

STATE COUNCIL FOR TECHNICAL EDUCATION AND VOCATIONAL TRAINING, ODISHA

TEACHING AND EVALUATION SCHEME FOR 6th Semester MLT (wef 2020-21)

Subject Number	Subject Code	Subject	Periods/week			Evaluation Scheme			
			L	T	P	Internal Assessment/ Sessional	End Sem Exams	Exams (Hours)	Total
		Theory							
	Th.1	PHARMACOLOGY-II	4		-	20	80	3	100
	Th.2	MICROBIOLOGY-II	4		-	20	80	3	100
	Th.3	BIOCHEMISTRY-II	4		-	20	80	3	100
	Th.4	MAINTENANCE OF MEDICAL EQUIPMENTS	4			20	80	3	100
		<i>Total</i>	16			80	320	-	400
		Practical							
	Pr.1	PHARMACOLOGY-II LAB	-	-	4	25	25	3	50
	Pr.2	MICROBIOLOGY-II LAB	-	-	4	25	25	3	50
	Pr.3	BIOCHEMISTRY-II LAB	-	-	4	25	50	3	75
	Pr.4	Project Phase-II			6	50	100	3	150
	Pr-5	Life Skill			2	25	-		25
		Student Centered Activities(SCA)		-	3	-	-	-	-
		<i>Total</i>	-	-	23	150	200	-	350
		Grand Total	16	-	23	230	520	-	750

Abbreviations: L-Lecturer, T-Tutorial, P-Practical . Each class is of minimum 55 minutes duration

Minimum Pass Mark in each Theory subject is 35% and in each Practical subject is 50% and in Aggregate is 40%

SCA shall comprise of Extension Lectures/ Personality Development/ Environmental issues /Quiz /Hobbies/ Field visits/ cultural activities/Library studies/Classes on MOOCs/SWAYAM etc. ,Seminar and SCA shall be conducted in a section.

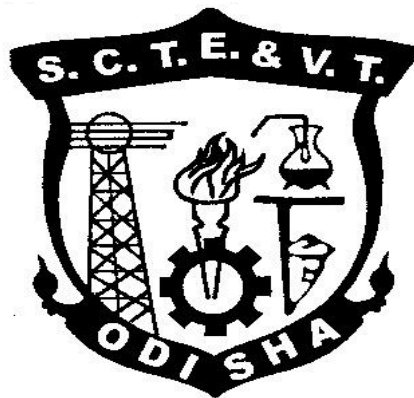
There shall be 1 Internal Assessment done for each of the Theory Subject. Sessional Marks shall be total of the performance of individual different jobs/ experiments in a subject throughout the semester

**CURRICULLUM OF 6th
SEMESTER**

For

**DIPLOMA IN Medical Lab
Technology**

**(Effective FROM 2020-21
Sessions)**



**STATE COUNCIL FOR TECHNICAL
EDUCATION & VOCATIONAL
TRAINING, ODISHA,
BHUBANESWAR**

TH-1-PHARMACOLOGY-II

Name of the Course: MLT			
Course code:		Semester	6th
Total Period:	60	Examination :	3 hrs
Theory periods:	4P / week	Internal Assessment:	20
Maximum marks:	100	End Semester Examination ::	80

A. RATIONALE:

The subject Pharmacology is a compulsory paper for MLT. This subject includes scope of pharmacology, their advantages and disadvantages, Metabolism, distribution and excretion of drugs and General mechanism of drugs action and their factors which modify drugs action. Pharmacological classification of drugs etc .

B. OBJECTIVE:

On completion of study of Pharmacology, the students will be able to: To acquire new knowledge in Pharmacology and Toxicology by conducting and promoting innovative research. The final aim of this research is to establish the efficacy, safety and effectiveness of medications in humans, to discover new lead compounds and to understand the mechanisms of action of drugs.

Topic- Wise Distribution Of Periods With Marks

S.L. No.	Topics	Periods
1.	Drugs	12
2.	Autocoids	8
3.	Cardio Vascular Drugs	10
4.	Drugs Affecting Renal Function	4
5.	Hormones And Hormone Antagonists	8
6.	Drugs Acting On Digestive System	8
7.	Chemotherapy Of Microbial Diseases	10
	Total	60

1. Drugs:

- 1.1. Drugs acting on respiratory system Respiratory stimulants.
- 1.2. Bronchodilators.
- 1.3. Nasal decongestants.
- 1.4. Expectorants and Antitussive agents.

2. Autocoids:

- 2.1. Physiological role of histamine and serotonin
- 2.2. Histamine and Antihistamines
- 2.3. Prostaglandins.

3. Cardio Vascular Drugs:
 - 3.1. Cardio vascular drugs Cardiotonics
 - 3.2. Antiarrhythmic agents
 - 3.3. Anti-anginal agents
 - 3.4. Antihypertensive agents
 - 3.5. Peripheral Vasodilators and drugs used in atherosclerosis.
 - 3.6. Drugs acting on the blood and blood forming organs.
 - 3.7. Haematinics, Coagulants And Anticoagulants,
 - 3.8. Haemostatic
 - 3.9. Blood substitutes and plasma expanders.

4. Drugs Affecting Renal Function - Diuretics and anti-diuretics.

5. Hormones And Hormone Antagonists-
 - 5.1. Hypoglycemic agents
 - 5.2. Anti--thyroid drugs
 - 5.3. Sex hormones and oral contraceptives
 - 5.4. Corticosteroids.

6. Drugs Acting On Digestive System-
 - 6.1. Carminatives
 - 6.2. Digest Ants
 - 6.3. Bitters, Antacids And Drugs Used In Peptic Ulcer
 - 6.4. Purgatives & Laxatives
 - 6.5. Antidiarrohoeals
 - 6.6. Emetics, Anti-Emetics
 - 6.7. Antispasmodics.

7. Chemotherapy Of Microbial Diseases:
 - 7.1. Urinary Antiseptics
 - 7.2. Sulphonamides
 - 7.3. Penicillin
 - 7.4. Streptomycin
 - 7.5. Tetracyclines And Other Antibiotics.
 - 7.6. Antitubercular Agents
 - 7.7. Antifungal Agents
 - 7.8. Antiviral Drugs, Anti-Leprotic Drugs.
 - 7.9. Chemotherapy Of Protozoal Diseases
 - 7.10. Anthelmintic Drugs.
 - 7.11. Chemotherapy Of Cancer, Disinfectants And Antiseptics.

Syllabus to be covered up to I.A. Chapter: 1,2,3,4

Learning Resources:			
Sl.No	Title of the Book	Name of Authors	Name of Publisher
1.	Pharmacology	Rang & Dale	Sathya Publishers
2.	Pharmacology	Goodman and Gilman	Jaypee Brothers Publications

TH-2-MICROBIOLOGY-II

Name of the Course: MLT			
Course code:		Semester	6th
Total Period:	60	Examination :	3 hrs
Theory periods:	4P / week	Internal Assessment:	20
Maximum marks:	100	End Semester Examination ::	80

A. RATIONALE:

The subject Microbiology is a compulsory paper for MLT. This subject includes scope of pharmacology, their advantages and disadvantages, Metabolism, distribution and excretion of drugs and General mechanism of drugs action and their factors which modify drugs action. Pharmacological classification of drugs etc .

B. OBJECTIVE:

To impart knowledge of the basic principles of bacteriology, virology, mycology, immunology and parasitology including the nature of pathogenic microorganisms, pathogenesis, laboratory diagnosis, transmission, prevention and control of diseases common in the country.

Topic- Wise Distribution Of Periods With Marks

S.L. No.	Topics	Periods
1.	Immunology And Serology	20
2.	Parasitology	20
3.	Virology	15
4.	Animal Care	5
	Total	60

1. Immunology And Serology

- 1.1. Emphasis on principal and uses/application
- 1.2. Immunity –Basic principles and classification
- 1.3. Antigen, Antibody (Immunoglobulin's)
- 1.4. Complement system
- 1.5. Antigen – Antibody reactions
- 1.6. Hypersensitivity- classification & different skin tests used for diagnosis.
- 1.7. Immunodeficiency diseases including AIDS –in brief.
- 1.8. Autoimmunity – Basic concept,
- 1.9. Immuno-prophylaxis & Immunization schedule
- 1.10. Vaccines-classification & uses.

2. Parasitology

- 2.1. Introduction & classification of medically important parasites
- 2.2. Intestinal & Tissue protozoa (E. histolytica, Giardia Primary Amoebic meningo-encephalitis)
- 2.3. Malaria parasite
- 2.4. Leishmanial parasites
- 2.5. Tapeworms
- 2.6. Flukes of liver and Intestine
- 2.7. Intestinal nematodes
- 2.8. Filarial worms and other tissue nematodes

3. Virology

- 3.1. General Characters of viruses
- 3.2. Classification in brief and name of the diseases they produce.
- 3.3. Hepatitis viruses, HIV, (Polio, Rabies, Rata, Measles, Dengue)
- 3.4. Oncogenic viruses in brief
- 3.5. Collection and transport of virological specimens
- 3.6. Laboratory diagnosis of viral infections (various methods of virus culture, serology etc.)

4. Animal Care

- 4.1. Care of sheep and procedure to draw blood from sheep.
- 4.2. Handling, feeding and Breeding of laboratory animals.

Syllabus to be covered up to I.A. Chapter: 1,2

Learning Resources:			
Sl.No	Title of the Book	Name of Authors	Name of Publisher
1.	Microbiology	Gerard J. Tortora, Berdell R. Funke and	Tata Mcgraw Hill
2.	Clinical Microbiology Made Ridiculously Simple	Mark Gladwin, Bill Trattler and C. Scott Mahan	Tata Mcgraw Hill

TH-3-BIOCHEMISTRY-II

Name of the Course: MLT			
Course code:		Semester	6th
Total Period:	60	Examination :	3 hrs
Theory periods:	4P / week	Internal Assessment:	20
Maximum marks:	100	End Semester Examination ::	80

A. RATIONALE:

The subject Biochemistry is a compulsory paper for MLT. Biochemistry is used to learn about the biological processes which take place in cells and organisms. Biochemistry may be used to study the properties of biological molecules, for a variety of purposes.

B. OBJECTIVE:

To impart knowledge of the basic principles of biochemistry seeks to unravel the complex chemical reactions that occur in a wide variety of life forms, it provides the basis for practical advances in medicine, veterinary medicine, agriculture, and biotechnology. It underlies and includes such exciting new fields as molecular genetics and bioengineering.

Topic- Wise Distribution Of Periods With Marks

S.L. No.	Topics	Periods
1.	Organ Function Tests	25
2.	Clinical Enzymology & Organization	35
	Total	60

1. ORGAN FUNCTION TESTS

- 1.1. Endocrine Function Tests – Thyroid Function Tests- 2
- 1.2. Biochemical tests of CSF- 12
- 1.3. Renal Function Tests- 3 , 24 hr collection,
- 1.4. Preservation Physical characteristics, clearance tests.
- 1.5. Liver function tests.- 3
- 1.6. Gastric Function Tests-1
- 1.7. Pancreatic Function Tests-2
- 1.8. Serum Amylase, Serum Trypsin, Serum Lipase,.

2. CLINICAL ENZYMOLOGY & ORGANIZATION

- 2.1. Fundamentals of analytical bio-chemistry and instrumentation.
- 2.2. Clinical enzymology – Diagnostic enzymes, Iso-zymes.
- 2.3. Fundamentals of Analytical Bio-chemistry & Instrumentation
- 2.4. Analytical balance
- 2.5. Centrifuges
- 2.6. Colorimeter and spectrophotometer

2.7.Flame photometer

2.8. Auto analyzers

2.9.Chromatography

2.10. Electrophoresis

Syllabus to be covered up to I.A. Chapter: 1

Learning Resources:			
Sl.No	Title of the Book	Name of Authors	Name of Publisher
1.	Principles Of Biochemistry	Albert L. Lehninger	Tata Mcgraw Hill
2.	Fundamentals of General, Organic, and Biological Chemistry	John McMurry	Tata Mcgraw Hill

TH-4-MAINTENANCE OF MEDICAL EQUIPMENTS

Name of the Course: MLT			
Course code:		Semester	6th
Total Period:	60	Examination :	3 hrs
Theory periods:	4P / week	Internal Assessment:	20
Maximum marks:	100	End Semester Examination ::	80

A. RATIONALE:

The subject Maintenance Of Medical Equipments is a compulsory paper for MLT. This subject is to learn about the different devices used in different types of testings and diagnosis.

B. OBJECTIVE:

To maintain all medical equipments to the appropriate standards as prescribed by equipment manufacturer, so as to ensure that all medical equipments to be used to provide the best health care services to patients (IPs, staff, pensioners & beneficiaries) should be safe, efficient, effective, reliable and long lasting.

Topic- Wise Distribution Of Periods With Marks

S.L. No.	Topics	Periods
1.	Electrical Power Supply	15
2.	Electrical Shock Hazard & safety	15
3.	Installation	15
4.	Maintenance	15
	Total	60

1. Electrical Power Supply:

- 1.1. Concept of single phase & three phase power supply system
- 1.2. Voltage, wattage,
- 1.3. Earthing method, Open ground problem
- 1.4. Shielding, Electrical Rules & Regulation,
- 1.5. Switch, Fuse, UPS.

2. Electrical Shock Hazard & safety :

- 2.1. Electrical Shock
- 2.2. Type of shock, Gross shock, Micro Shock
- 2.3. Letgo-current
- 2.4. Physiological effect of electrical shock
- 2.5. Electrical Safety
- 2.6. Prevention of shock
- 2.7. Isolation circuit
- 2.8. Leakage Current, Code & Regulation for the medical Instrument
- 2.9. Patient safety.

3. Installation:
 - 3.1. Checklist
 - 3.2. Requirement for the installation of medical Instruments - Power , Room size, construction & others, drawing of Layout and Requirement for the installation of X-ray, USG, CT, MRI, Laboratory Instruments – colorimeter
 - 3.3. Spectrophotometer
 - 3.4. Semi analyzer
 - 3.5. Autoanalyzer
 - 3.6. Electrophoresis machine
 - 3.7. ECG, EEG, EMG
 - 3.8. Computed Spirometer etc.

4. Maintenance:
 - 4.1. Function of the instruments
 - 4.2. Use of manual , maintenance
 - 4.3. Troubleshooting –fault, possible cause, solution
 - 4.4. Approach of fault analysis
 - 4.5. Preventive maintenance& annual maintenance of different medical instruments such - X-ray, USG, CT, MRI, Laboratory Instruments – colorimeter, Spectrophotometer, Semi analyzer, Auto-analyzer, Electrophoresis machine, ECG, EEG, EMG , Computed Spiro meter, BP Instrument, Stethoscope etc.

Syllabus to be covered up to I.A. Chapter: 1,2

Learning Resources:			
Sl.No	Title of the Book	Name of Authors	Name of Publisher
1.	Medical Equipment Maintenance Management & Oversight	Binseng Wang	Tata Mcgraw Hill
2.	Medical Equipment Maintenance	Elliott S. Kanter	Tata Mcgraw Hill

PR-1-PHARMACOLOGY-II LAB

Name of the Course: MLT			
Course code:		Semester	6th
Total Period:	60	Examination :	3 hrs
Theory periods:	4P / week	Internal Assessment:	25
Maximum marks:	50	End Semester Examination ::	25

A. RATIONALE:

Pharmacology of drugs, their mechanisms of action; therapeutic uses, adverse effects and drug interaction are covered in theoretical classes. The subject **Pharmacology** is a compulsory paper for MLT.

B. OBJECTIVE:

Pharmacology deals with effects of various test substances studied on different animal species which is aimed at finding out safe therapeutic agent suitable for public health as well as mechanism and site of action of a test substance.

Experiments:

1. Effect of digitalis on frog's heart.
2. Effect of hypnotics in mice.
3. Effect of convulsants and anticonvulsant in mice or rats.
4. Test for pyrogens.
5. Taming and hypnosis potentiating effect of chlorpromazine in mice/rats.
6. Effect of diphenhydramine in experimentally produced asthma in guinea pigs.

PR-2-MICROBIOLOGY-II LAB

Name of the Course: MLT			
Course code:		Semester	6th
Total Period:	60	Examination :	3 hrs
Theory periods:	4P / week	Internal Assessment:	25
Maximum marks:	50	End Semester Examination ::	25

A. RATIONALE:

The subject Maintenance Of Medical Equipments is a compulsory paper for MLT. This subject is to learn about the different devices used in different types of testings and diagnosis.

B. OBJECTIVE:

To maintain all medical equipments to the appropriate standards as prescribed by equipment manufacturer, so as to ensure that all medical equipments to be used to provide the best health care services to patients (IPs, staff, pensioners & beneficiaries) should be safe, efficient, effective, reliable and long lasting.

Experiments:

Parasitology

Collection, transportation, preservation of faecal materials for examination of parasites.

a) Saline and iodine preparation of faeces for identification of Ova Cysts, RBC, Pus cells, Macrophage bacterial and fungal study

b) Concentration techniques for examination of faeces.

Blood smear examination for malaria parasite L.D. bodies, micro filarial etc.

Virology - (all theory discussion), Embryonated egg inoculation, Tissue culture techniques

Serological tests for diagnosis of common viral diseases, HIV surveillance lab and EUSA / Rapid tests.

Serology -Widal test and preparation of Salmonella antigens, VDRI Test, Latest agglutination tests for (RA, CRP, ASO, Pregnancy Test, Australia Antigen, Toxoplasmosis)

ELISA test RIA Test, Gel diffusion techniques and Immuno electro phoresis, Detection of Antigen / Antibody for Malarial (ICT), Optimal Test, Assay of immunoglobulins

Diagnostic skin tests

- Tuberculin test (montoux test), Lepromin test, Casoni's test, Other tests.

PR-3- BIOCHEMISTRY-II LAB

Name of the Course: MLT			
Course code:		Semester	6th
Total Period:	60	Examination :	3 hrs
Theory periods:	4P / week	Internal Assessment:	25
Maximum marks:	75	End Semester Examination ::	50

A. RATIONALE:

The subject Maintenance Of Medical Equipments is a compulsory paper for MLT. This subject is to learn about the different devices used in different types of testings and diagnosis.

B. OBJECTIVE:

To maintain all medical equipments to the appropriate standards as prescribed by equipment manufacturer, so as to ensure that all medical equipments to be used to provide the best health care services to patients (IPs, staff, pensioners & beneficiaries) should be safe, efficient, effective, reliable and long lasting.

Experiments:

Determination in Blood/Serum of

- Glucose Tolerance Tests
- Urea
- Creatinine
- Uric Acid
- Cholesterol, Triglycerides, HDL Cholesterol, Lipid Profile
- Total serum protein and albumin
- T3, T4, TSH

Pr4. PROJECT Phase - II

Name of the Course: Diploma in MLT			
Course code:		Semester	6 th
Total Period:	90	Examination	3 hrs
Lab. periods:	6 P / week	Sessional	50
Maximum marks:	150	End Sem Examination	100

RATIONALE

Students' Project Work aims at developing innovative skills in the students whereby they apply the knowledge and skills gained through the course covered in many subjects and Labs, by undertaking a project. The prime emphasis of the project work is to understand and apply the basic knowledge of the principles of Medical lab Technology and practices in real life situations, so as to participate and manage a large MLT projects, in future. Entire Project spreads over 5th and 6th Semester. Part of the Project covered in 5th Semester was named as *Project Phase-I* and balance portion to be covered in 6th Semester shall be named as *Project Phase-II*.

OBJECTIVES

After undergoing the Project Work, the student will be able to:

- Implement the theoretical and practical knowledge and skills gained through various subjects/courses into an application suitable for a real practical working environment, preferably in an industrial environment.
- Identify and contrast gap between the technological knowledge acquired through curriculum and the actual industrial need and to compensate it by acquiring additional knowledge as required.
- Carry out cooperative learning through synchronous guided discussions within the class in key areas, asynchronous document sharing and discussions, as well as prepare collaborative edition of the final project report.
- To develop the skill of writing Project Report

Project Phase-I and Phase-II

The Project work duration covers 2 semesters(5th and 6th sem). The Grouping of students, selection of Project, assignment of Project Guide to the Group was done in the beginning of 5th semester under Project Phase-I. The students were allowed to study literature, any existing system and then define the Problem/objective of the Project. Preliminary work of the system also have to be complete in Phase-I. Development/ further progress may also begin in this phase. Project Milestones are to be set so that progress can be tracked .

In Phase-II Development, Testing, Documentation and Implementation have to be complete. Project Report have to be prepared and complete in Phase-II. All Project reports should be organized uniformly in proper order, irrespective of group. Teacher Guides can make suitable alteration in the components of Task and schedule.

At the end of Project Phase-II in 6th semester there shall be one presentation by each group on whole Project work undertaken by them.

A suggestive criterion for assessing student performance by the external (preferably person from industry) and internal (teacher) examiner is given in table below:

Sl. No.	Performance Criteria
1.	Selection of project assignment
2.	Planning and execution of considerations
3.	Quality of performance
4.	Providing solution of the problems or production of final product
5.	Sense of responsibility
6.	Self expression/ communication/ Presentation skills
7.	Interpersonal skills/human relations
8.	Report writing skills
9	Viva voce

The teachers are free to evolve other criteria of assessment, depending upon the type of project work.

It is proposed that the institute may organize an annual exhibition of the project work done by the students and invite leading Industrial organisations to such an exhibition.

The Project Report need to be prepared as per standard format and following is the indicative format. The Teacher Guide may make minor alteration keeping the sense in tact.

Organization of Project Report

1. Cover page:

It should contain the following (in order)

- (i) Title of the Project
- (ii) “Submitted in partial fulfillment of the requirements for the Diploma in <Branch Name>”
- (iii) By Name of the Student(s)
- (iv) Logo of the Institution
- (v) Branch Name/Depart Name and Institution Name with Address
- (vi) Academic Year

2. 1st Inner page

Certificate:

It should contain he following

“This is to certify that the work in this Project Report entitled <Project Title> by <Name

of student(s)> has been carried out under my supervision in partial fulfillment of the requirements for the Diploma in <Branch Name>” during session <session > in <Branch /Department Name> of <Institute name> and this work is the original work of the above student(s).

Seal and signature of the Supervisor/Guide with date

3. 2nd Inner Page
Acknowledgement by the Student(s)
4. Contents.
5. Chapter wise arrangement of Reports
6. Last Chapter: Conclusion
It should contain
 - (i) Conclusion
 - (ii) Limitations
 - (iii) Scope for further Improvement
7. References

Pr-5 LIFE SKILL

(Common to All Branches)

Practical	2 Periods per week	Sessional	25 Marks
Total Periods	30 Periods	Total Marks	25 Marks

Objective: After completion of this course the student will be able to:

- Develop team spirit i.e. concept of working in team
- Apply problem solving skills for a given situation
- Use effective presentation techniques
- Apply task management techniques for given projects
- Enhance leadership traits
- Resolve conflict by appropriate method
- Survive self in today's competitive world
- Face interview without fear

DETAIL CONTENTS:

1. SOCIAL SKILL

Society, Social Structure, Develop Sympathy and Empathy

Swot Analysis – Concept, How to make use of SWOT

Inter personal Relation: Sources of conflict, Resolution of conflict ,
Ways to enhance interpersonal relation

2. PROBLEM SOLVING

Steps of Problem solving:

- Identify and clarify the problem,
- Information gathering related to problem,
- Evaluate the evidence,
- Consider alternative solutions and their implications,
- Choose and implement the best alternative,
- Review
- Problem solving techniques:

1) Trial and error, 2) Brain storming, 3) Lateral (Out of Box) thinking

3. PRESENTATION SKILL

Body language , Dress like the audience

Posture, Gestures, Eye contact and facial expression. STAGE FRIGHT,

Voice and language – Volume, Pitch, Inflection, Speed, Pause

Pronunciation, Articulation, Language, Practice of speech.

Use of AV aids such as Laptop with LCD projector, white board etc.

4. GROUP DISCUSSION AND INTERVIEW TECHNIQUES

Group Discussion:

Introduction to group discussion, Ways to carry out group discussion,
Parameters— Contact, body language, analytical and logical thinking,
decision making

Interview Technique :

Dress, Posture, Gestures, facial expression, Approach

Tips for handling common questions.

5. WORKING IN TEAM

Understand and work within the dynamics of a groups.

Tips to work effectively in teams,
 Establish good rapport, interest with others and work effectively with them
 to meet common objectives,
 Tips to provide and accept feedback in a constructive and considerate way ,
 Leadership in teams, Handling frustrations in group.

6. TASK MANAGEMENT

Introduction, Task identification, Task planning ,
 organizing and execution, Closing the task

PRACTICAL

List of Assignment: *(Any Five to be performed including Mock Interview)*

a. SWOT analysis:-

Analyse yourself with respect to your strength and weaknesses, opportunities and threats. Following points will be useful for doing SWOT.

- a) Your past experiences,
- b) Achievements,
- c) Failures,
- d) Feedback from others etc.

b. Solve the True life problem assigned by the Teacher.

3. Working in a Team

Form a group of 5-10 students and do a work for social cause e.g. tree plantation, blood donation, environment protection, camps on awareness like importance of cleanliness in slum area, social activities like giving cloths to poor etc.(One activity per group where Team work shall be exhibited)

4. Mock Interview

5. Discuss a topic in a group and prepare minutes of discussion.

6. Deliver a seminar for 5 minutes using presentation aids on the topic given by your teacher.

7. Task Management

Decide any task to be completed in a stipulated time with the help of teacher. Write a report considering various steps in task management (with Break up into sub tasks and their interdependencies and Time)

Note: -1. Please note that these are the suggested assignments on given contents/topic. These assignments are the guide lines to the subject teachers. However the subject teachers are free to design any assignment relevant to the topic.

Note: -2. The following Topics may be considered for Seminar/GD in addition to other Topics at the discretion of the Teacher.

(Comparison with developed countries, Occupational Safety, Health Hazard, Accident & Safety, First-Aid, Traffic Rules, Global Warming, Pollution, Environment, Labour Welfare Legislation, Labour Welfare Acts, Child Labour Issues, Gender Sensitisation ,Harassment of Women at Workplace)

METHODOLOGY:

The Teacher is to explain the concepts prescribed in the contents of the syllabus and then assign different Exercises under Practical to the students to perform.

Books Recommended:-

Sl.No	Name of Authors	Title of the Book	Name of the Publisher
01	E.H. Mc Grath , S.J	Basic Managerial Skills for All	PHI

02	Lowe and Phil	Creativity and problem solving	Kogan Page (I) P Ltd
03	Adair, J	Decision making & Problem Solving	Orient Longman
04	Bishop , Sue	Develop Your Assertiveness	Kogan Page India
05	Allen Pease	Body Language	Sudha Publications Pvt. Ltd.