

SERIES GEOLOGY, COEFFICIENT FOUR

MAJOR PAPERS GEOLOGY

TIME: 3 HOURS

INSTRUCTION: ANSWER ALL QUESTIONS

- (1a) Distinguish between the reflection and refraction seismic methods. (8mks)
- (b) Critically assess the role of gravity magnetic and seismic geophysical methods in the search for hydrocarbon. (17mks)
- (2) Show your knowledge of the crystallography chemistry and diagnostic features of the minerals: Zircon, Galena, Calcite, and Olivine. (25mks)
- (3a) Define (i) Axial plane (ii) Fold axes. (6mks)
- (3b) Fully account for the geometry or tectonic setting and topography of the following:
- (i) Normal faults (ii) Thrust faults (iii) Strike slip faults. (6.5 mks each)
- (4a) Bivalves for example *Solen, Pecten, Mya*, and *Ostrea* display characteristic morphologies which are related to their modes of lives? Appreciate this relationship with reference to the named bivalves. (20 mks)
- (4b) Distinguish between remanent fossils and trace fossils. (5mks)

ANSWERS TO ENTRANCE 2003