



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF POLITICAL SCIENCE
POP EXAMINATION QUESTION
2024 1 EXAMINATION**

COURSE CODE: POL 324

COURSE UNIT: 3

**COURSE TITLE: POLITICS OF DEVELOPMENT AND
UNDERDEVELOPMENT**

INSTRUCTION: ANSWER ANY FOUR QUESTIONS

TIME: 3 HRS

1. a. What do you understand by Multinational Corporations?
b. State five positive impact of Multinational Corporations.

2. a. Explain the concept of Globalisation
b. Discuss the two perspectives of Globalisation

3. Give a critical appraisal of underdevelopment in Africa

4. Explain with good examples the significance of the dependency theory in analysing underdevelopment in Africa

5. Development is the advancement of socio-economic and political spheres of a country. Substantiate this assertion by highlighting five features of developed countries.

- (2c) i. Explain how squalene epoxide (2,3-oxidosqualene) is produced (2 marks)
 ii. State four sources of Nerolidol (4 marks)

QUESTION THREE

- (3a) i. Draw the structure of quinoline (3 marks)
 ii. Explain what you understand as gonane (2 marks)
- (3b) i. Enumerate the biological importance of sesquiterpenes (4 marks)
 ii. Draw the structure of quinidine (3 marks)
- (3c) i. Describe the core of steroids (4 marks)
 ii. What is the name given to the derivatives of putrescine, spermidine and spermine? (2 marks)
- iii. Quinolizidine derivatives belong to which group of alkaloids with nitrogen heterocycles? (2 marks)

QUESTION FOUR

- (4a) i. Explain how steroids varies (2 marks)
 ii. Identify the type of alkaloids present in Colchicine, Ziziphin, Spermine and Licoctonine. (4 marks)
 iii. What are pseudalkaloids? (2 marks)
- (4b) i. Mention two steroids that lanosterol can be converted into? (2 marks)
 ii. Write down four (4) examples of β -Phenylethylamine derivatives (4 marks)
- (4c) i. How many carbon atoms in cholesterol and testosterone? (4 marks)
 ii. Give two examples of peptide alkaloids with 14-membered cycle (2 marks)

QUESTION FIVE

- (5a) Identify the biological precursors of alkaloids and give five examples (8 marks)
- (5b) Name the reactions through which dimeric alkaloids are formed from monomers of the same type. (6 marks)
- (5c) i. Explain the biological functions of alkaloid in regard to protection (4 marks)
 ii. What class of alkaloids do solanidine and veralkamine belong to? (2 marks)