



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
FACULTY OF SOCIAL SCIENCES  
DEPARTMENT OF ECONOMICS  
2024 1 EXAMINATION**

**COURSE TITLE: COMPARATIVE ECONOMIC SYSTEM**

**COURSE CODE: ECO 427**

**CREDIT UNITS: 2 UNITS**

**INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO (2) QUESTIONS**

**TIME: 2HRS**

1. What is an unplanned economy? List and explain in each case 3 advantages and disadvantages of an unplanned economy. (30marks)
2. Enumerate and discuss 5 features of a socialist economy. (20marks)
3. Distinguish between the micro and macro economy as perspectives of an economic entity. (20marks)
4. Enumerate and discuss 3 economic decision makers within an economy. (20marks)

- iii. The lateral line
- iv. The fins
- v. The tail

b. Provide an overview of fish preservation processing in Nigeria. (9marks)

#### Q5

- a. Enumerate four (4) hatchery premise that the manager would strive to incorporate into hatchery programs. (4marks)
- b. Succinctly explain hypophysation (fish pituitary extracts) (11marks)

#### Q6

- a. Explain packaging and storage as advanced methods of fish processing. (3marks)
- b. Write note on any three (3) of the listed fish preservation methods (12marks)
  - i. Cooling and icing
  - ii. Salting and pickling
  - iii. Air drying and smoking
  - iv. Fish sauces and pastes

#### Q7

- a. Explain pretreatment as advanced fish processing method. (3marks)
- b. List and explain any six (6) methods of fish processing. (12marks)

#### QUESTION 4

a. Define Work done

**3marks**

A projectile of mass  $M$  explodes in flight into three pieces. The first mass  $m_1 = M/2$  continues to travel in the same direction as the original projectile. The second mass  $m_2 = M/6$  travels in the opposite direction and  $m_3 = M/3$  comes to rest. The energy  $E$  converted from chemical energy of the explosive to final state mechanical energy is five times the initial kinetic energy of the projectile. What are the velocities of the three pieces?

**12Marks**

#### QUESTION 5

a. Discuss the Lagrangian Approach to Mechanics

**3Marks**

b. Calculate the work done by gravity on a particle shot upward with velocity  $\vec{v} = v_0 \vec{z}$  in the time  $0$  to  $t_f$ .

**12Marks**

#### QUESTION 6

a. Define the two types of constraints

**6Marks**

b. What work is done by a force  $F = (2xN)i + (3N)j$ , with  $x$  in meters, that moves a particle from a position  $r = (2m)i + (3)j$  to a position  $r_f = -(4m)i - (3)j$

**9marks**