

Code No: 57144

Set No. 1

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. I Sem., I Mid-Term Examinations, September - 2014

ROCK MECHANICS

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. The rocks are said to be flaggy if the bedded planes are separated by. []
a) more than 1.2m, b) 1m-1.2m c) 75mm-1m, d) less than 75mm.
2. If the bedded planes are separated by more than 1.2m apart then they are said to be. []
a) Massive b) Bedded c) Flaggy d) rubble.
3. The weight of rocks in a coal mining areas exerts a pressure nearly per meters depth from the surface is. []
a) 1 kg/sq.cm b) 0.5 kg/sq.cm c) 0.2kg/sq.cm d) 0.2kg/sq.mm.
4. The immediate roof is called..... []
a) 3m above the seam. b) 6m above the seam.
c) 6m below the seam. d) 3m below the seam.
5. For testing a specimen in the laboratory the length: diameter ratio should be. []
a) More than 1:2. b) More than 2:1 c) less than 2:1. d) less than 1:2.
6. Compressive strength of coal is []
a) 13.5 kg/sq.mm b) 2.25 kg/sq.mm c) 2.25 kg/sq.cm d) 13.5kg/sq.cm.
7. The load on a prop when upper member is begins to slide is called. []
a) Load bearing capacity b) Setting load c) Yield load d) Limit load
8. The load at which on axially loaded prop reaches its elastic limit or at which it begins to buckle is called. []
a) Load bearing capacity b) Setting load c) yield load d) Limit load.
9. By tapering the prop at the foot or top by providing a lid on the top of the prop.....could be obtained? []
a) Max strength, b) Yield, c) max life of prop, d) none of the above.
10. The maximum height of the roof that can be tested by bamboo? []
a) 2.5m. b) 3m. c) 3.5m. d) 1.5m.

Cont.....2

II Fill in the Blanks:

11. For equal resistance to crushing and bending the prop should have diameter_____.
12. Freshly exposed roof after blasting is effectively and quickly Supported by_____.
13. The phenomenon of lifting up of the floor if the floor is weak is called_____.
14. On account of the weight of the rocks the pressure arch is transmitted to abutment if the depth of the coal seam is _____the length of the pressure.
15. Angle of draw for flat seams are maximum for undistributed over lying mass while it is up to _____ for distributed rock mass.
16. A rock because of its physical and geological characteristics is capable of sustaining openings without any structural support is called_____.
17. The rod which are used to reinforce the rocks are under_____.
18. Strength of rock is _____when tested dry as compared to when tested wet.
19. The general equation to find flexural strength of the prismatic specimen is _____.
20. The over break of rock around underground working is excessive in Highly _____ rock.

Code No: 57144

Set No. 2

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. I Sem., I Mid-Term Examinations, September - 2014

ROCK MECHANICS

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:

- The immediate roof is called..... []
a) 3m above the seam. b) 6m above the seam.
c) 6m below the seam. d) 3m below the seam.
- For testing a specimen in the laboratory the length: diameter ratio should be. []
a) More than 1:2. b) More than 2:1 c) less than 2:1. d) less than 1:2.
- Compressive strength of coal is []
a)13.5 kg/sq.mm b)2.25 kg/sq.mm c)2.25 kg/sq.cm d)13.5kg/sq.cm.
- The load on a prop when upper member is begins to slide is called. []
a) Load bearing capacity b) Setting load c) Yield load d) Limit load
- The load at which on axially loaded prop reaches its elastic limit or at which it begins to buckle is called. []
a) Load bearing capacity b) Setting load c) yield load d)Limit load.
- By tapering the prop at the foot or top by providing a lid on the top of the prop.....could be obtained? []
a) Max strength, b) Yield, c) max life of prop, d) none of the above.
- The maximum height of the roof that can be tested by bamboo? []
a) 2.5m. b) 3m. c) 3.5m. d) 1.5m.
- The rocks are said to be flaggy if the bedded planes are separated by. []
a)more than 1.2m, b)1m-1.2m c)75mm-1m, d)less than 75mm.
- If the bedded planes are separated by more than 1.2m apart then they are said to be. []
a) Massive b) Bedded c) Flaggy d) rubble.
- The weight of rocks in a coal mining areas exerts a pressure nearly per meters depth from the surface is. []
a)1 kg/sq.cm b) 0.5 kg/sq.cm c)0.2kg/sq.cm d)0.2kg/sq.mm.

Cont.....2

II Fill in the Blanks:

11. On account of the weight of the rocks the pressure arch is transmitted to abutment if the depth of the coal seam is _____ the length of the pressure.
12. Angle of draw for flat seams are maximum for undistributed over lying mass while it is up to _____ for distributed rock mass.
13. A rock because of its physical and geological characteristics is capable of sustaining openings without any structural support is called _____.
14. The rod which are used to reinforce the rocks are under _____.
15. Strength of rock is _____ when tested dry as compared to when tested wet.
16. The general equation to find flexural strength of the prismatic specimen is _____.
17. The over break of rock around underground working is excessive in Highly _____ rock.
18. For equal resistance to crushing and bending the prop should have diameter _____ .
19. Freshly exposed roof after blasting is effectively and quickly Supported by _____.
20. The phenomenon of lifting up of the floor if the floor is weak is called _____.

II Fill in the Blanks:

11. A rock because of its physical and geological characteristics is capable of sustaining openings without any structural support is called_____.
12. The rod which are used to reinforce the rocks are under_____.
13. Strength of rock is _____when tested dry as compared to when tested wet.
14. The general equation to find flexural strength of the prismatic specimen is_____.
15. The over break of rock around underground working is excessive in Highly _____ rock.
16. For equal resistance to crushing and bending the prop should have diameter_____ .
17. Freshly exposed roof after blasting is effectively and quickly Supported by_____.
18. The phenomenon of lifting up of the floor if the floor is weak is called_____.
19. On account of the weight of the rocks the pressure arch is transmitted to abutment if the depth of the coal seam is _____the length of the pressure.
20. Angle of draw for flat seams are maximum for undistributed over lying mass while it is up to _____ for distributed rock mass.

Code No: 57144

Set No. 4

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. I Sem., I Mid-Term Examinations, September - 2014

ROCK MECHANICS

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. The load at which on axially loaded prop reaches its elastic limit or at which it begins to buckle is called. []
a) Load bearing capacity b) Setting load c) yield load d) Limit load.
2. By tapering the prop at the foot or top by providing a lid on the top of the prop.....could be obtained? []
a) Max strength, b) Yield, c) max life of prop, d) none of the above.
3. The maximum height of the roof that can be tested by bamboo? []
a) 2.5m. b) 3m. c) 3.5m. d) 1.5m.
4. The rocks are said to be flaggy if the bedded planes are separated by. []
a) more than 1.2m, b) 1m-1.2m c) 75mm-1m, d) less than 75mm.
5. If the bedded planes are separated by more than 1.2m apart then they are said to be. []
a) Massive b) Bedded c) Flaggy d) rubble.
6. The weight of rocks in a coal mining areas exerts a pressure nearly per meters depth from the surface is. []
a) 1 kg/sq.cm b) 0.5 kg/sq.cm c) 0.2kg/sq.cm d) 0.2kg/sq.mm.
7. The immediate roof is called..... []
a) 3m above the seam. b) 6m above the seam.
c) 6m below the seam. d) 3m below the seam.
8. For testing a specimen in the laboratory the length: diameter ratio should be. []
a) More than 1:2. b) More than 2:1 c) less than 2:1. d) less than 1:2.
9. Compressive strength of coal is []
a) 13.5 kg/sq.mm b) 2.25 kg/sq.mm c) 2.25 kg/sq.cm d) 13.5kg/sq.cm.
10. The load on a prop when upper member is begins to slide is called. []
a) Load bearing capacity b) Setting load c) Yield load d) Limit load

Cont.....2

II Fill in the Blanks:

11. Strength of rock is _____ when tested dry as compared to when tested wet.
12. The general equation to find flexural strength of the prismatic specimen is _____.
13. The over break of rock around underground working is excessive in Highly _____ rock.
14. For equal resistance to crushing and bending the prop should have diameter _____.
15. Freshly exposed roof after blasting is effectively and quickly Supported by _____.
16. The phenomenon of lifting up of the floor if the floor is weak is called _____.
17. On account of the weight of the rocks the pressure arch is transmitted to abutment if the depth of the coal seam is _____ the length of the pressure.
18. Angle of draw for flat seams are maximum for undistributed over lying mass while it is up to _____ for distributed rock mass.
19. A rock because of its physical and geological characteristics is capable of sustaining openings without any structural support is called _____.
20. The rod which are used to reinforce the rocks are under _____.