

FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI
SCHOOL OF PHYSICAL SCIENCE
DEPARTMENT OF SCIENCE LABORATORY TECHNOLOGY
GLT 501: PHOTOGRAPHY AND ILLUSTRATION
HARMATTAN SEMESTER EXAMINATION 2015 / 2016 ACADEMIC SESSION

Instructions: Answer five questions and at least two from each section.

Time allowed: 2 ½ Hrs.

Date: 05/05/2016.

SECTION A

- 1a. Understanding exposure is the most critical aspect of the photographic process. Discuss the term "exposure" explaining how it will determine the depth of field and how the depth of field will in turn affect the image quality.
- 2i. Define correct exposure value (EV) and explain how to obtain correct exposure.
 - ii. Discuss the relationship between aperture and F-number.
- 3i. A 35mm camera on a standard 50mm lens has a diameter of 12.5mm; calculate the selected lens aperture of the camera.
 - ii. The diameter of another selected lens aperture on the same lens measures 3.125mm; find the size of the aperture.
 - iii. If the focal length of the camera is increased to 75mm with the diameter of 3.125mm; calculate the selected lens aperture size of the camera
- 2a. Give a concise definition of the term "Photography".
 - b. Discuss the "Twin-Lens Reflex" camera.
 - c. Write short note on the function of shutter in a camera during exposure
 - d. Diagrammatically illustrate and discuss the path of an object illuminance onto a camera's sensor/film to produce an image.
- 3a. Discuss the following characteristics of light. (i) Intensity (ii) Reflectance
 - b. State the inverse square law.
- 4i. When will a chemical spill be considered major?
 - ii. Enumerate the procedures to be followed during emergency minor and major chemical spill.
- 4i. What are the dangers associated with improperly stored darkroom chemicals.
 - ii. Explain the practices involved in proper darkroom chemical storage.

SECTION B

- 4a. Photomicrography filters are of three categories, list them and state clearly their specific functions.
 - b. What are the importance of colour temperature regulation in photomicrography?
5. What are the sequential steps involved in the production of black and white image. State what happens at each step.
- 6a. Distinguish between commercial and small scale processing.
 - b. State two applications of photomicrography.