**Invertebrate Palaeontology/ 2nd year Earth Sciences and Petroleum**

**Samples of Questions:**

**Q1) Define the following:**

1- Pseudopunctate brachiopod shell 2- Petrifaction 3-Thamnasteroid corals 4- Stromatoporoid coenosteum 5- Bryozoan fenestrules.

**Q2) Select the suitable choice for the following blanks:**

1. Fossils may be very abundant in ----------------------- rocks.

limestone sandstone igneous

1. The usual shape of solitary rugosan corals is ------------------------.

ceratoid trochoid turbinate

1. The spicules that are found in the Chaetetid skeletons are of ---------------------- type.

tetraxon monaxon triaxon

1. Septa in tabulate corals are --------------------- in number.

four twelve six

**Q3) Determine whether the following statements are true or false:**

1. The earliest living organisms on the earth were eucaryotes.
2. In most rugosan corals the tabulae terminate externally in marginarium.
3. The autozooecia in trepostome bryozoans are filled with closely spaced diaphragms.
4. The shell structure in terebratulid brachiopods is pseudopunctate.

**Q4) Enumerate the following, and for each explain one only.**

1**-** Types of form of corallum in tabulate corals.

2- Types of preservation of altered hard part remains of organisms.

3- The ways of attachment of brachiopod to the sea floor.

**Q5) Compare between the following:**

1. Pre-Cambrian fossils and post-Cambrian fossils.
2. Cerioid tabulate corals and fasciculate tabulate corals.
3. External mould and cast of a bivalve shell.

**Q6) Interpret the following:**

1. Hermatypic corals can flourish only in the photic zone.
2. Shells preserved by replacement are lost their original microstructure.
3. Rate of evolutionary changes in Precambrian life was extremely slow.
4. Fasciculate tabulate corals usually lived in quiet water environment.

**Q7) Explain the following:**

1. The steps of septal growth in scleractinian corals.
2. How the state of fossils preservation depends on the processes of diagenesis.
3. Muscle platform in highly biconvex shells of brachiopoda.

**Q8) Describe the following:**

1. The zoarium of fenestellid bryozoans.
2. The skeleton of archaeocyathids.
3. The shell of *Lingula*.