1. Draw a profile and cross section of ONE of the following modern tankers:
   i) Deep-sea Oil/Chemical tanker over 30,000 dwt (IMO Type 1 and 2 cargoes)
   ii) LNG carrier
   iii) VLCC

   Provide the main details and dimensions. Using the world map provided, describe THREE trade routes on which your chosen vessel is regularly fixed. Select TWO of these routes and indicate what weather conditions could be anticipated for a vessel loading in November.

2. A shipowner is planning to increase its fleet of tankers. In your role as an independent tanker broker provide a market report identifying potential opportunities available for VLCC tonnage up to 2018. In your opinion, what are the influences on future market trends for this class of tanker?

3. Draft a firm offer for a voyage charter including all the main terms. Identify the key differences between an offer for a voyage employment and a time charter employment.

4. Answer ALL parts of the question:
   a) Identify the main causes of delay in pumping cargo during discharge of clean and dirty petroleum cargoes.
   b) What evidence would be needed to report the circumstances relating to slow pumping in the petroleum trade?
   c) What provision is made for this in the pumping clause?

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5. When fixed on time charter, a vessel will be regarded as off-hire when it is not at the time charterer’s disposal. Explain the reasons why a vessel may be off-hire.

6. Answer **ALL** parts of the question

Demurrage is paid to owners when laytime is exceeded.

   a) Define laytime
   b) With respect to Port Time, how does the calculation of Worldscale 100 rates vary from Worldscale hours, terms and conditions?
   c) What periods are usually excluded from tanker laytime?
   d) Describe the difference between demurrage and damages for detention.

7. Answer **ALL** parts of the question

   a) Prepare a tanker voyage estimate for a VLCC performing a round voyage loading in Ras Tanura and discharging in Le Havre.
   b) Explain the essential details required including proposed route and gross voyage surplus assuming a freight rate of $WS100 = US$40.00 per metric ton.
   c) Explain how a break even rate is calculated.

8. A shipowner is planning to enter the market to secure employment for their tanker. When selecting a broker what services, expertise and ethics would the owner expect?