 - (d) 5 to 14
5. To close fabric intersects _____ finishing is done.
 - (a) Mercerization
 - (b) Sanforization
 - (c) Beetling
 - (d) None of the above
6. Worsted fabrics are finished to
 - (a) Improve dye ability
 - (b) Clarify weave
 - (c) Obscure weave pattern
 - (d) Introduce scroop
7. Textiles can be given fire proof finish by
 - (a) Sodium stannate and ammonium sulphate
 - (b) Sodium silicate and ammonium hydroxide
 - (c) Sodium carbonate and ammonium sulphate
 - (d) Sodium stannate and ammonium hydroxide
8. Wet fastness of direct dyes can be improved by
 - (a) Treatment with common salt
 - (b) Treatment with mordant
 - (c) Diamalyzation
 - (d) Diazotization

(6)

Q 2 Explain any **SEVEN** of the following:

1. Water soluble dyes
2. Colour matching booth
3. Reactive dyes
4. Natural mordant dyes
5. Carbonizing
6. Cire finish
7. Beetling machine
8. Permanent finish
9. Textile finishing

Q 3(a) What factors are considered before deciding which finishing treatments should be given to textiles? (6)

(b) What is the difference between aesthetic and functional finish. Explain giving suitable examples. (6)

OR

(b) Describe in detail mercerization process.

Q 4(a) Explain, "Optical density is directly proportional to the concentration of the dye solution" (6)

(b) Write in brief on Munsell System for colour specification. (6)

OR

(b) Explain the procedure for dyeing of cotton with basic dyes. (6)

Q 5(a) Write in brief on any **ONE** of the following: (12)

1. Synthetic resins and finishing of pile fabrics
2. CIE system and types of illuminations.

Q 6 Write short notes on any **TWO** of the following: (12)

1. Latest developments in natural dyes
2. Herbal dyeing and its benefits
3. Resist dyeing
4. Importance of blood repellent finish and mosquito repellent finish
5. Use of aloe vera for anti-microbial finish
6. Microwaves in textile processing

X-X-X-X-X-X-X-X-X-X-X-X