OCEANS, SEAS AND THEIR COASTS

1. a) H-Lagoon

J-Island

K-Tombole

L-Spit

b)(i)

- A gently sloping shore.
- The shore should be shallow
- The breaking waves should have a strong swash and a weak backwash.
- Waves should carry a large load of materials to be deposited.

(ii) Processes involved in marine erosion.

Hydraulic action

- Breaking saves/swash hits against cliff shattering the rock
- The force of breaking waves compress air into the cracks/joints in the cliff face. This enlarges the cracks and part of the rock break off.

Corrosion/Abrasion

- The rock fragments carried by the waves are used as a tool to erode the cliff as the wave break at the cliff face.
- The material/ load carried by the backwash erodes the sea floor.

Attrition

- The searing down of particles/loads as they continuously hit against each other and against the cliff

Solution/corrosion

- The solvent and chemical action weakens and removes the minerals found in the cliff and sea-floor where there are limestone rocks.

c) (i) Objectives to formulate for the study.

- To assess/find out the importance of depositional features.
- To identify different types of depositional features.
- To find out how the features were formed
- To establish how features are distributed along the coast
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- To find out the materials that make up each of the depositional features
- To find out how constructive wave break at the shore.

ii) Methods to use to record the information collected

- Photographing/video taking/filming
- Tape recording
- Taking notes
- Sketching/drawing
- Filling tables Tallying

2. a) Submerged highland coasts

Submerged lowland coast

b) i) Hard rocks carried by waves increase the erosive power of the waves as they hit against the Coast.

ii) A coast made of soft rocks wears away easily when subjected to sea waves.

3. Rise in sea level/eustatic change in base level/positive eustatic change.

Depression of coastlands/submergence of coastlands.

4. Fjords/fyord

   Rias/creeks

   Islands

   Estauaries

5. Coastline is the line reached by the highest storm water and demarcated by a cliff.

6. Destructive waves are waves which have strong backwash and weak swash

   leading to enhanced erosion and less deposition.

7. Erosion features include:

   - Cliffs -Blowholes

   - Caves -Arch

   - Geos -Stacks

   - Stump

8.

- Cliffs are formed by action of destructive waves
- These waves start by cutting a small notch or hollow on the rock face called a notch.
- As soil erosion continues a notch is enlarged.
- The upper section collapses due to its own weight forming a cliff.

9.

- A steeply sloping coast is subjected to sea waves
- Due to wave attacks a notch is formed.
- When the upper side of the notch collapses a cliff develops
- Continued undercutting of the cliff makes the cliff to collapse and to retreat inland

- As cliff retreats it leaves behind a rocky floor which slopes gently towards the see (wave-cut platform)

10.

- Emerged coast
- Submerged coast
- Coral coast

11. a)

- Formed from tiny marine organisms called coral polyps
- Coral polyps live in colonies
- They extract from sea water, calcium and use it to build protective shells
- When they die their skeletons pile together and are commented together by calcareous algae to form a ridge like rock parallel to the shore called coral reef.
- Coral reefs include fringing reefs barrier reefs and a toll.

b)

- Rias have been used to develop habours
- Most resultant land forms are tourists attractions sites
- Some Rias are habitat for marine life which promotes fishing industry
- Coral rock is a raw material for cement industry
- Most of landforms have promoted education and research.

12.

- Shingle beaches are beaches made up of unsorted particles of shells, mud, stones and sand particles of various sizes. Such kind of beaches allow backwash to infiltrate into the beach.

- Sand beaches-these are beaches made up purely of sand. But since sand is compact they don't allow easy infiltration of water into the ground.

13.

- Ria coast
- Fiord coasts
- Dalmatian coast

14.

- Horizontal movement
- Vertical movement

15 a) A- Stack

B- Arch

C- Cave

b) Abrasion and wave action attacks the pre-existing lines of weakness at the base of headland leading to formation of a hollow.

The hollow is enlarged to form a tunnel like chamber known as cave.