NAME : Abdul Basit Khan
ID = 16319
Subject = Engineering geology
Department = "Civil"
Reg No :
section = "B"

Q A :-

Ans (a) :-
The name given to this process is physical-wheathering.

Ans(b) :-
When the sediment grains flow in the river it undergoes two main changes
(i) reduction in particle size due to breaking up.
(ii) rounding the orignionaly angular fragment due to callision etc.

Ans (c) :-
Cementation is the changing of sediment into rock by filling space around the sediments with chemical perlipitates of minerals. Binding the loose sediments and forming salid rock. Calcite and Silica are common minerals that cement the sediments together.

Ans (d):-

Metamarphism means change in farm. metamarphic rocks may be farmed by simply being deep beneath the earth crust surface subjected to high temperature and great pressure of rock layer above it. Metamarphism is the change of minerals or geologic texture (distinct arrangement of minerals) in pre-existing rocks (protoliths). with protolith melting into liquid magma (a salid state change) The change occur primerly due to heat, pressure and introduction of chemically active fluids.

contact metamarphic rocks are farmed when the pre existing rocks comes in contact with magma and changes.

Regional metamarphism is when the existing rocks are transfarmed in large area by tremendous heat and pressure created by tectonic farces.

El

point "D" shows ~~that~~ the process that when the heat is so high and due to extream pressure from burial when the newly farmed metamarphic rock continues to heat it eventualy melt and becomes malten magma. when it coals it farm an ignious rock.

QB:-

Ans(i):-

(1) [4] angular boulders

(2) [2] rounded pebbles and sand

(3) [1] clay mud

Ans(ii):-

When the sediment particles flow in the river the changes that occur in the sediment particle depends upon the flow of water in river and size of the sediment particle. If the size of sediment particle is large and the flow of water is high then it will break into more smaller peices and flow with more speed it may get attached to some thing or stops at a calm place like lake, pounded and If the sediment particle is small and strong then it collides withe other rocks and become rounded in shape due to smaller surface area the sediment does not break entirely to small pieces and kept on moving ie the greater the distance of flowing water greater will be its rounded shape.

Qc:

Ans(I):

The volcano shown in the figure is composite volcano and the category it fits is explosive or central.

Ans(II):

(a) magma contain dissolved gasses, which provide the driving forces that cause most volcanic eruption. As magma rises towards the surface and pressure decreases, gases are released from liquid portion of the magma (melt) and continue to travel upward and are eventually released into the atmosphere which on reacting with particles of atmosphere produce ash column.

(b)

(i)

minor shakes (the increase in the frequency and intensity of felt earthquakes)

(ii) volcano ash contain tiny jagged particles of rocks and natural glass blasted into the air by volcano

+ The earth quakes that comes due to erruption of volcano is hazardous to live stock and human life.

Q.D:-

Ans(i):- (1) weathering
(2) Erosion
(3) Erosion
(4) weathering

Ans(ii):-
The rain makes lime stone weather more quickly than sand stone because the chemical attack on lime stone by rain that is naturaly acedic (containing dissalved carbondioxide) and compound calcite. while sand stone causes their grains to break up over time and become sand and clay particles.

Ans(iii):-
Igneous rocks never contain fossils because any fossils in the orignional rocks will have melted when the rock melted to form magma.

Ans(iv)
Igneous rocks are formed by the ~~dirg~~ crystallisation of magma. The difference blw granite and basalt crystal size is due to Silica content and their rates of coaling.

-> Basalt contain 53% SiO_2

-> granite contains 73% SiO_2 instrusive slowly cooled inside the crust.

Ans(v):- formation of scree sediments is the result of physical and chemical weathering and erosion acting on rock face. causing scree sediments falling from mountains, cliffs etc. In my opinion one process that might be responsible for producing the large, angular poorly sorted fragments in the scree sediment collection at the bottom of the cliff is erosion.