

# 19222

**11920**

**3 Hours / 100 Marks**

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
- (2) Answer each next main Question on a new page.
- (3) Illustrate your answers with neat sketches wherever necessary.
- (4) Figures to the right indicate full marks.
- (5) Assume suitable data, if necessary.
- (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

**1. Attempt any FIVE of the following:**

**20**

- State basic classification of originals.
- Write two points about the need of imaging media used in reproduction process.
- Explain any two advantages of contact frame.
- Write two applications of digital camera and names of two camera manufacturing companies.
- Define densitometry and sensitometry.
- Define digital original and state its two characteristics.
- Write the formula for :
  - Focal length
  - Depth of focus

P.T.O.

- 2. Attempt any TWO of the following: 16**
- a) Describe any two factors governing selection and state four characteristics of ideal original.
  - b) Describe the importance of time gamma curve of emulsion.
  - c) Describe the chemical development process of exposed silver halide film.
- 3. Attempt any TWO of the following: 16**
- a) Explain construction and working principle of computer to film digital output device.
  - b) Describe the construction and working principle of reflection densitometer.
  - c) With schematic diagram describe construction of vertical dark room enlarger type camera.
- 4. Attempt any TWO of the following: 16**
- a) Compare AM and FM screening upto four points.
  - b) Describe fixing process of chemically developed photographic film.
  - c) With schematic diagram, describe halation and irradiation defects.
- 5. Attempt any TWO of the following: 16**
- a) With schematic diagram, describe construction and working of flat bed colour scanner.
  - b) Write any two types of silver halide and describe two physical, two chemical and two optical properties of silver halide.
  - c) Describe any two lens aberrations remedial action.
- 6. Attempt any TWO of the following: 16**
- a) Explain the construction and working principle of contact frame with neat diagram.
  - b) Describe the approaches employed to control exposure.
  - c) Describe the construction and working principle of digital camera with neat diagram.
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