



C09-MNG-407

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BOARD DIPLOMA EXAMINATION, (C-09)

MARCH / APRIL - 2019

DMNG - IV SEMESTER EXAMINATION

ROCK MECHANICS AND STRATA CONTROL

Time : 3 Hours]

[Total Marks : 80

PART - A

3×10=30

- Instructions :**
- (1) Answer *ALL* questions.
 - (2) Each question carries *THREE* marks.
 - (3) Answer should be brief and straight to the point.

- 1 Define Rock Mechanics.
- 2 List the instruments used for measurement of stress.
- 3 What are the lateral stress acting on a block of rock ?
- 4 Define the term Shear Strength.
- 5 List the theories of failures of rocks.
- 6 Explain Rzhijaz theory.
- 7 What is Abutment pressure ?
- 8 List the factors influencing angle of draw.
- 9 List the parts of 6 Legged Shield Support.
- 10 List the various materials used for supporting in mines.

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[Contd...

PART - B

10×5=50

- Instructions :**
- (1) Answer any **FIVE** questions.
 - (2) Each question carries **TEN** marks.
 - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 Explain hydrostatic and Litho static states of rock.
 - 12 List the preventive measures against Rock burst.
 - 13 Explain compressive strength of rocks.
 - 14 Explain Normal Theory.
 - 15 Write the strata conditions before and after the mining operations.
 - 16 Explain the method of subsidence measurement.
 - 17 List the merits and demerits of roof bolting.
 - 18 Explain the method of Roof stitching.
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