



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91 Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi, Abuja.
DEPARTMENT OF SCIENCE EDUCATION

EXAMINATION: 2021_2
COURSE CODE: SED312
COURSE TITLE: EARTH AND THE UNIVERSE
CREDIT UNIT: 2
TIME ALLOWED: 2HOURS
INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO

QUESTION 1.

- a) (i) With the aid of a diagram, illustrate the **internal structure** of the Earth. (ii) States the composition and density of each of the layers of the internal structure. **(14 marks)**
- b) (i) Give any two points in describing each of the outer structure of the Earth (ii) State two importance of each of the structures **(16 marks)** **(Total = 30 marks)**

QUESTION 2

- a) Give a short description on the mode of formation of intrusive and extrusive igneous rock.
- b) List the three (3) types of sedimentary rock and explain the mode of formation of each.
- c) State three different points in differentiating between igneous and sedimentary rocks.

(Total marks = 20 marks)

QUESTION 3

(a) You have been charged to lead the delegation of Junior Secondary School III students on an excursion trip to Olumo Rock in Abeokuta. Give any five points you will cite to convince the young students that rocks are important to the survival of man. **(10 marks)**

- (b) Briefly describe the concept of Greenhouse Effect by stating any five (5) related points. State five greenhouse gases. **(10 marks)**

(Total marks = 20 marks)

QUESTION 4

(a) As a Nigerian representative to the World Summit on Climate Change, provide five (5) pieces of evidence that will be part of your presentation to show that the phenomenon of climate change is indeed a fact and not a fallacy. Add a brief explanation to your points. **(15 marks)**

(b) To a layman on the street, weather and climate are words that can be used interchangeably. Correct this notion by providing the true interpretation of each of the words and point out the basic difference. **(5 marks)** **(Total marks = 20 marks)**