DIPLOMA IN MINING ENGINEERING

SCHEME OF INSTRUCTIONS AND EXAMINATION

VI SEMESTER

C18:INDUSTRIAL TRAINING

(Practical Training)

S. No	Subject	Duration	Items	Max Marks	Remarks
1	Industrial Training (Practical Training)	6 Months	1.First Assessment (at the end of 2nd month)	200	
			2. Second Assessment (at the end of 4th month)	200	
			3.Training Report a) Log Book b) Report	 100 100	
			4. Seminar	200	
			5.Viva Voce	200	
		Total :		1000	

GENERALGUIDELINES

(Visit, Assessment, Logbook, Attendance, Report)

During Industrial Training the candidate shall put in a minimum of 90% attendance. The Industrial Training shall carry 1000 marks and pass marks is 50% a candidate failing to secure the minimum marks should repeat the training

At the end of the Training, the attendance of the student is to be obtained in the prescribed format from the industry.

Since the SBTET issues a mark list for training marks, it shall collect an examination fee for Industrial Training Evaluation.

The staff assigned for visit shall visit the industry as and when required and shall submit the progress of the student for every month

OBJECTIVES

On completion of Industrial Training / practical training in a industry, the student will be able to

1. Analyse the organizational set up of a mine
2. Compare the function of each department/section in a mine
3. State the inter relationship among various departments/sections
4. Examine the Geology of the mine and mine survey and preparation of various mine plans.
5. Explain various geological features of mine
6. Carry out different surveys and prepare the various mine plans in the survey Department.
7. Understand the winding system and pit top arrangements
8. Explain the various components of winding system and equipment in winding Engine room.
9. Explain the methods of working Coal
10. Explain the development of Coal
11. Explain the depillaring
12. Explain the transportation system in mines
13. Explain the different transportation systems
14. List the various safety devices used in different transportation system
15. Explain the ventilation systems in mines
16. Explain various ventilation systems used in mines
17. Explain various ventilation devices used for distribution of mine air
18. Estimate the drilling and blasting practice in mines
19. Explain the various patterns of drilling.
20. Explain the storage of explosives/Magazine
21. Explain the various types of explosives used in mines

22. Explain the various tools/accessories /equipment used for blasting
23. Explain the procedure of blasting/shot firing in mines(Ordinary/Electric)
24. Understands the lighting arrangements in mines
25. Explain about lamp room organization
26. Describe the Cap lamp and flame safety lamp
27. Illustrate the different machinery used in mines
28. Explain about different machinery employed on surface and in underground.
29. Explain about Industrial Effluent treatment and Low cost automation .
31. Illustrate Hoisting systems in underground mine /Haulages and transport system in underground/opencast mine /Signaling systems in underground mines
32. Illustrate Ventilation related instruments used in mines / Air conditioning systems in underground mine / Fire fighting equipments.
33. Illustrate Stoping operations in underground mines/ Ore bins and types/ Sampling and assaying / Mineral beneficiation methods in case of Metal mining
34. Illustrate Dust control measures/ Miner's diseases/ Rescue and recovery/ Air pollution / Mine fires / Water pollution / Industrial safety / Industrial Effluent treatment
35. Illustrate Mine pumps/ Mine surveying/ Stowing operations
36. Understanding about mine Fans, Fan house, auxiliary, booster fans
37. Understanding Man riding System
38. Understanding Coal Handling Plant/ Truck dispatch system
39. Understanding Pit safety committee/safety weeks/welfare measures
40. Understanding Underground substation, surface substation, maintenance and operation

LOG BOOK:

The trainees are required to maintain neatly a work diary(Log Book) giving a brief account of the activities performed and observations made on day to day basis at the industry. This is to be checked and counter signed by the supervising personnel in industry once in every week and shall be signed by the visiting faculty at the time of visit(to avoid writing of logbook at the end in a single stretch).

COVER PAGE FOR LOG BOOK FORMAT

Name of the Student	
PIN	
Name of the Institution	
Name of Industry	
Date of joining	
Name of the project	
Nature of the work	Underground (Coal/Metal) mine /Opencast(Coal/Metal) mine /Quarry mine/Lime stone mine/Granite Mine/ Cement Industry/Exploration/any other specify ----------

LOG BOOK -FORMAT

S N	Day	Date	Shift hours	Work done/ activity	Signature of student
1	Mon				
2	Tue				
3	Wed				
4	Thu				
5	Fri				
6	Sat				
7	Sun				

Signature of Training in-chare
(at end of every week)

Trainee student Attendance Particulars-Format

Name and Address of the Industry:
Name of the Institution :
Name of the Branch :

S.No.	PIN	Name	Date of joining	Date of relieving	Total working days (Excluding Holidays)	Total Present days	Percentage of attendance
1.							
2.							
3.							
4.							
5.							

Training Report:

Every trainee shall submit a spiral bounded training report ,of approximately 100 pages ,neatly typed in A4 size paper. It shall be informative and cover all Technical aspects of training and certified by the Industry concerned.

- **Evaluation and assessment of Industrial Training**, shall be done and marks be awarded in the following manner, provided the candidates concerned have put up minimum 90% attendance of Industrial Training.

Industrial assessment at Industry : 600 marks (in two spells of 300 marks each)

Institutional Evaluation : 300 marks

Semester End Examination : 100 marks
(Seminar/viva-voce at Institution)

TOTAL 1000 marks

Assessment parameters at Industry

Sl No	Learning Parameter	Assessment I (First Quarter)	Assessment II (Second Quarter)
1	Attendance and punctuality	20	20
2	Familiarity of tools and material	30	30
3	Engineering skills	50	50
4	Application of knowledge & Problem solving skills	50	50
5	Comprehension and observation	10	10
6	Professionalism/Professional ethics	20	20
7	Safety and environmental consciousness	10	10
8	Communication skills	20	20
9	Supervisory skills	50	50
10	General conduct during the period	40	40
Total marks for Industry Evaluation		300	300
		600 marks	

Assessment parameters at Institution (End Examination)

Institution Level Evaluation Scheme			
Sl No	**Criteria**	**Marks**	**Time**
1	1st Report Submission	50	within 4 Weeks
2	Seminar-I	50	9th to 10th week
3	2nd Report Submission	50	Within 12 weeks
4	Log book	100	--
5	Seminar-II	50	Before Viva-Voce
	Institute Evaluation Total	**300**	
Semester End Examination			
1	Viva-Voce	50	After 24 weeks
2	Presentation/Demonstration of skills	50	
	Total	100	

The assessment at the institute level will be done by a minimum of three members i.e. Internal Faculty, Industrial Experts/External Examiner and H.O.D. and the shall be averaged