



C14-MNG-606

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BOARD DIPLOMA EXAMINATION, (C-14)

MARCH / APRIL - 2019

DMNG - VI SEMESTER EXAMINATION

MINERAL PROCESSING AND QUALITY 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 and shall not exceed five simple sentences.

- 1 State the important operations of ore dressing.
- 2 State the law of comminution process.
- 3 Define the terms (a) Mechanical sorting (b) Grinding (c) Crushing
- 4 List different types of crushers.
- 5 Define the terms (a) Mesh number (b) Mesh size
- 6 List different types of industrial screens.
- 7 State the principle of concentration.
- 8 Define the term Forth-floatation.
- 9 List various clean coal technologies used in mining.
- 10 State the merits and demerits of Clean Coal Technology.

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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 the working principle and operation of Dodge Jaw crusher.
- 12 Explain the working principle and operation of Rod Mills.
- 13 Explain the working principle and operation of Hydro cyclones.
- 14 Explain the principle and operation of Magnetic Separation.
- 15 List different types of jigging method. State the merits and demerits of Jigging methods.
- 16 Draw the simplified flow diagram for improving the concentration of Copper and write in brief about various important steps involved in it.
- 17 Explain the ultimate analysis of coal.
- 18 Sketch and explain the simplified flow sheet diagram of coal cleaning process.