

THE WEST BENGAL UNIVERSITY OF HEALTH SCIENCES



WBUHS

**PATHOLOGY LOGBOOK
FOR
2ND PROFESSIONAL MBBS STUDENT
AS PER
COMPETENCY BASED CURRICULUM**

DEPARTMENT OF PATHOLOGY.....

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Personal details

Name of the student :

Date of admission to MBBS Course :

Date of beginning of the current Phase :

College ID(Roll No) :

Reg. No. (University ID) :

Permanent Address :

Present Address:

E mail ID:

Mobile Number:

Father's/Guardian's contact no:

Student's Signature:

LOGBOOK CERTIFICATE**DEPARTMENT OF PATHOLOGY.....****MBBS BATCH:****LOGBOOK CERTIFICATE**

This is to certify that the candidate Mr/ Ms....., Reg No.admitted in the year in Medical College and Hospital has satisfactorily completed / has not completed all assignments /requirements mentioned in this logbook for second year MBBS course in the subject of Pathology during the period from to.....
She / He, is / is not, eligible to appear for the summative (University) assessment as on.....

Signature of Faculty

Countersigned by Head of the Department . Name and Designation

Principal/Dean of the College

Place:

Date:

DEPARTMENT OF PATHOLOGY.....

GENERAL INSTRUCTIONS FOR STUDENTS

- 1) The log book is a record of the academic / non academic activities of the student. Each medical student is responsible for maintaining their logbook.
- 2) This logbook is prepared as per the guidelines of NMC for implementation of Competency based curriculum for Phase II MBBS students in the subject of Pathology.
- 3) Students are instructed to keep their logbook entries up to date. It is the responsibility of the student to enter their activity in respective pages & get them duly signed by the supervising faculty (within a week).
- 4) Entries in the logbook will be in accordance with activities done in the para-clinical departments & have to be scrutinized by the Head/ In-charge of the concerned department.
- 5) The logbook assessment will be based on multiple factors like Attendance, Active participation in the sessions, Timely completions, Quality of write up of reflections, Overall participation & performance and Acquisition of selected competencies
- 6) The logbook shall be kept as documentation of performance of the candidate for that department and should be submitted to department as a bonafide record of the candidate before appearing for the University examination.
- 7) The undergraduate medical education program is designed with a goal to create an "Indian Medical Graduate" (IMG). The IMG must be able to function in the following ROLES appropriately and effectively: (A) *Clinician* who understands and provides preventive, promotive, curative, palliative and holistic care with compassion. (B) *Leader* and member of the health care team and system with capabilities to collect analyze, synthesize and communicate health data appropriately. (C) *Communicator* with patients, families, colleagues and community. (D) *Lifelong learner* committed to continuous improvement of skills and knowledge. (E) *Professional* who is committed to excellence, is ethical, responsive and accountable to patient's community and the profession.

DEPARTMENT OF PATHOLOGY

DURATION OF COURSE & ELIGIBILITY CRITERIA

1. Every learner shall undergo a period of certified study extending over 4 ½ academic years, divided into nine semesters from the date of commencement of course to the date of completion of examination which shall be followed by one year of compulsory rotating internship.
2. Para-clinical phase [(Phase II) - Second Professional (12 months)]: will consist of Para-clinical subjects namely Pathology, Pharmacology, Microbiology, Community Medicine, Forensic Medicine and Toxicology, Professional development including Attitude, Ethics & Communication (AETCOM) module and introduction to clinical subjects ensuring both horizontal and vertical integration.
3. The second Professional examination shall be held at the end of second professional training (11 months), in the subjects of Pathology, Microbiology, and Pharmacology. Eligibility to appear for Professional examinations:
 - a. **Attendance requirements are 75% in theory and 80% in practical** for eligibility to appear for the examinations in that subject.
 - b. Learners must secure at least 50% marks of the total marks (combined in theory and practical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject.
 - c. **In subjects that have two papers, the learner must secure** at least 40% marks in each of the papers with minimum 50% of marks in aggregate (both papers together) to pass in the said subject.
4. **Internal Assessment**
 - a) Minimum 3 internal assessment examinations will be conducted in each Para clinical subject.
 - b) Day to day practical records & log book will be given importance in internal assessment.
 - c) Learners must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject.
 - d) Results of IA will be displayed in notice board within 1-2 weeks of test. The internal assessment records will be kept in the department as a separate document.
 - e) Students will be made aware of the results and their signature will be documented against results.
 - f) Internal assessment marks will reflect as separate head of passing at the summative/university examination and will not be incorporated with the marks obtained in summative/university exam.
 - g) Summative Assessment will be under the supervision of University.

OVERVIEW TEACHING SCHEDULE IN PATHOLOGY

Lectures (in hours)	Tutorials/ Seminars /Integrated Teaching (in hours)	Self- Directed Learning (hours)	Total (hours)
80	138	12	230

OVERVIEW INTERNAL ASSESSMENT SCHEDULE IN PATHOLOGY

1 st Internal Assesement	3(three) IA in a academic year Theory 100 marks Practical 100 marks *20% of marks from formative assessment documented in log book will be added to the internal assessment marks.
2 nd Internal Assesement	
3 rd Internal Assesement	

OVERVIEW OF UNIVERSITY EXAMINATION

Subjects	Theory Total	Practicals /Orals	Pass Criteria
Pharmacology 2 Papers	200	100	Internal Assessment: 50% combined in theory and practical (not less than 40% in each) for eligibility for appearing for University Examinations University Examination: Mandatory 50% marks separately in theory and practical (practical = practical+ viva)
Pathology 2 papers	200	100	
Microbiology 2 papers	200	100	

GLOSSARY

Logbook: is a *verified record* of the progression of the learner documenting the acquisition of the requisite knowledge, skills, attitude and/ or competencies.

Portfolio is an evidence events documented in the logbook. It includes selected assignments, self assessment, feedback, work-based and in-training formative assessments, reflections and learning from planned activity in the curriculum.

Activity: This term refers to a predefined task performed by learners that contributes to the achievement of stated objectives or competencies.

Attempt at activity by learner: Indicate if:

- a. First attempt (or) only attempt
- b. Repeat (R) of a previously done activity
- c. Remedial activity (Re) based on the determination by the faculty

Rating - Use one of three grades:

- a. Below expectations (B);
- b. Meets expectations (M)
- c. Exceeds expectations (E)

Decision of faculty

- a. C: activity is completed, therefore closed and can be certified
- b. R: activity needs to be repeated without any further intervention
- c. Re: activity needs remedial action (usually done after repetition did not lead to satisfactory completion)

Feedback: Feedback is a formal active interaction performed at the completion of an observed activity (or activities) intended to facilitate positive change, growth and improvement of the learner through guided reflection of activity (ies) performed.

INDEX OF COMPETENCIES

Sr. No	Topics/Systems	No of Competencies	Page numbers	
			From	To
1	Cell Injury and Adaptation	1		
2	Amyloidosis	1		
3	Inflammation	1		
4	Hemodynamic disorders	1		
5	Basic diagnostic cytology	1		
6	Introduction to Hematology	1		
7	Microcytic Anemia	1		
8	Macrocytic Anemia	1		
9	Haemolytic Amemia	1		
10	Lymph node and spleen	3		
11	Plasma cell disorders	1		
12	Clinical Pathology	2		
13	Hepatobiliary System	1		
14	Cardiovascular System	1		
15	Breast	1		
16	Skin	1		
17	Central nervous system	1		

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 2.8	Identify and describe various forms of cell injuries, their manifestations and consequences in gross and microscopic specimens						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 3.2	Identify and describe amyloidosis in a pathology specimen						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 4.4	Identify and describe acute and chronic inflammation in gross and microscopic specimens						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 6.7	Identify and describe the gross and microscopic features of infarction in a pathologic specimen						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 13.5	Perform, identify and describe the peripheral blood picture in anemia						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 14.3	Identify and describe the peripheral smear in microcytic anemia						

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 15.3	Identify and describe the peripheral smear in macrocytic anemia						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 16.6	Prepare a peripheral blood smear and identify hemolytic anemia from it						
PA 16.6.1	a. the student should be able to prepare a peripheral blood smear from a given sample						
PA 16.6.2	b. the student should be able to identify morphological features of haemolytic anemia from PBS						

COMPETENCY ACQUIRING CERTIFICATE
DEPARTMENT OF PATHOLOGY
MBBS BATCH:

This is to certify that the candidate Mr/ Ms....., Reg No.admitted in the year in Medical College and Hospital has satisfactorily completed and acquired the competency PA 16.6: Prepare a peripheral blood smear and identify hemolytic anemia from it.

Countersigned by Head of the Department

Signature of Faculty
Name and Designation

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation (E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 19.3	Identify and describe the features of tuberculosis lymphadenitis in a gross and microscopic specimen						

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation (E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 19.5	Identify and describe the features of Hodgkin's lymphoma in a gross and microscopic specimen						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation (E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 19.7	Identify and describe the gross specimen of an enlarged spleen						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation (E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 20.1	Describe the features of plasma cell myeloma						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation (E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 23.1	Describe abnormal urinary findings in disease states and identify and describe common urinary abnormalities in a clinical specimen						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation (E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 23.3	Describe and interpret the abnormalities in a panel containing function tests, renal function tests or liver function tests						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 25.6	Interpret liver function and viral hepatitis serology panel. Distinguish obstructive from non – obstructive jaundice based on clinical features and liver function tests						
PA 25.6.1	The student should be able to interpret liver function test						
PA 25.6.2	The student should be able to interpret serological findings in viral hepatitis						
PA 25.6.3	The student should be able to distinguish obstructive from non - obstructive jaundice from clinical features and LFT						

COMPETENCY ACQUIRING CERTIFICATE
DEPARTMENT OF PATHOLOGY
MBBS BATCH:

This is to certify that the candidate Mr/ Ms....., Reg No.admitted in the year in Medical College and Hospital has satisfactorily completed and acquired the competency PA 25.6 : Interpret liver function and viral hepatitis serology panel. Distinguish obstructive from non – obstructive jaundice based on clinical features and liver function tests.

Countersigned by Head of the Department

Signature of Faculty
Name and Designation

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 27.8	Interpret abnormalities in cardiac function testing in acute coronary syndromes						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 31.3	Describe and identify the morphologic and microscopic features of carcinoma of the breast						

SKILL DOMAIN IN PATHOLOGY – Acquisition of competency

Competency addressed	Name of activity	Date of completion	Attempt at activity First(F) Repeat (R) Remedial(Re)	Rating Below expectation(B) Meets expectation(M) Exceeds expectation(E)	Decision of faculty Completed(C) Repeat(R) Remedial(Re)	Remarks and Initial of Faculty and date	Feedback received Initial of student
PA 35.3	Identify the etiology of meningitis based on given CSF parameters						
PA 35.3.1	The student able to identify the normal parameters in CSF						
PA 35.3.2	The student able to identify the abnormal parameters of CSF in different type of meningitis						
PA 35.3.3	The student should be able to differentiate the various types meningitis based abnormal CSF findings						

COMPETENCY ACQUIRING CERTIFICATE
DEPARTMENT OF PATHOLOGY
MBBS BATCH: 2019

This is to certify that the candidate Mr/ Ms....., Reg No.admitted in the year in Medical College and Hospital has satisfactorily completed and acquired the competency PA 35.6 : Identify the etiology of meningitis based on given CSF parameters.

Countersigned by Head of the Department

Signature of Faculty
Name and Designation

Sub Item: Record/Reflections on Self Directed Learning

1	2	3	4	5	6
Competency # addressed	Name of Activity	Date completed: dd-mm-yy	Rating B/M/E OR Numerical Score	Initial of faculty and date	Feedback Received Initial of learner

Sub Item: Record/Reflections on Self Directed Learning

1	2	3	4	5	6
Competency # addressed	Name of Activity	Date completed: dd-mm-yy	Rating B/M/E OR Numerical Score	Initial of faculty and date	Feedback Received Initial of learner

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Competency # addressed	Name of Activity	Date completed: dd-mm-yy	Rating B/M/E OR Numerical Score	Initial of faculty and date	Feedback Received Initial of learner

Reflective writing

SDL TOPIC

Date

Name of the Facilitator

Reflective writing

SDL TOPIC

Date

Name of the Facilitator

Reflective writing

SDL TOPIC

Date

Name of the Facilitator

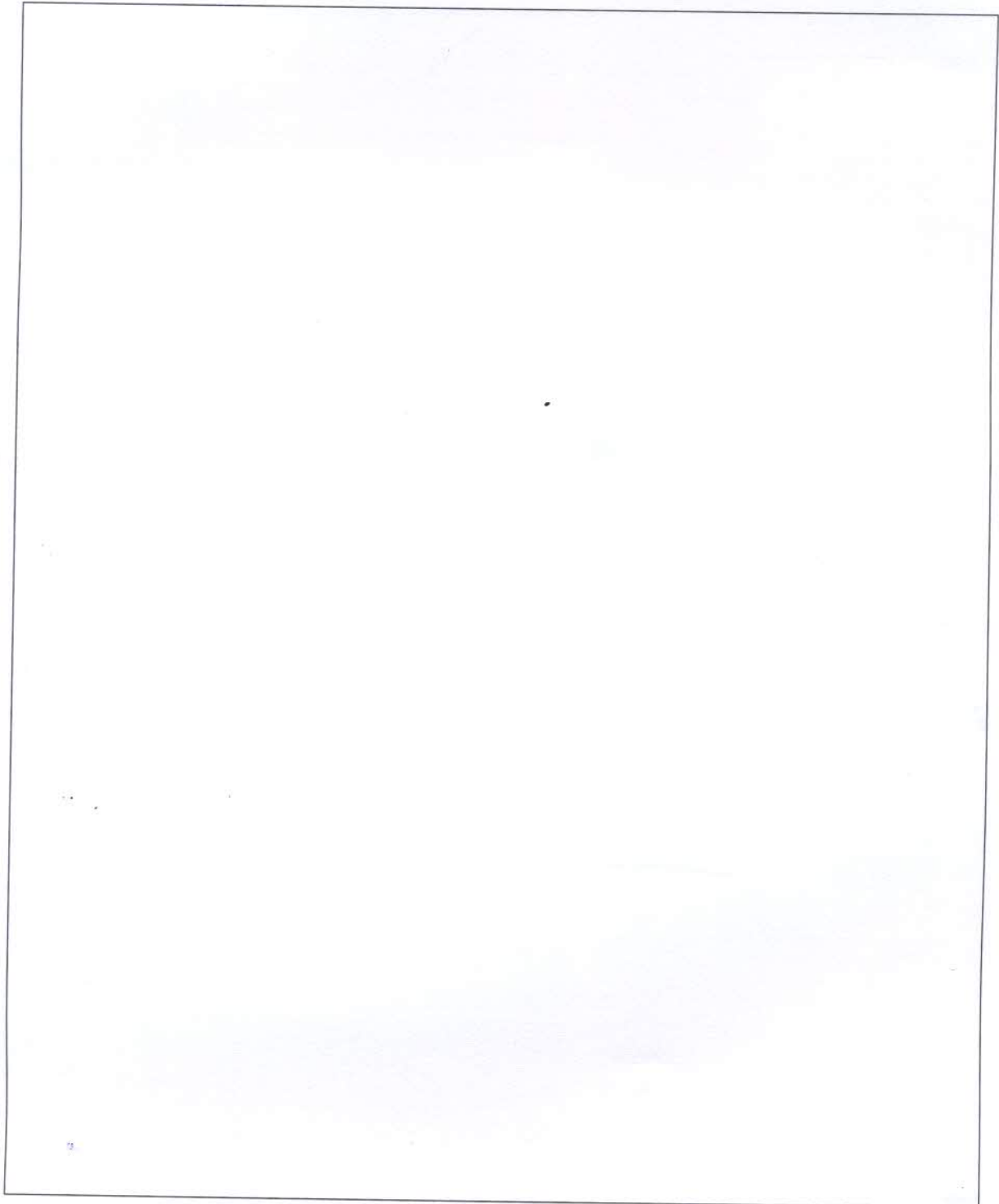
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Reflective writing

SDL TOPIC

Date

Name of the Facilitator

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Reflective writing

SDL TOPIC

Date

Name of the Facilitator

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Reflective writing

SDL TOPIC

Date

Name of the Facilitator

Sub Item: Seminar / Assignment / Projects

1	2	3	4	5	6
Competency # addressed	Name of Activity	Date completed: dd-mm-yy	Rating B/M/E OR Numerical Score	Initial of faculty and date	Feedback Received Initial of learner

Sub Item: Seminar / Assignment / Projects

1	2	3	4	5	6
Competency # addressed	Name of Activity	Date completed: dd-mm-yy	Rating B/M/E OR Numerical Score	Initial of faculty and date	Feedback Received Initial of learner

Sub Item: Seminar / Assignment / Projects

1	2	3	4	5	6
Competency # addressed	Name of Activity	Date completed: dd-mm-yy	Rating B/M/E OR Numerical Score	Initial of faculty and date	Feedback Received Initial of learner

Sub Item: Seminar / Assignment / Projects

1	2	3	4	5	6
Competency # addressed	Name of Activity	Date completed: dd-mm-yy	Rating B/M/E OR Numerical Score	Initial of faculty and date	Feedback Received Initial of learner

Sub Item: Seminar / Assignment / Projects

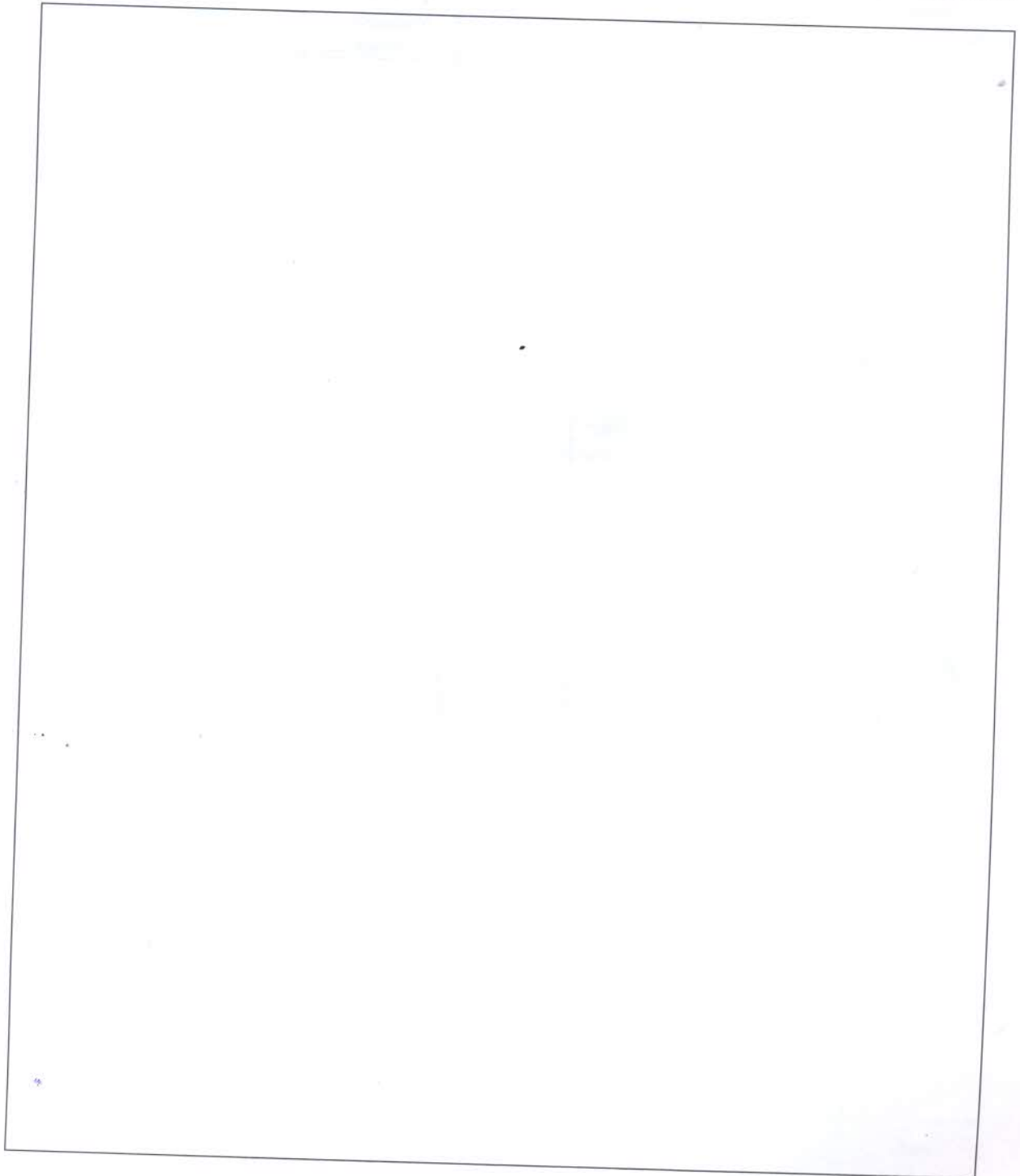
1	2	3	4	5	6
Competency # addressed	Name of Activity	Date completed: dd-mm-yy	Rating B/M/E OR Numerical Score	Initial of faculty and date	Feedback Received Initial of learner

SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

Date

A large, empty rectangular box with a thin black border, occupying the majority of the page below the header information. It is intended for the student to write a summary of concepts learnt from their seminar or project.

SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

Date



SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

Date

SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

Date



SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

Date

SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

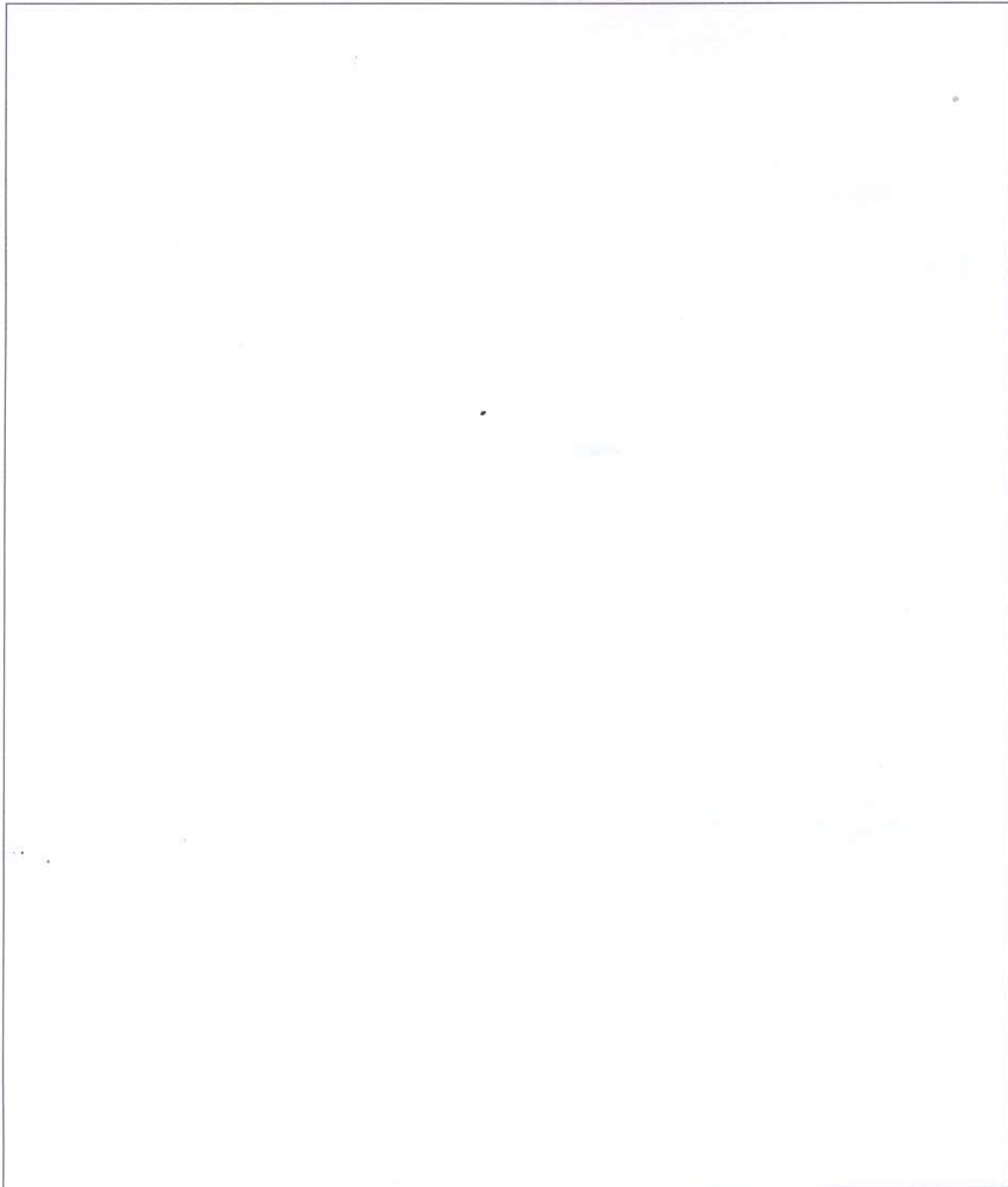
Date

SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

Date



SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

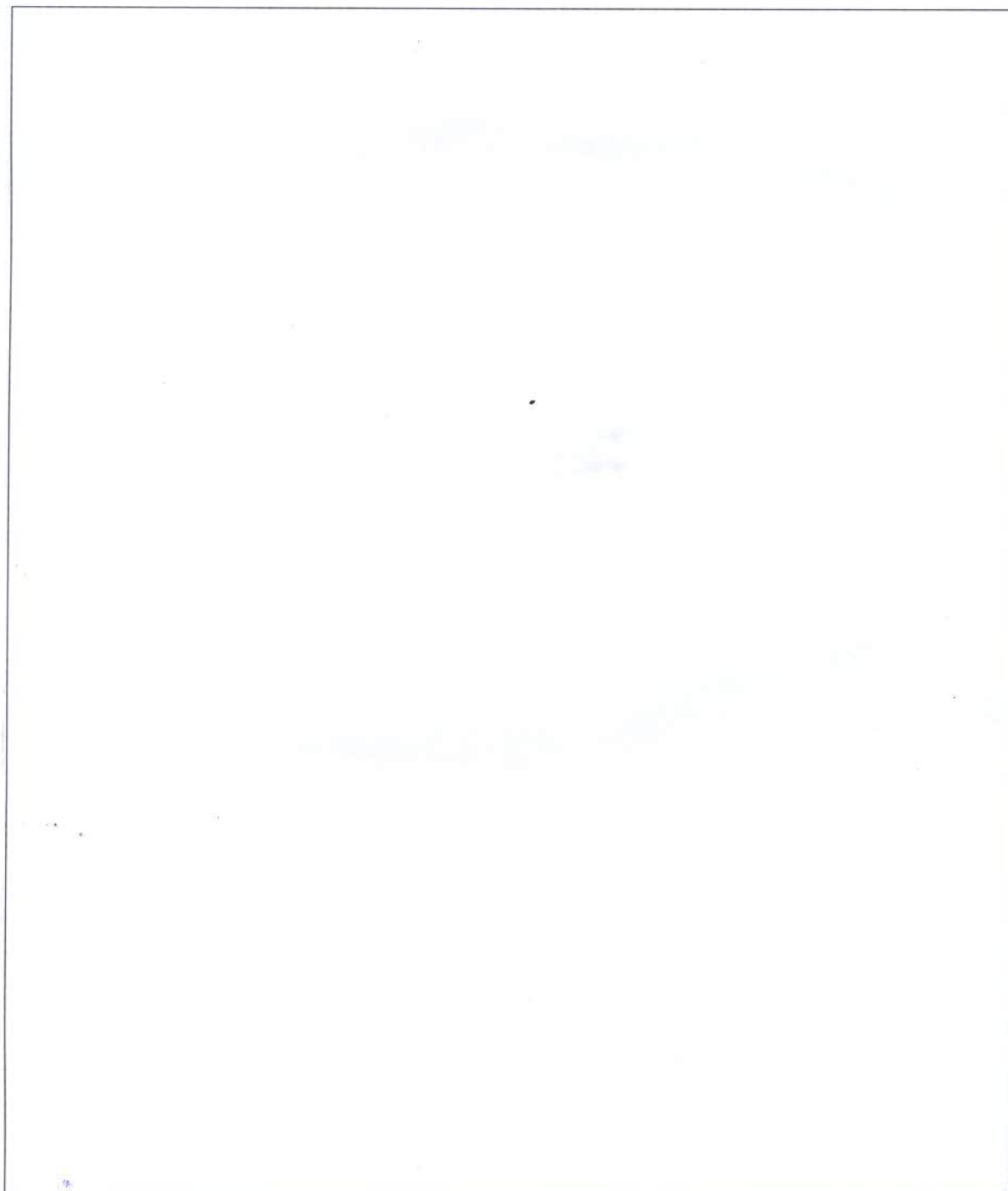
Date

SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

Date



SUMMARY OF CONCEPTS LEARNT

Seminar/Project Topic

Name of the Facilitator

Date

ATTENDANCE RECORD

Phase	Theory Class Total	Theory Class Attended	Percentage Theory Class Attended	Practical Total	Practical Attended	Percentage Practical Class Attended
Professional Year II (Term I)						
Professional Year II (Term II)						
Professional Year II (Term III)						
Professional Year II (Total)						

Signature of the Student

Signature of Faculty in Charge

Signature of Professor and Head
Department of Pathology

RECORDS OF INTERNAL ASSESSMENT
EXAMINATIONS

Assessment	Date	Theory	Date	Practical including viva	Signature of student	Signature of teacher
1 st Internal Assessment						
2 nd Internal Assessment						
3 rd Internal Assessment						
Total Aggregate of Internal Assessment Assessment Marks (Part I&II)						
Remedial examination if any						
Marks from FA log book						
Final Internal Assessment Marks (to be submitted to University)						

Signature of Professor and Head
Department of Pathology

