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MAASAI MARA UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/17

**FORTH YEAR SECOND SEMESTER EXAMINATIONS**

**FOR**

**THE DEGREE OF BACHELOR OF SCIENCE**

ZOO 423E: ICHTHYOLOGY

**DATE: 16th May 2017 TIME: 1100-1300**

**INSTRUCTIONS TO CANDIDATES**

Answer **ALL** questions in **Section A** and any other **TWO** questions in **Section B.**

**SECTION A: ANSWER ALL THE QUESTIONS (30 MARKS)**

1. Giving examples, distinguish between anadromous and catadromous fish species **3 marks**
2. Identify the role of oxygen in fish ponds **3 marks**
3. Outline the special conditions under which the fish blood circulatory system operates **3 marks**
4. Differentiate between the cycloid and cteinoid scales in teleosts

**3 marks**

1. Identify the main components of the Accoustico-Lateralis System and state their functions **3 marks**
2. Outline the social economic importance of aquaculture in Kenya

**3 marks**

1. Identify the main characteristics of Agnatha **3 marks**
2. State the mains reasons for fish migrations **3 marks**
3. List the advantages and disadvantages of cage culture systems
4. **marks**
5. Illustrate with a diagram the paired lobes in the brain of fishes and state their functions **3 marks**

**SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)**

1. State and explain the main biological considerations when selecting a fish species for culture **20 marks**
2. Water has important characteristics that control the shape of fishes. Discuss this statement **20 marks**
3. Using illustrations, differentiate between the physostomous and physoclistous gas bladders **20 marks**
4. Discuss the main factors that affect growth in fishes. **20 marks**