

THE UNIVERSITY OF BAMENDA
COMMON ENTRANCE EXAMINATION JULY 2007 SESSION
FIRST CYCLE – GENERAL EDUCATION

PAPER: GEOLOGY (Major) SERIES: GEOLOGY DURATION: 3hrs – COEF 4

Instructions: For each question, choose the correct answer from **A, B, C.**

1. The composition of the mantle by volume and mass is:
A – 16% by volume and 90% by mass C. – 95% by volume and 90% by mass
B – 83% by volume and 68% by mass
2. Which of the following crystal system belong to the group of systems referred as the special sets? A – Cubic B – Monoclinic
C – Hexagonal
3. The silicates that exhibits the strongest bonding are:
A – Inosilicates B – Tektosilicates C – Phyllosilicates
4. To which system do most minerals tend to crystallize out?
A – Cubic B – Orthorhombic C – Monoclinic
5. The following minerals A – quartz, B – cristobalite C – tridymite form polymorphs
Choose the polymorph that exists at a temperature range of 1450⁰C to 1750⁰C.
6. The criteria for any sedimentary rocks to be classified as a politic rock is that it should fall within Wentworth grade size of:
A – 2 – 1 mm B – 1 – (1/16) mm C – Less than (1/16) mm

7. Which of the following sedimentary rocks is not formed by chemical precipitation?
A – Evaporate B – oolitic limestone C – Kaolin
8. Marine environments that are known to have turbidite being common are:
A – Bathyal environments B – nerite environment C – abyssal environment
9. Igneous rocks display textures like fine, medium and coarse grain. Which of these classes of igneous rocks ultrabasic, basic and acid will not display all the above textures:
A – Ultrabasic B – basic C - kaolin
10. Plagioclase feldspars form essential minerals in many igneous rocks. Choose the plagioclase feldspar that will occur as an essential mineral in granite rocks:
A – Orthoclase B – albite C – andesine
11. The development of pegmatitic textures in rock depends on:
A – A high concentration of residual silica B – A high concentration of volatile rich magma
C – A high concentration of ferromagnesian
12. Choose from the letters A, B, C, the conditions that favor the development of burial metamorphism.
A – Low temperature, low pressure B – high temperature, low pressure
C – Low temperature, high pressure
13. Which of these metamorphic rocks develop foliations?
A – Retrograde metamorphism B – dynamic metamorphism
C – Contact metamorphism

- 14.** In a supergene enrichment deposit where will the less soluble ore be concentrated?
A – In the gossans B – in the zone of oxidation C – at the zone where the water-table occurs.
- 15.** Select from the list A to C, the facies that belong to contact metamorphism.
A – Sanidine facie; hornblede-hornfels B – eclogite facie; Glaucophane-schist facies
C – pyroxene – hornfels facies; granulite facies
- 16.** Why are crinoids and echinoids considered to belong to the same phylum?
A – They both have a test B – they both have a five-rayed body arrangement
C – The body consist of variable number of small calcareous plates
- 17.** The earliest ammonoids showed sutures that were describes as:
A – Ammonitic B – Ceratitic C – Goniatitic
- 18.** The succession of rocks established along a line of section was found to be NXYZYXN. Given that N is the oldest and Z the youngest, what structure exists along the line of section?
A – An anticline B – a syncline C – a fold
- 19.** If the rate of spreading of an oceanic plate is 10cm/year, how long would it take for basaltic rock produced at the ridge to reach a trench located 300km from the ridge?
A – 3×10^6 yrs B – 2.5×10^{10} yrs C – 3.5×10^{10} yrs.
- 20.** Choose from the following list of radioactive elements that one most suitable for dating Pleistocene deposits:
A – Carbon – 14 method B – Potassium – Argon method C – Uranium – Lead method