

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, July 2020

Course Name : Mine Legislation & Safety

Semester : VIII

Programme Name : B.Tech Mining Engineering

Time : 03 hrs

Course Code : MIEG 423

Max. Marks:100

SECTION A

S. No.		Marks	CO
Q 1	Mark the statement as True/ False i. For ground vibration, lower the frequency - higher the ground displacement. ii. Blaster is a competent person iii. Date for annual return in mine is 20th February iv. For more than 5000 persons in u/g, rescue room can serve as rescue station v. Manager needs to visit & examine u/g working once in 15 days vi. Overman is subordinate to Sirdar vii. In gassiness-II, ventilation & safety officer can be one viii. If no u/g work in process, 1 person will be on rooster duty ix. Shifting of winding engine from one mine to another is considered as new installation x. For O/c mechanized mine, size of foreman's district means 4 districts in a radius of 1 km in flat terrain	10	CO1
Q 2	i. For wet bulb temperature more than -----degree, air current at a speed of --- - circulates ii. Minimum age of rescue trained person should be between --- & --- iii. Container containing explosive for first and third shift are of ---- & ---- colour iv. Size of overman's district depends upon -----& ----- v. If inclination of travelling roadway is >60 degree, it is provided with -----& ----	2*5= 10	CO2
Q 3	i. In production drilling of CBM, ---- & ----- are there at the collar of borehole ii. Mine abandonment notice to be given to ----- & within ---- days iii. automatic contrivance to prevent ---- & ---- iv. Manholes shall be not less than ---- metres in height and ---- metres in depth v. In development, seam height & width should be -----& -----mtrs	2*5= 10	CO4

SECTION B

Q 4	In U/g mine working, total number of persons ordinarily employed are >5000. Total number of personnel in rescue room are 7. Explain who are they and their requisite qualifications.	10	CO2
Q 5	For a U/G Coal mine, examination held. After examination certificates were verified. Out of total selected candidates, for 5 candidates, medical certificates found to be fraudulent. Assuming yourself as the chairman of board, suggest	10	CO3

	<ul style="list-style-type: none"> i. Necessary action needs to be taken ii. Legal provisions for the candidates 		
Q 6	<ul style="list-style-type: none"> i. Explain the condition under which rescue room can served as rescue station in U/G working ii. Assume that a mining company named XYZ had sent its report briefing rescue functionalities. Report was sent in the year 2018, what are those points mentioned in that report? 	10	CO1
Q 7	<ul style="list-style-type: none"> i. Indian Bureau of Mines, Ministry of Mines and D. G. M. S are planning to do change in existing MMR/ CMR. What is the provision for the same? ii. Can supdt. Of rescues station serve as Training officer as per vocational rule? Elaborate 	10	CO3
Q 8	<p>Summarize ISO 19434:2017, classification scheme of mining accidents, highlighting the key parameter.</p> <p style="text-align: center;">OR</p> <p>Apart from educational qualifications, judge the role of mine production in deciding the statutory positions in Mine.</p>	10	CO2
SECTION C			
Q 9	<p>In a U/G metal mine, regular & periodical inspection is needed. The officials who are responsible for such inspection have set of job responsibilities. Evaluate the job responsibility of each of them and select the most responsible one in case of any eventuality.</p> <p style="text-align: center;">OR</p> <p>Suggest the statutory provisions (for Inspection by official) for an underground coal. Assume the mine to be of gassiness type-II & chances of spontaneous heating are very high.</p>	15+5 10+10	CO4