Government Institute of Printing Technology, Mumbai.

Sample Paper

Course: Electronic color correction Code: M508
Duration: 03Hours Marks: 80

Instructions to candidates:

1. Attempt all questions and illustrate your answers with neat sketches wherever necessary.
2. Figures to the right indicate full marks.

Q1 Answer any five questions. **20**

a. Describe additive color theory.
b. Describe function of rods & cones.
c. Define bit depth. State its two examples.
d. Describe meaning of block point compensation.
e. Describe working principle of PMT.
f. State the meaning of page description language.
g. Differentiate between Bitmap (raster) and vector formats.

Q2 Answer any two questions. **12**

a. Explain functions of RIP.
b. Explain the concept of color gamut & gamut mapping.
c. Explain working principles of spectrophotometer with diagram.

Q3 Answer any two questions. **12**

a. Compare AM screening with FM screening up to six points.
b. Explain four characteristics of color management.
c. Write the formula to calculate color derivation (ΔE) and write meaning of each term. Also calculate ΔE when L_1 = 24 L_2 =21 , a_1=15, a_2=-15, b_1=19, b_2= -19

Q4 Answer any two questions. **12**

a. Explain meaning of 1) Errors of Trichromatism 2) Proportionality failure.
b. Explain meaning of Device dependent & Device independent color.
c. Explain working principle of colorimeter with diagram.

Q5 Answer any two questions. **12**

a. Explain the term UCR, GCR with example.
b. Write steps in color management process.
c. Why screen angles are necessary? State screen angles for offset printing process.

Q6 Answer any two questions. **12**

a. Write six characteristics of preflight process.
b. Explain metamerism, its causes and effect.
c. Write six characteristics of CIP 4 process.