



SANJEEV AGRAWAL GLOBAL EDUCATIONAL (SAGE) UNIVERSITY, BHOPAL

Mid Semester Test -I
Spring 2023-24 (April 2024)

Name of Program-PhD

Course: ZOOLOGY

Course Code: ZL22P104

Max. Duration: 1.5 hrs

Max. Marks: 30

SECTION - A

- 1. Objective Type Questions (ALL QUESTIONS ARE COMPULSORY) (5X1 = 05)**
- a) . Which part of the compound microscope helps in gathering and focusing light rays on the specimen to be viewed?
- i. Eye piece lens
 - ii. Objective lens
 - iii. Condenser lens
 - iv. Magnifying lens
- b) What does it mean mounting of the slide?
- i. Final gluing of the covering slide
 - ii. Gluing of the slice on the underlying slide
 - iii. Covering the block of tissue by the paraffin
 - iv. Labeling of final slide by a bar- or QR code
- c) Among following dyes, only one is not acidic. Which one?
- i. Eosin
 - ii. Orange G
 - iii. Anilin blue
 - iv. Hematoxylin
- d) Degradation of a biological material caused by bacteria is called:
- i. Apoptosis
 - ii. Autolysis
 - iii. Liquefaction
 - iv. Putrefaction
- e) Wounds in plants are healed by the activity of _____.
- i. Apical meristem
 - ii. Intercalary meristem
 - iii. Lateral meristem
 - iv. Secondary meristem

SECTION - B

- 2. Short Answer Type Questions (Attempt any THREE) (3X5 =15)**
- a) Explain the principles of Light Microscope.
 - b) What do you understand of Histochemical methods?
 - c) What is Microtomy? Explain Ultramicrotomy.
 - d) Who invented microscope? Give details about the Confocal microscope.
 - e) Write short note on various methods of cell culture.

SECTION - C

- 3. Long Answer Type Questions (Attempt any ONE) (1X10 =10)**
- a) What is toxicology? Explain the application and techniques in toxicological study.
 - b) Discuss Cryo freezing and its process in detail.