MINING

EXAMINATION SCHEME

There will be two papers-1 & 2 both of which must be taken as a composite paper in one sitting for a duration of 2 hours 45 minutes.

**Paper 1:** will consist of forty multiple choice objective questions all of which are to be answered in 40 minutes for 40 marks.

**Paper 2:** will comprise two sections, Section A and Section B as follows:

**Section A:** will consist of 10 short structured questions covering the entire syllabus. All the questions should be answered in 40 minutes for 40 marks.

**Section B:** will consist of five essay-type questions from which candidates are to answer any three questions for 60 marks in 1 hour 25 minutes.

**SAMPLE OBJECTIVE QUESTIONS**

1. What is the name of the outermost zone of the inner structure of the solid earth?
   A. Sima
   B. Mantle
   C. Sial
   D. Barysphere

2. Which of the following is a gemstone?
   A. Quartz
   B. Ruby
   C. Feldspar
   D. Mica

3. A mandatory safety project that is normally embarked upon before projects are carried out is called
   A. feasibility study.
   B. market segmentation.
   C. environmental impact assessment.
D. capital budgeting.

4. Which of the following minerals is formed through the process of sedimentation?
   A. Iron ore
   B. Granite
   C. Basalt
   D. Limestone

5. During what age did mining start?
   A. Space age
   B. Iron age
   C. Bronze age
   D. Stone age

6. Which of the following is a common disease that is associated with mining activities?
   A. Appendicitis
   B. Asthma
   C. Malaria
   D. Indigestion

7. Which of the following is an environmental law which governs the treatment, storage and disposal of effluents?
   A. Investment law
   B. Financial law
   C. Waste law
   D. Tax law

8. Which of the following is a technique used in feasibility studies?
   A. Geophysical technique
   B. Hydrometallurgical technique
   C. Electrometallurgical technique
D. Pyrometallurgical technique

9. The North Central Highlands of Nigeria is mainly made up of
   A. sedimentary deposits.
   B. metamorphic rocks.
   C. basement complex rocks.
   D. clay deposits.

10. Which of the following is not a feature of underground mine?
   A. Shaft
   B. Hanging wall
   C. Vem
   D. Humus

SHORT STRUCTURED QUESTIONS

1. Name four Personal Protective Equipment (PPE) used in mining operations. (4 marks)

2. State four advantages of surface mining. (4 marks)

3. What are the two main products of mineral processing? (4 marks)

ESSAY QUESTIONS

1. (a) What is mining? (2 marks)
   (b) Outline five economic benefits of mining. (10 marks)
   (c) Highlight four problems associated with mining. (8 marks)

2. (a) Name the three classes of rocks. (3 marks)
   (b) Describe how any two of the three classes of rocks are formed. (12 marks)
   (c) With the aid of a diagram, explain the rock cycle. (5 marks)