

**PRACTICE SET**

**End Semester Examination, December, 2025**

**Program: BTECH**

**Semester: VII**

**Subject: MINE LEGISLATION & SAFETY I**

**Subject Code: 8PCCMiE404**

**Course Outcome:**

On the completion of the Course, the students will be able to:

Course Outcomes	Description
CO1	Understand the knowledge on implementation of provisions of mines act related to Mine, Open cast working, underground working, Relay, Shift, Serious bodily injury, Provisions for health and safety, Provisions regarding leave with wages.
CO2	Apply knowledge of legislation in mines for the implementation of mine rules, various committee & provisions related to First Aid.
CO3	Learn the various duties & responsibilities of mine managers, Asst/under Managers, Overman, foreman and surveyor.
CO4	Explain the implementation of the safety management plan to reduce the accident and various type of mine accident.

**UNIT I**

**Section A (5 marks)**

1. Define Minerals, Mine, Owner, Agent, Inspector & Adult as per Mines Act 1952. (CO 1) (Remember)
2. Describe the conditions under which provisions of Mines Act 1952 does not apply. (CO 1) (understand)
3. Describe the provisions regarding extra wages for overtime & limitation of daily hours of work including overtime work as per provision of Mines Act 1952. (CO 1) (understand)
4. Mention the provisions regarding employment of persons below eighteen years of age as per Mines Act 1952. (CO 1) (understand)

**Section B (10 marks)**

5. Define District Magistrate, opencast working, employed below ground and employed above ground as per Mines Act 1952. (CO 1) (Remember)
6. Describe the provisions regarding drinking water & conservancy as per Mines Act 1952. (CO 1) (Understand)
7. Discussion the provisions regarding Medical Appliance as per Mines Act 1952. (CO 1) (understand)
8. Describe the provisions regarding hours of week above grounds & hours of working below grounds as per Mines Act 1952. (CO 1) (understand)

**Section C (20 marks)**

9. In mines annual leave is as per Act. Describe the provisions regarding annual leave with wages as per Mines Act 1952. (CO 1) (Apply)
10. Can you explain the provisions regarding Night shifts, weekly days of rest and Compensatory days of rest as per Mines Act 1952. (CO 1) (Apply)

**UNIT II**

**Section A (5 marks)**

11. Enlist the equipment list of First –Aid- Room as per Mines Rule 1955. (CO 2) (understand)
12. Mention the provisions regarding persons holding positions of supervision or Management as per Mines Rule 1955. (CO 2) (understand)
13. Discuss the provision regarding employment of apprentices & Trainee as per Mines Rules 1955. (CO 2) (understand)

**Section B (10 marks)**

14. Mention the provisions regarding first aid room as per Rule [43] of Mines rule 1955. (CO 2) (understand)
15. Enumerate the provisions of first aid stations as per Rule [44] of Mines rule 1955. (CO 2) (understand)
16. Describe the requisites of a first aid station as per Third Schedule of Mines rule 1955. (CO 2) (understand)
17. Mention the provision regarding carrying of First-Aid outfit by official as well as provisions regarding medical attention in case of injury. (CO 2) (understand)
18. Write down the provision regarding leave wages due if a person dies as well as exemption from this provision as per Mines Rules 1955. (CO 2) (understand)
19. Mention the provisions regarding weekly days of rest as well as compensatory days of rest as per Mines Rule 1955. (CO 2) (understand)

**Section C (20 marks)**

20. Mention the provision regarding exemptions from hours & limitations of employment as per Fourth Schedule of Mines Rules 1955. (CO 2) (understand)

**UNIT III**

**Section A (5 marks)**

21. Define fiery seam & gassy seams of first degree, second degree & third degree as per CMR 2017. (CO 3) (Remember)
22. Describe the surface precautions against fire as per CMR 2017. (CO 3) (understand)
23. Mention the underground precautions against fire as per CMR 2017. (CO 3) (understand)
24. Describe the precautions after a fire has broken out as per CMR 2017. (CO 3) (understand)

**Section B (10 marks)**

25. Discuss the precautions against spontaneous heating as per CMR 2017. (CO 3) (understand)
26. Describe the provision regarding danger from surface water as per CMR 2017. (CO 3) (understand)
27. Explain the provision regarding danger from inundation as per CMR 2017. (CO 3) (understand)



28. Describe the provision of CMR 2017 regarding working under railways and roads as well as multi-section & contiguous working. (CO 3) (understand)
29. Elaborate the provisions regarding depillaring operations as per CMR 2017. (CO 3) (understand)
30. Describe the provisions of CMR 2017 regarding working near mine boundaries in below ground mines as well as working near mine boundaries in opencast mines. (CO 3) (understand)
31. Write down the provision of CMR 2017 regarding standard of ventilation. (CO 3) (understand)
32. Mention the provision of CMR 2017 regarding production drilling and extraction of methane from borehole as well as ventilation plan for methane exploration or extraction below ground. (CO 3) (understand)

**Section C (20 marks)**

33. In CMR 2017, the provisions regarding Manual Opencast working & mechanized opencast working are mentioned. Enumerate the provisions & explain. (CO 3) (Apply)
34. There is always a precaution required against the gases in mines, can you describe the precautions against inflammable & noxious gases as per CMR 2017. (CO 3) (Apply)

**UNIT IV**

**Section B (10 marks)**

35. Describe the provisions of MMR 1961 regarding ladders & Ladder ways. (CO 4) (understand)
36. Discuss the provisions of MMR 1961 regarding travelling roadways. (CO 4) (understand)
37. Describe the provisions of MMR 1961 regarding underground working. (CO 4) (understand)
38. Explain the provisions of MMR 1961 regarding standard of ventilation. (CO 4) (understand)
39. Notice of accident play vital role in mines. Describe the provisions of MMR 1961 regarding Notice of accident. (CO 4) (Apply)
40. Describe the provisions of MMR 1961 regarding ingress & egress. (CO 4) (understand)

**Summary Sheet**

**CO Wise**

CO	Q. No	Marks
<b>CO1</b>	<b>1,2,3,4,5,6,7,8,9,10,11</b>	<b>115</b>
<b>CO2</b>	<b>12,13,14,15,16,17</b>	<b>70</b>
<b>CO3</b>	<b>18,19,20,21,22,23,24,25,26,27</b>	<b>100</b>
<b>CO4</b>	<b>28,29,30,31,32,33,34,35,36,37,38,39,40</b>	<b>70</b>
<b>Total</b>		<b>355</b>



**Unit Wise**

Unit	Q. No	Marks
<b>Unit 1</b>	<b>1,2,3,4,5,6,7,8,9,10,11</b>	<b>115</b>
<b>Unit 2</b>	<b>12,13,14,15,16,17</b>	<b>70</b>
<b>Unit 3</b>	<b>18,19,20,21,22,23,24,25,26,27</b>	<b>100</b>
<b>Unit 4</b>	<b>28,29,30,31,32,33,34,35,36,37,38,39,40</b>	<b>70</b>
Total		355

**Blooms Taxonomy Level (BTL) Wise**

BTL	Q. No	Marks
<b>LOT</b>	<b>1,2,3,4,5,6,7,9,12,13,14,16,18,19,20,21,22,24,25,28,29, 30,31,32,33,34,36</b>	<b>165</b>
<b>HOT</b>	<b>8,10,11,15,17,23,26,27,26,27,34,35</b>	<b>190</b>
Total		355

**Prepared By: Prof. D P Pandey**

**Disclaimer:** - This is a practice set. The Question in End term examination will differ from the practice set. This practice set is meant for practice only.