



NATIONAL OPEN UNIVERSITY OF NIGERIA
 Plot 91 Cadastral Zone, Nnamdi Azikwe Express Way, Jabi, Abuja.
FACULTY OF EDUCATION
2020_1 SEMESTER

COURSE CODE: **SED312**

COURSE TITLE: **EARTH AND THE UNIVERSE**

CREDIT UNITS; **2**

INSTRUCTIONS: **ANSWER QUESTION 1 AND ANY OTHER 2 QUESTIONS.**

TIME: **2Hrs**

QUESTION:

1. a. Draw and locate the continents of the modern world on an outlined map. **9 marks**
 b.
 - i. Mention four (4) characteristic features each that differentiate the Devonian and Carboniferous geological periods of the Paleozoic era? **8 marks**
 - ii. Identify and discuss five (5) problems associated with mining. **10 marks**
 - iii. Describe the formation process of igneous rocks. **3 marks**

2. a. State five (5) and explain any two (2) properties used in identification of rocks and minerals. **10 marks**
 b. i. In what 3 ways has space exploration benefitted mankind? **3 marks**
 ii. Mention 3 mineral constituents of the earth's core discovered from analysis. **3 marks**
 c. Contrast between solar eclipse and lunar eclipse? **4 marks**

3. a. Despite its negative consequences on the environment, mining is capable of impacting positively on the socioeconomic wellbeing of a nation. Justify this assertion. **15 marks**
 b. Briefly highlight the role of water vapour in the atmosphere. **5 marks**

4. a. There are four (4) identified areas of challenges in space exploration. Outline these four (4) areas. **4 marks**
 b. Justify with four (4) reasons the existence and operation of the International Space Station (ISS). **4 marks**
 c. Explain briefly the three types of solar eclipses. **12 marks**