



- 2 Describe each component in anatomy of spectrophotometer, used in CCMS. 15
- OR**
- 2 Discuss the technological aspects involved in process of standardization of an illuminant observer and object. 15
- 3 Write short notes on : (any **three**) 15
- (i) Components of CAD system for textile designs.
  - (ii) Need and advantage of CAD.
  - (iii) Application of CAD in different areas of textile field.
  - (iv) Need for objective quantification of colour.

### SECTION - II

- 4 (a) Answer the following objective questions : 10
- (i) How reflectance changes with concentration of colour?
  - (ii) Name the inorganic compound used for coating of integrating sphere.
  - (iii) K/s decreases as reflectance increases, true or false.
  - (iv) The gloss in bright objects is due to diffuse reflectance, true or false.
  - (v) What is meant by D-65?
  - (vi) How chroma is related mathematically with 'a' & 'b'?
  - (vii) Green Hue occupies largest space in CIE locus of spectrum colours, true or false?
  - (viii) What is meant by a metameric match?
  - (ix) Which illuminant is found best suitable for CCMS?
  - (x) What are 'k' and 's' in K/S?
- (b) Discuss, the need for objective quantification of colour difference. Describe the use of colour difference measurement for assigning fastness ratings. 10
- 5 Describe the technological steps involved in process by software for prediction and verification of match recipe. 15
- OR**
- 5 Describe, three methods used for determination of relative strength of dyes. 15
- 6 Write short notes : (any **three**) 15
- (i) Acceptability and perceptibility
  - (ii) Steps involved in database preparation for CCMS.
  - (iii) Whiteness and yellowness index
  - (iv) Hue Circle.