

OIL AND GAS ACCOUNTING

QUESTIONS BANK

Section 1: Multiple Choice Questions

1. Which of the following statements best describes a Joint Venture (JV) in the context of oil and gas operations?

- a) It involves a single foreign oil company operating independently.
- b) It requires the host government to bear all exploration costs.
- c) It is an agreement where multiple foreign oil companies and the host government jointly develop oil mining licenses and facilities.
- d) It ensures that the foreign oil company receives compensation regardless of oil discovery

2. **What is a key feature of a Service Contract in oil and gas operations?**

- a) The contractor gains ownership of the oil produced.
- b) The government provides all funds for exploration and production activities.
- c) The contractor provides all funds for exploration and production, while the government retains ownership of the oil.
- d) The contractor shares the costs equally with the government

3. **What is the primary objective of Indigenous Contracts in the context of oil and gas operations?**

- a) To ensure foreign companies dominate the oil and gas sector.
- b) To encourage local participation in the exploration and production (E&P) of oil and gas.
- c) To reduce the government's regulatory oversight.
- d) To eliminate the payment of royalties and taxes by local companies

4. **What is the purpose of applying Reserve Adjustment Factors (RAFs) in risk management for oil and gas reserves?**

- a) To increase the estimated reserves
- b) To reflect varying degrees of risk by adjusting reserve estimates downward
- c) To provide an optimistic view of future cash flows
- d) To ensure all reserves have equal value

5. **Which type of risk is associated with changes in technology and knowledge?**

- a) Business Risks (BR)
- b) Technical Risks (TR)
- c) External Risks (ER)
- d) Health, Safety, Security, and Environment Risks (HR)

6. **What is Cost Oil in a production sharing contract?**

- a) Share of production allocated to the government mineral owner
- b) Share of production allocated to the
- c) Share of production to the operator for certain costs
- d) Share of production allocated to investors

7. Which term refers to a well that has production in paying quantities or commercial quantities?

- A) Depletion
- B) Dry hole
- C) Reserves
- D) Commercial well

8. Depreciation is associated with the decrease in the values of which type of assets?

- A) Intangible assets
- B) Oil and gas reserves
- C) Tangible assets
- D) Financial assets

9. Amortization is typically associated with the expiration of the cost of which type of assets?

- A) Tangible assets
- B) Financial assets
- C) Intangible assets
- D) Liquid assets

10. What is the characteristic of a Dry Hole in oil and gas exploration?

- A) It yields production in paying quantities
- B) It is drilled with the intention of producing hydrocarbons
- C) It does not yield production in paying quantities
- D) It is associated with high lease operating expenses

11. What are Acquisition Costs in the context of the oil and gas industry?

- A) Costs associated with geological and geophysical studies
- (B) Costs incurred to purchase, lease, or acquire a property
- C) Costs associated with drilling and exploration activities
- D) Costs of dismantling and restoring an oil and gas asset

12. What is a joint interest in the context of oil and gas operations?

- A) A sole proprietorship managing oil operations
- B) An arrangement where two or more parties combine resources to manage oil and gas operations
- C) A situation where one company manages all oil operations
- D) A government-only funded oil project

13. Which agreement involves the government engaging a contractor to carry out petroleum operations with the contractor assuming initial exploration risks?

- A) Concession
- B) Indigenous Contract
- C) Production Sharing Contract
- D) Joint Venture

14. Under a service contract without risk, who retains ownership of the oil produced?

- A) The contractor
- B) The host government
- C) Jointly by the contractor and the government
- D) The local indigenous companies.

15. What is a common objective of CSR programs implemented by oil and gas companies?

- A) Increasing short-term profitability
- (B) Enhancing community development and environmental sustainability
- C) Expanding drilling operations to new regions
- D) Minimizing tax obligations

16. One of the followings is a significant characteristic of the oil and gas industry?

- a) High level of risk and uncertainty
- b) short lead-time between investment and returns
- c) Minimal regulation by government authorities
- d) Technical and operational simplicity

17. In the oil and gas industry, what does the term "downstream operations" refer to?

- a) Exploration and production activities
- b) Transportation, refining, and marketing of processed products
- c) Acquisition of hydrocarbon assets
- d) Extraction of oil and gas reserves

18. What is Net Revenue Interest (NRI) in the oil and gas industry?

- a) Percentage of revenue received after taxes
- b) Percentage of revenue received after expenses and taxes
- c) Percentage of revenue received after royalty payments and expenses
- d) Percentage of revenue received after exploration costs

19. A well drilled with the intention of producing hydrocarbons but does not yield production in paying quantities is known as a:

- A) Commercial well
- B) Dry hole
- C) Reserves well
- D) Depleted well

20. What does depletion refer to in the context of asset valuation?

- A) Increase in asset value over time
- B) Reduction in asset value due to market fluctuations
- C) Reduction in asset value over time due to extraction or use
- D) Increase in asset value due to production

21. In Kurdistan, what percentage of the oil produced do oil and gas companies typically pay as royalty?

- A) 40%
- B) 10%
- C) 60%
- D) 25%

22. What is the primary purpose of risk management in the oil and gas industry?

- A) To maximize profits by increasing oil prices
- B) To enhance decision-making by considering potential risks and their impacts
- C) To reduce operational costs
- D) To minimize the use of resources

23.. Which of the following is classified as a business risk in the oil and gas industry?

- A) Changes in technology
- B) Political instability
- C) Inappropriate business strategies
- D) Health and safety issues

24. Which of the following is an example of a technical risk in the oil and gas sector?

- A) Inadequate resources
- B) Delay in permit approval
- C) Changes in technology
- D) Community relations issues

25. How are risk-adjusted reserves typically calculated in the oil and gas industry?

- A) By applying reserve adjustment factors (RAFs) to reserve estimates
- B) By increasing reserve estimates based on market trends
- C) By eliminating the riskiest reserves from calculations
- D) By multiplying reserves by expected oil prices

Section B: True or False

1. Acquisition Costs in the oil and gas industry refer to costs incurred to purchase, lease, or acquire a property.

True or False

2. A joint interest in oil and gas operations refers to an arrangement where two or more parties combine resources to manage oil and gas operations.

True or False

3. A Production Sharing Contract involves the government engaging a contractor to carry out petroleum operations, with the contractor assuming initial exploration

risks.

True or False

4. Under a service contract without risk, the host government retains ownership of the oil produced.

True or False

5. A common objective of CSR programs in oil and gas companies is enhancing community development and environmental sustainability.

True or False

6. A significant characteristic of the oil and gas industry is a high level of risk and uncertainty.

True or False

7. In the oil and gas industry, "downstream operations" refer to transportation, refining, and marketing of processed products.

True or False

8. Net Revenue Interest (NRI) is the percentage of revenue received after royalty payments and expenses.

True or False

9. A well drilled intending to produce hydrocarbons but which does not yield production in paying quantities is known as a dry hole.

True or False

10. Depletion refers to the reduction in asset value over time due to extraction or use.

True or False

11. In Kurdistan, oil and gas companies typically pay 10% of the oil produced as royalty.

True or False

12. The primary purpose of risk management in the oil and gas industry is to enhance decision-making by considering potential risks and their impacts.

True or False

13. Inappropriate business strategies are classified as a business risk in the oil and gas industry.

True or False

14. Changes in technology are an example of a technical risk in the oil and gas sector.

True or False

15. Risk-adjusted reserves are typically calculated by applying reserve adjustment factors (RAFs) to reserve estimates.

True or **False**

Section C: Short answer Questions

1. Briefly discuss the difference between downstream and upstream sector in the oil and Gas Industry.
2. Distinguish between Exploration and Appraisal Costs and Acquisition Costs in the oil and gas industry, providing examples of each.
3. Differentiate between depreciation and depletion in the context of asset valuation in the oil and gas industry.
4. Analyze the advantages and disadvantages of indigenous contracts in the context of oil and gas exploration and production
5. Define Royalty Interest and provide an example of how it is applied in oil and gas operations assuming a total production is 4,000,000 Barrels.
6. Differentiate between Drilling cost and production Costs in the oil and gas industry, providing one examples of each.
7. What is the difference between commercial oil well and dry well in the oil and gas industry?
8. Define CSR and provide 4 activities covered in CSR
9. Briefly discuss the difference between downstream and upstream sector in the oil and Gas Industry.
10. Distinguish between Exploration and Appraisal Costs and Acquisition Costs in the oil and gas industry, providing examples of each.
11. Differentiate between depreciation and depletion in the context of asset valuation in the oil and gas industry.
12. analyses the advantages and disadvantages of indigenous contracts in the context of oil and gas exploration and production
13. Define Royalty Interest and provide an example of how it is applied in oil and gas operations assuming a total production is 4,000,000 Barrels.
14. Differentiate between Drilling cost and production Costs in the oil and gas industry, providing one examples of each.
15. What is the difference between commercial oil well and dry well in the oil and gas industry?

Section C : Problem Solving Questions

Question 1

ASD Oil and Gas Company entered into a joint operating agreement with KRG to drill an oil well located in Masif Mountain. Assume that the well is drilled at a cost of \$1000,000. Disina Oil Company pays all the drilling and associated costs

Month	Gross Sales	Sale Price	Operating Expenses
August	11,000 bbl	\$50/bbl	\$24,000
September	5250 bbl	\$80/bbl	\$28,000
October	8,500 bbl	\$64/bbl	\$19,000

The following details were provided:

1. The royalty interest is 19% of the total revenue, while the Cost Oil remained at 15%.
2. The participation rate is 50% for ASD Oil and Gas Company, while KRG retained the remaining 50%.
3. All the figures are in thousands

Required:

1. Use the information available to calculate the total payout attributable to Disina Oil and Gas Company and the Kurdistan Regional Government.

Question 2

The following information relates to the Duhuk Oil and Gas Company for the period ending 31st December, 2024.

Particulars	Dr.	Cr.
	\$' 000	\$ 000
Crude oil Inventory at 1/1/2009	6,700,000	
Export Sales		50,000,000
Local Sales		10,000,000
Production Cost	9,000,000	
Transportation cost	1,500,000	
Intangible oil and gas assets	117,000,000	
Salaries and wages	300,000	
Proved oil and gas properties	13,500,000	
Unproved oil and gas properties	8,300,200	
Accumulated DD&A: Oil and Gas Assets		5,200,500
Loan Interest	3,500,000	
Bank interest	1,700,000	

Geological and geophysical costs	800,000	
Exploratory wells: Successful	15,672,000	
Unsuccessful	2,250,000	
Development wells	20,567,000	
Wells in Progress	11,570,000	
Expenditure for purchase of seismic data	683,650	
Royalties	1,500,000	
Derivative financial instruments		500,800
Loss on exchange	1,450,000	
Trade and other receivables	3,500,000	
Derivative financial instruments	2,503,200	
Cash and cash equivalents	500,000	
Trade and other payables		7,500,000
Investments in subsidiaries	14,500,000	
Other current assets	50,250,100	
Share capital		200,134,850
Share premium		9,850,000
Other reserves		560,000
	283,746,150	283,746,150

The following Additional Information are also available (All the figure are in thousands)

- (i) Closing stock of oil and gas as at 31st December, 2009 \$1,200,000
- (ii) Accrued expenses as at 31st December, 2009 amounted to \$3,500,700
- (iii) The Director's proposed a dividend of \$2, 000,000 on shares and Petroleum Profit Tax is to be calculated at the rate of 70%.
- (v) All capitalized costs and intangible oil and gas assets are to be amortized at the rate of 10% per annum

Required: Prepare a statement of financial performance for Duhuk Oil and Gas Comapny

Questions 3

ERBIL Petroleum Company PLC had the following data at end of its financial year ended 31st December 2021. You are required to calculate the DD&A for that year.

- Capitalized cost at end of the year N 1,700,000
- Accumulated amortization in prior years N 100,000
- Reserves estimate at the beginning of the year 5,000,000 bbls
- Production during the year 250,000 bbls
- Reserves estimate at the end of the year 4,000,000 bbls

Questions 4

ACCT Grade 4 Oil Company, a joint venture operator in ERBIL incurred the following costs in drilling of an oil well.

	\$
i. Drilling (on footage basis)	90,000
ii. Cost of clearing and grading unpaved roadways to the drill site	60,560
iii. Construction of overflow mud pits	98,700
iv. Surface casing used in the well	700,908
v. Services such as acidizing and testing	500,200
vi. Cementing services for casing	190,890
vii. Tubing and control valves	507, 500
viii. Flow lines, tanks and treaters	160, 700
ix. Labour to install lines and tanks	260,500

Required : Used the above information to classify the cost into tangible and intangible drilling costs.

Questions 5

During the year 2022, Dana and Sirwan Oil Company produced 100,000 barrels of crude oil from oil field, which is located onshore. 10,000 barrels out of the total production were re-injected into the well to enhance crude oil recovery from an adjoining lease. The power generators used for field operations consumed 2,000 barrels during the quarter and 1000 barrels were lost through evaporation. There was an additional theft of 2000 bbls toward the end of production year. Assuming that the posted price for the crude oil is US\$21.00 per barrel and exchange rate of US\$1 to IQD is equal to N1500.

You are required to:

Compute royalty liability for the period, assuming that the applicable rate of royalty is 10 percent.

Question 6

During the first quarter of 2022, ERBIL Oil Company Limited produced 50,000 barrels of crude oil from oil field, which is located onshore. 5,000 barrels out of the total production were re-injected into the well to enhance crude oil recovery from an adjoining lease. The power generators used for field operations consumed 1,000 barrels during the quarter and 500 barrels were lost through evaporation. Assuming that posted price for the crude stream is US\$21.00 per barrel and exchange rate of US\$1 to IQD is equal to N1500.

You are required to compute royalty liability for the quarter, assuming that the applicable rate of royalty is 10 percent.

Questions 7

Ali Yaqouq and Halez Ltd acquired a 620 acre unproved property. The company paid a lease bonus of \$ 200/acre and recording fees of \$ 1,000. The company also incurred legal fee amounting to \$3000 and a signature bonus of 30% of total cost before signature bonus.

Required: Calculate the total acquisition cost and state the journal entry

Questions 8

Maryam and Isra Oil Company purchased land in fee for \$950,000. A qualified appraiser made the following estimate of the fair market values of the surface and mineral rights:

Surface rights	\$600,000
Mineral rights	\$400,000
	\$1,000,000

Required : Calculate the total acquisition cost and state the journal entry

Questions 9

Huda and Kazhal Oil Company began installing flow lines. The flow lines cost \$300,000, and installation charges were \$25,000. They also paid \$240,000 for leasing the area, \$20,000 as legal fees during the acquisition of the mineral right. The company equally pays the contractor \$800,000, including IDC of \$750,000 and equipment costs totaling \$50,000. The well was plugged and abandoned for an additional \$20,000. Assume instead that the well was successful and that additional IDC of \$75,000 and equipment costs of \$200,000 were incurred to complete the well.

Required: Calculate the accurate development cost and make the appropriate journal entries in the book of Huda and Kazhal for the relevant year.

Questions 10

Disina Oil Company began operations with the acquisition of a lease in Erbil forest, during the first year, the following costs and revenue were incurred

G&G costs	\$ 60,000
Acquisition costs	100,000
Exploratory dry holes	1,400,000
Exploratory wells, successful	800,000
Development costs	500,000
Production costs	50,000
DD&A expense	40,000 (SE) 90,000 (FC)
Revenue	250,000

Use the above information to prepare the financial statements of Disina Oil Company using full cost (FC) and successful efforts (SE) accounting methods