

ENTRANCE EXAMINATION INTO YEAR ONE 2005

SERIES GEOLOGY, INSTRUCTIONS: Choose all that apply to each question

- (1) What tectonic plate are you presently on? (a) Mid-Atlantic plate (b) African plate (c) Cameroon plate (d) European plate (e) Arabian plate (f) African continent plate.
- (2) They are geology-related hazards likely to occur in Cameroon, (a) uplift (b) land fill (c) land slide (d) rock fall (e) earthquake (f) tsunami.
- (3) What are the three major types of rocks? (a) volcanic rocks (b) igneous rocks (c) granitic rock (b) metamorphic rocks (e) sedimentary rocks.
- (4) A typical rate of motion is (a) 1 kilometer per year (b) 3-4 meters per year (c) 1-10 centimeters per year (d) 1,000 kilometers per year.
- (5) Oceanic and continental crusts differ in (a) composition (b) density (e) thickness (d) none of the above
- (6) The lithosphere is (a) layer beneath the crust (b) the same as the crust (c) the crust and uppermost mantle (d) a mineral.
- (7) The most common mineral in the earth's crust is (a) stone (b) biotite (c) amphibole (g) basalt
- (8) On Mohs hardness scale ordinary window glass has a hardness of about (a) 2-3 (b) 3-4 (c) 7-8 (d) 9-10.
- (9) The ability of a mineral to break along preferred direction is called (a) fracture (b) crystal form (c) hardness (d) cleavage (e) softness
- (10) Processes transforming igneous rocks into sediment are called (a) lithification (b) erosion (c) solidification (d) weathering (e) melting (f) cementation.
- (11) Which is not an intrusive igneous rock? (a) diorite (b) andesite (c) gabbro (d) granite.
- (12) The geothermal gradient is on the average about (a) 1°C/km (b) 10°C/km (c) 40°C/km.
- (13) The most common igneous rock of the continents is (a) basalt (b) granite (c) rhyolites (d) ultramafic (e) soil (f) andesite.
- (14) They are formed from volcanic lavas (a) basalt (b) diorite (c) granite (d) andesite (e) gabbro (f) dolomite.
- (15) The most common end product of the chemical weathering of feldspar is (a) quartz (b) clay minerals (c) pyroxene (d) amphibole (e) soil.

- (16) The soil horizon leaching by down ward percolating water is the (a) O horizon (b) B horizon (c) C horizon (d) A horizon.
- (17) Compaction and cementation are two common processes of (a) Erosion (b) transportation (c) deposition (d) lithification.
- (18) They are processes of formation of sedimentary rocks from sediments? (a) melting (b) weathering (c) erosion (d) lithification (e) solidification (f) compaction.
- (19) Sediment particles are classified and define according to the (a) color of individual fragments (b) size of individual fragments (c) density of individual fragment (d) porosity of individual fragments (e) none of above.
- (20) Different types of sedimentary rocks are (a) clastic (b) dolomite (c) organic (d) shale (e) chemical (f) sandstone.
- (21) The main difference between sedimentary breccias and conglomerate is on the (a) size of fragment (b) chemical composition of fragment (c) mineralogical composition of fragments (d) shape of fragments.
- (22) The chemical element found in dolomite not found in limestone is? (a) Ca (b) Mg (c) C (d) O (e) Al (f) Si.
- (23) Metamorphism of limestone may contribute to global warming by the release of? (a) oxygen (b) hydrogen (c) sulfuric acid (d) carbon dioxide (e) fluorine (f) heat.
- (24) Which is not a metamorphic rock? (a) gneiss (b) schist (c) phyllite (d) slate (e) none of the above.
- (25) The schistose texture in metamorphic rocks always shows (a) foliation (b) elongate mineral (c) contact metamorphism (d) quartzite (e) aligned mineral.
- (26) Metamorphic rock produces igneous rock throughout processes of: (a) weathering and erosion (b) lithification and metamorphism (c) melting and solidification (d) erosion and weathering (e) solidification and melting.
- (27) C-14 dating can be used on all of the following except (a) wood (b) shell (c) granite (d) bone (e) organic sediment (f) peridotite.
- (28) Which division of geology time was the longest? (a) Precambrian (b) Paleozoic (c) Mesozoic (d) Cambrian.

- (29) "Geology processes operating at present are the same processes that have operated in the past" is the principle of (a) correlation (b) catastrophism (c) continuity (d) uniformitarianism (e) present.
- (30) On the "Geologic time scale" "Cretaceous" is an, (a) era (b) year (c) period (d) epoch.
- (31) Land sliding is the best known type of (a) flooding (b) mass wasting (c) rock fall (d) soil movement (e) gravity.
- (32) Which is not a type of fold (a) isoclinal (b) overturned (c) recumbent (d) open (e) thrust.
- (33) Fractures in bedrock along which movement has taken place are called (a) crevasses (b) cracks (c) joints (d) faults (e) fracturation.
- (34) Normal faults accommodate what kind of strain? (a) ductile (b) shortening (c) extensional (d) compact.
- (35) The main composition of mid-oceanic ridges is (a) granitic (b) rhyolitic (c) basaltic (d) magmatic.
- (36) Tsunami is caused by (a) submarine earthquake (b) submarine animal (c) submarine volcanic eruptions (d) rainfall (e) human activity.
- (37) The boundary that separates the crust from the mantle is called the (a) lithosphere (b) asthenosphere (c) Mohorovicic discontinuity (d) none of the above.
- (38) The core of the earth is probably composed mainly of (a) silicon (b) sulfur (c) oxygen (e) iron (f) quartz.
- (39) An active continental margin is characterized by (a) earthquakes (b) ancient mountain belt (c) young mountain belts (d) volcanoes (e) all of the above.
- (40) The mantle convection is the engine of (a) sea-floor spreading (b) landside (c) plate motion (d) continental drift.