

B.E. Mining Engineering Sem-VIII
MN802 - Mine Legislation and Safety

P. Pages : 2

Time : Three Hours



GUG/S/19/2082

Max. Marks : 80

- Notes :
1. Due credit will be given to neatness and adequate dimensions.
 2. Assume suitable data wherever necessary.
 3. Diagrams and Chemical equation should be given wherever necessary.
 4. Retain the construction lines.
 5. Illustrate your answers wherever necessary with the help of neat sketches.
 6. Discuss the reaction, mechanism wherever necessary.
 7. Marks have been given against each question.

1. a) Define the following as per the mines act or other statutory provisions applicable in mines. **6**
i) Agent. ii) Booster fan.
iii) Reportable injury.

- b) Explain the power of inspector as per section 22 of the mines act 1984. **10**

OR

2. a) Define the following term as the statute applicable in mines. **6**
i) Serious bodily injury. ii) Shift and relay.
iii) Ordinarily employed person.

- b) Write the composition and function of the safety committee. **10**

3. a) Give features to be shown on water danger plan as per CMR. **7**

- b) Write provisions regarding. **9**
i) Construction of cage.
ii) Life of winding rope.
iii) Capping of rope when white metal is used.
as per CMR.

OR

4. a) Write the provisions of CMR with respect to out let of mines. **8**

- b) As per CMR/circular given. **8**
i) Standard of lighting in U/G mines.
ii) Index of dustiness.

5. a) Give provisions of NMR/circular wrt FOS of winding rope. **6**

- b) As per NMR, Enlist plan to be maintained in mines. Also give general requirement of mine plan. **10**

OR

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| 6. | a) Write provisions of NMR with respect ladders. | 8 |
| | b) Give standard of lighting in ofc as a per NMR/circular. | 8 |
| 7. | Explain General principle for preventions or minimization of an accident in mines. | 16 |

OR

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|---|--|---------------------------|--------------------|---|------------------------|---------------------------|--------------------|-------------------|--|---------------------|----------|
| 8. | Prepare pare as report of investigation in to an accident due to roof fall in which 4 loader have died. | 16 | | | | | | | | | |
| 9. | <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;">a) Define.</td> <td style="text-align: right; vertical-align: top;">8</td> </tr> <tr> <td style="vertical-align: top;"> <table border="0"> <tr> <td style="vertical-align: top;">a) Intrinsically safe.</td> <td style="vertical-align: top;">b) Flame proof enclosure.</td> </tr> <tr> <td style="vertical-align: top;">c) Medium voltage.</td> <td style="vertical-align: top;">d) Seventy Index.</td> </tr> </table> </td> <td></td> </tr> <tr> <td style="vertical-align: top;">b) Write ABOUT FAB.</td> <td style="text-align: right; vertical-align: top;">8</td> </tr> </table> | a) Define. | 8 | <table border="0"> <tr> <td style="vertical-align: top;">a) Intrinsically safe.</td> <td style="vertical-align: top;">b) Flame proof enclosure.</td> </tr> <tr> <td style="vertical-align: top;">c) Medium voltage.</td> <td style="vertical-align: top;">d) Seventy Index.</td> </tr> </table> | a) Intrinsically safe. | b) Flame proof enclosure. | c) Medium voltage. | d) Seventy Index. | | b) Write ABOUT FAB. | 8 |
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