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Suman (Burdak), Notes for
B.Sc part 3rd, paper VII.

Question:- Write Notes on PAUNIS-
PECULIARITIES OF PALAEOZOIC
ERA?

Ans:- Paleozoic :-

The paleozoic
(or Paleozoic) Era (/,
pæl.i.ə'zɔ:z.ɪk, i-ɔz-, , pæl.li.ə-
-li.ɔz-/pæl-ee-ə-zoh-ik, -ee-
oh, -poy-lee, -lee-oh-,
from the Greek *palaios*
"old" and *zōē* (ζωή), "life"
meaning "ancient life." is the
earliest of three geologic
eras of the Phanerozoic
Eon. It is the longest of
the Phanerozoic Eon. It is
the longest of the phae-
-zoic eras, lasting from

years ago, and is subdivided into six geologic periods (from oldest to youngest): the Cambrian, Ordovician, Silurian, Devonian, Carboniferous, and Permian. The Paleozoic comes after the Neoproterozoic and is followed by the Mesozoic Era.

The Paleozoic was a time of dramatic geological, climatic, and evolutionary change. The Cambrian witnessed the most rapid and widespread diversification of life in Earth's history, known as the Cambrian explosion, in which most modern phyla first appeared. Arthropods, molluscs, fish, amphibians, synapsids and diapsids all evolved during the Paleozoic. Life began in the ocean but eventually transitioned into land, and by the late Paleozoic it was dominated by various forms of organisms. Great forests of primitive plants covered the continents, many of which formed the coal beds of Europe

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and eastern North America. Towards the end of the era, large, sophisticated diapsids and synapsids were dominant and the first modern plants (conifers) appeared.

Geology :-

The Paleozoic era began and ended with supercontinents and in between were the rise of mountains along the continental margins, and flooding and draining of shallow seas between the mountain ranges in the interior of the continents. At its start, the supercontinent Pannotia broke up. Paleoclimatic studies and evidence of glaciers indicate that central Africa was most likely in the polar regions during the early Paleozoic. During the early Paleozoic, the huge continental supercontinent (510) million years ago, formed or was forming

Silurian Period :-

The Silurian spanned from 444 to 419 million years ago. The Silurian saw the rejuvenation of life as the Earth recovered from the previous glaciation. This period saw the mass evolution of fish, as jawless fish became more numerous, jawed fish evolved, and the first fresh-water fish evolved, though arthropods, such as sea scorpions, were still apex predators. Fully terrestrial life evolved, including early arachnids, fungi, and jointed-limbeds. The evolution of vascular plants (Cooksonia) allowed plants to gain a foothold on land. These early plants were the forerunners of all plant life on land. During this time, there were four continents: Gondwana (Africa, South America, Australia, Antarctica, Siberia), Laurentia (North America), Baltica (Northern Europe), and Avalonia (Western Europe). The recent sea level rise allowed many

many new species to thrive
in water.

See also :-

- Geologic time scale - system that relates geological strata to time.
- Proterozoic - The earliest part of earth's history: 4600 - 541 million years ago.
- Cenozoic - Third era of the Phanerozoic Eon 66 million years ago to present.
- Mesozoic - Second era of the Phanerozoic Eon: ~ 252 - 66 million years ago.
- Phanerozoic - Fourth and current eon of the geological timescale.