

NATIONAL OPEN UNIVERSITY OF NIGERIA FACULTY OF SOCIAL SCIENCES DEPARTMENT OF POLITICAL SCIENCE 2022_2 EXAMINATIONS

2023_2 EXAMINATIONS_

COURSE CODE: POL 301

COURSE TITLE: RESEARCH METHODS IN POLITICAL SCIENCE

COURE UNIT: 3 UNITS

TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER ANY 4 QUESTIONS

Rationalize the concept of Empiricism (5marks)

1b. Identify and describe 10 Significance of Research (12.5marks)

2a. What are the significance of qualitative and quantitative investigation? (7.5marks)

2b. Critically assess the Nature of Research in Political Science (10marks)

3a. What do you understand by the concept of Research? (7.5marks)

3b. Identify and explain 5 types of research with an example (10marks)

4a. In your words, describe the concept of Hypothesis (5marks)

4b. Critically assess 2 elements of Philosophical Research. (12.5marks)

5a. Vividly describe 5 motives for Sampling (7marks)

5b. Outline and explain the concept of Sampling Error (10.5marks)

QUESTION THREE

(3a) In [Co(H₂O)₆]²⁺ the observed magnetic moment is higher than the predicted value; Explain briefly the reason for this.

(4 marks)

(3b) Describe bronze in terms of composition, specific properties and uses.

(5 marks)

(3c) Complete this reaction:

$$Si_3H_{(1)} + 5O_2(g) \rightarrow 3SiO_{2(s)} + 4H_2O_{(1)}$$

(3 marks)

QUESTION FOUR

(4a) Lanthanides occur in only one oxidation state. What is the oxidation state? Explain the reason for this.

(7 marks)

(4b) Write down the chemical equations for the reactions of lanthanide elements with

(i) water. (ii) acids

(5 marks)

QUESTION FIVE

(5a) State TWO postulates of the Werner's theory.

(4 marks)

(5b) What is radioactivity? Give TWO characteristics of radioactivity.

(5 marks)

(Sc) Describe briefly the properties of β -particles.

(3 marks)

QUESTION SIX

(6a) (i) What is a ligand? (2 marks) (ii) Discuss briefly the classification of ligands in coordination chemistry (10 marks)