

PETE 203: DRILLING ENGINEERING

EXERCISE # 2

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1. List the primary functions of drilling fluids?

- (i)
- (ii)
- (iii)
- (iv)

2. What are the main responsibilities of a Mud engineer?

- (i)
- (ii)
- (iii)

3. What is the criteria for selecting drilling mud?

- (i)
- (ii)
- (iii)
- (iv)
- (v)

4. What are the main diagnostic tests for drilling fluids?

- (i)
- (ii)
- (iii)
- (iv)
- (v)

5. What are the main advantages and disadvantages of water-base muds?

ADVANTAGES:

(i)

(ii)

DISADVANTAGES:

(i)

(ii)

6. Define the Yield of clay?

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.....
.....
.....

7. Name the most common commercial clay and what is its yield?

.....

8. Give three examples of inert solids and state the problems caused by them.

(i)

(ii)

(iii)

(iv)

Problems:.....

.....
.....

9. Name the four methods used to prevent solids concentration.

(i)

(ii)

(iii)

(iv)

10. List the primary methods used to control the density of unweighted clay-water muds.

- (i)
- (ii)
- (iii)

11. What are the three common uses of chemical additives?

- (i)
- (ii)
- (iii)

12. Why is high pH desirable?

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13. Define Flocculation.

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14. What are the causes of Flocculation?

- (i)
- (ii)
- (iii)

15. What are Deflocculants?

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16. Name three common deflocculants.

- (iv)
- (v)
- (vi)