

**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)