

BE 7th sem (Mining Engg) Final examination 2011
Sub: Mines act, regulation and legislation
(MN 701)

Time : 3 Hrs

FM: 70

FIRST HALF

Q1 and 6 are mandatory. Answer 4 more questions taking atleast 2 from each half. Marks are shown on the right hand side of each question.

1. Answer as directed-

3+4+3+3

- a) As per provision 137 of CMR 1957 “sufficient quantity of air” shall reach to all working faces. What do you mean by “sufficient” ?
- b) State the provision given in CMR on powered support
- c) State the conditions given in statute on working of contiguous seam
- d) State the conditions of supporting the immediate roof by cross-bar

2. Write down the provisions from DGMS Circular-

4+4+3

- a) Anchorage testing of roof bolting
- b) Ground movement observation
- c) Obligation of Mining Sirdar when 2 faces reaches within 4.5m of other

3. a) Write down the steps to deal with the misfire in underground coal face.

6+5

b) Write down the specific provisions on standard of ventilation in a mine.

4.a) What are the needs of safety? How can you promote safety matters in a coal mine? 2+4+2+3

b) What is dust plan? State the duties of sampling incharge.

5. a) What should be the standard of shelter as mentioned in MR 1955?

4+7

b) How can you monitor the efficacy and performance of roof bolting in underground coal mines? Give the provisions as enumerated in DGMS Circulars.

SECOND HALF

6. Answer the following from CMR 1957 – 3+2+6+2
- a) Where from the Inflammable gas is collected for the purpose of sampling
 - b) What is the obligation of CM when working extended to within 60m of settled boundary
 - c) In which places of underground the provisions of SSR is applicable
 - d) What is to be done when inflammable gas percentage exceeds 0.8
7. a.) Write down the duties and responsibilities of Surveyors of a mine. 6+5
b) Write down the provisions of statute regarding determination of permissible limit of dust.
8. a) What extant provisions are therein DGMS Circular to prevent accident due to explosives? 4+4+3
b) State the statutes from CMR in heightening of galleries during depillaring operation.
c) What is the duty of CM where voids formed due to coal extraction are stowed with sand
9. Write down the provisions from Mines Act and Mine Rule – 2+5+4
- a) Drinking water
 - b) Occupational Health and Safety Survey
 - c) First aid room
10. a) What are the provisions given in Circular to support freshly exposed roof and sides in Coal mines? 3+3+5
b) What do you mean by Abandonment of Mines?
c) Write a note on stone dust barrier