### KISII UNIVERSITY

# SCHOOL OF PURE AND APPLIED SCIENCES

# **ZOOL 331/ CMB 222: DEVELOPMENTAL BIOLOGY**

### SPECIAL EXAMINATION 2022

# **Instructions:**

Answer All question in section A which is compulsory and any other TWO questions in Section A

- 1. Different types of cleavage encountered in different eggs are catalogued. Discuss (6mks)
- 2. State 5 factors responsible for controlling the cleavages (5mks)
- 3. Developmental Biology has got medical benefits. Discuss. (4mks)
- 4. Elaborate on the planes of cleavage (4mks)
- 5. When choosing a model organism for research, there are a number of different aspects to be considered. Discuss(6mks)
- 6. Discuss different Types of Blastula (6mks)
- 7. Based on the distribution and amount of yolk describe the eggs classification (6mks)
- 8. Discuss Divergence as used in this unit (3mks)

#### Section B

- 1. Using theoretical examples discuss Organogenesis and histogenesis (15mks)
- 2. Discuss the Germ Layer theory and derivatives of germ layers (15mks)
- 3. Discuss the four steps of fertilization (15mks)