JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
III B.Tech. II Sem., II Mid-Term Examinations, April – 2014
RESERVOIR ENGINEERING
Objective Exam

Name: _____ Hall Ticket No. ☐☐☐☐☐☐ A ☐☐☐☐

Answer All Questions. All Questions Carry Equal Marks.Time: 20 Min. Marks: 10.

I   Choose the correct alternative:

1.   If the reservoir temperature is greater than the critical temperature of the hydrocarbon fluid, the reservoir is considered as _____   [   ]
        a. Oil Reservoir   b. Gas Reservoir   c. Gas-oil Reservoir   d. GOR Reservoir

2.   The following factor which accounts for the departure from ideal gas behavior   [   ]
        a. Molecular Weight   b. Moles   c. Gas Constant   d. Compressibility

3.   Reduced Pressure is the ratio of   [   ]
        a. Total pressure to atmospheric pressure   b. Critical pressure to total pressure
        c. Total pressure to critical pressure   d. Critical to atmospheric pressure

4.   In reservoir Engineering terminology S_{wc} is given for   [   ]
        a. Irreducible water saturation   b. Oil saturation   c. Water content   d. Specific gravity

5.   The natural occurance of connate water saturation in a porous medium accounts for   [   ]
        a. 0%   b. 10-25 %   c. 50%   d. 100%

6.   In a porous medium when one fluid displaces another fluid the displaced fluid saturation will
         be _____   [   ]
        a. Never equal to zero   b. 0 %   c. 100 %   d. 10 %

7.   The maximum relative permeability to oil and water that can naturally occur during displacement
        are called _____ Permeability   [   ]
        a. Null   b. Hyper   c. End point   d. Absolute

8.   Mobility control is the primary aim in applying _____   [   ]
        a. Water flooding   b. Water drive   c. Artificial methods   d. Thermal methods

9.   In reservoir terminology M refers to   [   ]
        a. End point mobility ratio   b. Miscible ratio   c. Immiscible ratio   d. None

10.   By passing of oil in recovery mechanisms is greatly achieved in   [   ]
        a. Thermal methods   b. Hot water injection   c. Polymer flooding   d. Water flooding

II   Fill in the blanks

11.   The _____ chart is used to find the vapour pressure of a given hydrocarbon at a given temperature.

12.   When the initial reservoir pressure is equal to bubble point pressure of the reservoir fluid the reservoir is _____.

13.   The _____ of a hydrocarbon system is defined as the highest pressure at which a bubble of gas is first liberated from the oil.

14.   At a very low pressure there is a slippage between gas molecules and the walls of each pores leading to an increase in permeability is _____

15.   Pore compressibility can be sometimes very large in _____

16.   The standard reservoir temperature and pressure are given as _____.

17.   In liberated gas expansion oil must be at _____.

18.   Cumulative water influx from the aquifer into reservoir is given by _____

19.   When the solubility of gas in water Is rather small then B_w _____

20.   Transient flow condition in radial flow is only applicable for a relatively short period after _____ has been created in reservoir.

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Code No:56648   **Set No. 2**

Name: _____   Hall Ticket No. [ ][ ][ ][ ][ ][A][ ][ ][ ][ ]

Answer All Questions. All Questions Carry Equal Marks.Time: 20 Min. Marks: 10.

I   **Choose the correct alternative:**

1.   In reservoir Engineering terminology S_{wc} is given for   [   ]
       a. Irreducible water saturation   b. Oil saturation   c. Water content   d. Specific gravity

2.   The natural occurance of connate water saturation in a porous medium accounts for   [   ]
       a. 0%   b. 10-25 %   c. 50%   d. 100%

3.   In a porous medium when one fluid displaces another fluid the displaced fluid saturation will
       be _____   [   ]
       a. Never equal to zero   b. 0 %   c. 100 %   d. 10 %

4.   The maximum relative permeability to oil and water that can naturally occur during displacement
       are called _____ Permeability   [   ]
       a. Null   b. Hyper   c. End point   d. Absolute

5.   Mobility control is the primary aim in applying _____   [   ]
       a. Water flooding   b. Water drive   c. Artificial methods   d. Thermal methods

6.   In reservoir terminology M refers to   [   ]
       a. End point mobility ratio   b. Miscible ratio   c. Immiscible ratio   d. None

7.   By passing of oil in recovery mechanisms is greatly achieved in   [   ]
       a. Thermal methods   b. Hot water injection   c. Polymer flooding   d. Water flooding

8.   If the reservoir temperature is greater than the critical temperature of the hydrocarbon fluid, the
       reservoir is considered as _____   [   ]
       a. Oil Reservoir   b. Gas Reservoir   c. Gas-oil Reservoir   d. GOR Reservoir

9.   The following factor which accounts for the departure from ideal gas behavior   [   ]
       a. Molecular Weight   b. Moles   c. Gas Constant   d. Compressibility

10.   Reduced Pressure is the ratio of   [   ]
       a. Total pressure to atmospheric pressure   b. Critical pressure to total pressure
       c. Total pressure to critical pressure   d. Critical to atmospheric pressure

II Fill in the blanks

11. At a very low pressure there is a slippage between gas molecules and the walls of each pores leading to an increase in permeability is _____.

12. Pore compressibility can be sometimes very large in _____

13. The standard reservoir temperature and pressure are given as _____.

14. In liberated gas expansion oil must be at _____.

15. Cumulative water influx from the aquifer into reservoir is given by _____

16. When the solubility of gas in water Is rather small then B_w _____

17. Transient flow condition in radial flow is only applicable for a relatively short period after _____has been created in reservoir.

18. The _____chart is used to find the vapour pressure of a given hydrocarbon at a given temperature.

19. When the initial reservoir pressure is equal to bubble point pressure of the reservoir fluid the reservoir is _____.

20. The _____ of a hydrocarbon system is defined as the highest pressure at which a bubble of gas is first liberated from the oil.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
III B.Tech. II Sem., II Mid-Term Examinations, April – 2014
RESERVOIR ENGINEERING
Objective Exam

Name: _____ Hall Ticket No. [ ] [ ] [ ] [ ] [ ] [A] [ ] [ ] [ ] [ ]

Answer All Questions. All Questions Carry Equal Marks.Time: 20 Min. Marks: 10.

I   Choose the correct alternative:

1.   In a porous medium when one fluid displaces another fluid the displaced fluid saturation will
        be _____   [   ]
        a. Never equal to zero   b. 0 %   c. 100 %   d. 10 %

2.   The maximum relative permeability to oil and water that can naturally occur during displacement
        are called _____ Permeability   [   ]
        a. Null   b. Hyper   c. End point   d. Absolute

3.   Mobility control is the primary aim in applying _____   [   ]
        a. Water flooding   b. Water drive   c. Artificial methods   d. Thermal methods

4.   In reservoir terminology M refers to   [   ]
        a. End point mobility ratio   b. Miscible ratio   c. Immiscible ratio   d. None

5.   By passing of oil in recovery mechanisms is greatly achieved in   [   ]
        a. Thermal methods   b. Hot water injection   c. Polymer flooding   d. Water flooding

6.   If the reservoir temperature is greater than the critical temperature of the hydrocarbon fluid, the
        reservoir is considered as _____   [   ]
        a. Oil Reservoir   b. Gas Reservoir   c. Gas-oil Reservoir   d. GOR Reservoir

7.   The following factor which accounts for the departure from ideal gas behavior   [   ]
        a. Molecular Weight   b. Moles   c. Gas Constant   d. Compressibility

8.   Reduced Pressure is the ratio of   [   ]
        a. Total pressure to atmospheric pressure   b. Critical pressure to total pressure
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9.   In reservoir Engineering terminology S_{wc} is given for   [   ]
        a. Irreducible water saturation   b. Oil saturation   c. Water content   d. Specific gravity

10.   The natural occurance of connate water saturation in a porous medium accounts for   [   ]
        a. 0%   b. 10-25 %   c. 50%   d. 100%

II   Fill in the blanks

11.   The standard reservoir temperature and pressure are given as _____ .

12.   In liberated gas expansion oil must be at _____ .

13.   Cumulative water influx from the aquifer into reservoir is given by _____

14.   When the solubility of gas in water Is rather small then B_w _____

15.   Transient flow condition in radial flow is only applicable for a relatively short period after _____has been created in reservoir.

16.   The _____chart is used to find the vapour pressure of a given hydrocarbon at a given temperature.

17.   When the initial reservoir pressure is equal to bubble point pressure of the reservoir fluid the reservoir is _____ .

18.   The _____ of a hydrocarbon system is defined as the highest pressure at which a bubble of gas is first liberated from the oil.

19.   At a very low pressure there is a slippage between gas molecules and the walls of each pores leading to an increase in permeability is _____ .

20.   Pore compressibility can be sometimes very large in _____

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Code No:56648   **Set No. 4**

Name: _____ Hall Ticket No. [ ][ ][ ][ ][ ][A][ ][ ][ ][ ]

Answer All Questions. All Questions Carry Equal Marks.Time: 20 Min. Marks: 10.

I   Choose the correct alternative:

1.   Mobility control is the primary aim in applying _____   [   ]
        a. Water flooding   b. Water drive   c. Artificial methods   d. Thermal methods

2.   In reservoir terminology M refers to   [   ]
        a. End point mobility ratio   b. Miscible ratio   c. Immiscible ratio   d. None

3.   By passing of oil in recovery mechanisms is greatly achieved in   [   ]
        a. Thermal methods   b. Hot water injection   c. Polymer flooding   d. Water flooding

4.   If the reservoir temperature is greater than the critical temperature of the hydrocarbon fluid, the
        reservoir is considered as _____   [   ]
        a. Oil Reservoir   b. Gas Reservoir   c. Gas-oil Reservoir   d. GOR Reservoir

5.   The following factor which accounts for the departure from ideal gas behavior   [   ]
        a. Molecular Weight   b. Moles   c. Gas Constant   d. Compressibility

6.   Reduced Pressure is the ratio of   [   ]
        a. Total pressure to atmospheric pressure   b. Critical pressure to total pressure
        c. Total pressure to critical pressure   d. Critical to atmospheric pressure

7.   In reservoir Engineering terminology S_{wc} is given for   [   ]
        a. Irreducible water saturation   b. Oil saturation   c. Water content   d. Specific gravity

8.   The natural occurance of connate water saturation in a porous medium accounts for   [   ]
        a. 0%   b. 10-25 %   c. 50%   d. 100%

9.   In a porous medium when one fluid displaces another fluid the displaced fluid saturation will
         be _____   [   ]
        a. Never equal to zero   b. 0 %   c. 100 %   d. 10 %

10.   The maximum relative permeability to oil and water that can naturally occur during displacement
        are called _____ Permeability   [   ]
        a. Null   b. Hyper   c. End point   d. Absolute

II Fill in the blanks

11. Cumulative water influx from the aquifer into reservoir is given by _____

12. When the solubility of gas in water Is rather small then B_w _____

13. Transient flow condition in radial flow is only applicable for a relatively short period after _____has been created in reservoir.

14. The _____chart is used to find the vapour pressure of a given hydrocarbon at a given temperature.

15. When the initial reservoir pressure is equal to bubble point pressure of the reservoir fluid the reservoir is _____.

16. The _____ of a hydrocarbon system is defined as the highest pressure at which a bubble of gas is first liberated from the oil.

17. At a very low pressure there is a slippage between gas molecules and the walls of each pores leading to an increase in permeability is _____.

18. Pore compressibility can be sometimes very large in _____

19. The standard reservoir temperature and pressure are given as _____.

20. In liberated gas expansion oil must be at _____.

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