

Total No. of Questions :4]

SEAT No. :

P700

[5315]-237

[Total No. of Pages :2

S. Y. B. Sc. (Vocational - I)

PHOTOGRAPHY AND AUDIO-VISUAL PRODUCTION -I

**Colour Photography and Digital Photography
(2013 Pattern) (Semester-II) (Paper - III)**

Time : 2 Hours]

[Max. Marks :40

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Draw neat labeled diagrams wherever necessary.*
- 3) *Figures to the right indicate full marks.*

Q1) Answer the following in short.

[16]

- a) Why is white balance important in digital photography?
- b) Which tool in image processing software is used for selecting a specific area or colour?
- c) Explain two important features of a CCD sensor.
- d) What is dynamic range of a digital sensor?
- e) Draw a histogram of a properly exposed image. Discuss the diagram you have drawn.
- f) Explain the source of 'noise' in a digital sensor.
- g) What is 'crop factor?' How dose it affect the image qualities?
- h) How is '18% grey' important for a photographer?

Q2) Attempt any two of the following.

[8]

- a) Draw a suitable diagram and explain the 'luminosity curve' of a normal human eye.
- b) Explain how the black body radiation curve is useful in defining the colour temperature of a light source.
- c) Describe the world without colours.

P.T.O.

Q3) Write short notes on any two of the following. **[8]**

- a) Use of filters in photography.
- b) Psychological impact of colours.
- c) Use of layer mask in image processing.

Q4) Attempt any one of the following. **[8]**

- a) Draw a diagram and discuss the spectral response of a normal human eye. Hence explain how human beings see colours.
- b) Draw a suitable diagram and explain the construction of a typical sensor used in a digital camera. Explain the purpose of each 'layer' and component of the sensor. Discuss the sequence of events taking place when the sensor is exposed to a 'scene'.

