

## 444 GPH - Unit (1) Review Questions

- How old is earth?
- What is earth's radius? How far is it?
- Explain and draw earth's internal structure?
- What is the difference between continental crust and oceanic crust?
- List types of plate boundaries? Give examples?
- Define: earthquakes, seismic waves, focus, and epicenter?
- Explain and draw how an earthquake occur?
- What is Wadati-Benioff Zone?
- What are the types of earthquakes?
- List the depth of earthquakes?
- What is the difference between seismometers and seismography?
- Define geophysics?
- Explain and draw types of seismic waves?

## 444 GPH - Unit (2) Review Questions

- Define oceanography? What does it study?
- List the divisions of oceanography?
- What are the roles of oceans?
- Explain how to study oceans?
- List the instruments used to investigate oceans?
- Define ocean floor?
- Explain and draw Wilson Cycle?
- What is bathymetry?
- Write down divisions of ocean floor?
- Define continental margins and its classifications?
- What is the difference between: continental shelf, continental slope, continental rise and ocean basin?
- Explain and draw mid-oceanic ridge?

## 444 GPH - Unit (3) Review Questions

- What technique marine geophysical methods use the most to investigate seabed structures?
- What are the most common methods used in seabed geophysics?
- List types of geophysical survey equipment? What can data display?
- How can we get marine reflection data?
- What is the concept of multibeam echo sounding?
- What are seabed characteristics for surface, shallow subsurface and deep subsurface structures?
- What is the sequence of seabed soils characterization?
- What is the development process?
- Explain the desk study?
- Into how many groups oil and gas offshore structures can be categorized?
- List the most significance difference between offshore survey and onshore survey?

## 444 GPH - Unit (4) Review Questions

- Define sound? How can it be characterized?
- What factors of ocean environment can affect sound propagation?
- What factors of coastal variability can affect sound propagation?
- What is the difference between active and passive sonar?
- What is the concept of echosounders?
- What properties can be displayed in sonar image?
- List the characteristic of sound in se water?
- What factors can affect choosing of frequency?
- How does SONAR works?
- What is the reason for using sound waves in marine survey?

## 444 GPH - Unit (5) Review Questions

- Draw the components of an echo event at the sea floor?
- What is a sidescan sonar?
- Define the following: Footprint, Fish, Hull?
- Draw a typical echosounder output?
- What is a sonograph?
- List the characteristics of sonograph?
- Explain the concept of sonograph?
- Draw a sidescan sonar geometry?
- What factors that can affect the intensity of the returning signal?
- Define acoustic reflectivity?
- What are the limitations of sidescan sonar?

## 444 GPH - Unit (6) Review Questions

- What information magnetic prospecting provide?
- Which type of rocks have small magnetic effect, sedimentary or igneous?
- What is the reason for having variations in magnetic intensity?
- What types of magnetic surveys there are?
- Explain and draw earth's magnetic field?
- What is magnetometer?
- Why the different effects on the magnetic files of rock is important?
- Explain and draw the concept of marine magnetometer?
- List the instruments used for sea floor mapping and sub-bottom mapping?
- For what is marine magnetometer used for?
- List parts of marine magnetometer?