

**CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT,
ODISHA**

SCHOOL OF PARAMEDIC AND ALLIED HEALTH SCIENCES



Centurion
UNIVERSITY

ACADEMIC REGULATIONS

1. Introduction

The School of Paramedics and Allied Health Sciences (SPAHS) is a constituent school of the Centurion University of Technology and Management (CUTM). SPAHS offers Certificate, Diploma, B.Sc, M.Sc. programmes in four streams or disciplines, viz Medical Laboratory Technology (MLT), Radiology and Imaging Technology (RIT), Clinical Microbiology and Optometry.

The Academic Rules and Regulations governing the above mentioned programmes are provided below.

Definitions:

Programme: An academic process of specified duration in a particular field of study, which, upon successful completion by a student, leads to award of a certificate, diploma or degree. For example, Certificate in MLT is a Programme of 1-year duration.

Course (Subject): A prescribed unit of study in a given programme. A Course (or Subject) is assigned a number, referred to as “Credit”, which signifies the relative importance of the Course (or Subject) as compared to other such courses prescribed in the Programme. For example, Ocular Microbiology and Pathology is a course in the B.Sc. (Optometry) Programme.

2. Overview of Programmes Offered by SPAHS

Table 2.1: Overview of Programmes Offered by SPAHS

DISCIPLINE	PROGRAM	DURATION (Year)	ELIGIBILITY
Medical Laboratory Technology (MLT)	CMLT (Certificate In MLT)	1	10th or equivalent
	DMLT(Diploma in MLT) (Run as per Academic Regulations of DMET, Govt of Odisha)	2	+2 Science
	B.Sc. MLT	3	+2 Science with Physics, Chemistry & Biology or equivalent degree/ DMLT from a recognized institute
	M.Sc. MLT	2	Bachelor's degree in any branch of Life Science/ Agriculture/ Pharmacy/ Veterinary /Medicine (MBBS/BDS) .
Medical Radiation Technology(MRT)	DMRT(Diploma In MRT) (run as per Academic regulations of DMET, Govt of Odisha)	2	+2 Science
Radiology and Imaging Technology (RIT)	B.Sc. RIT	3	+2 Science with Physics, Chemistry, Biology Mathematics or DMRT from a recognized institute
Clinical Microbiology (CMB)	B.Sc. CMB	3	+2 Science with Physics, Chemistry & Biology or equivalent degree
	M.Sc. CMB	2	Bachelor's degree in any branch of Life Science/ Agriculture/ Pharmacy/ Veterinary /Medicine (MBBS/BDS)
Optometry	B. OPTOM	4	+2 Science with Physics, Chemistry & Biology/ Mathematics or equivalent
	B. OPTOM- LE(Lateral Entry)	3	Diploma in optometry

3. Description of Disciplines and Programmes Offered:

3.1 Medical Laboratory Technology (MLT)

Medical Laboratory Technology also called Clinical laboratory science is an allied health profession which is concerned with the diagnosis and prevention of diseases through the use of clinical laboratory tests. These tests help doctors to detect, diagnose and treat diseases.

Medical Technologists form an integral part of the medical profession. These professionals get involved in practical and technical work to aid correct diagnosis and effective functioning of Biochemical Laboratories.

A Medical Laboratory Technologist (MLT) also referred to as a medical technologist, a clinical scientist, or clinical laboratory technologist do these tests by analyzing body fluids, tissues, blood typing, microorganism screening, chemical analyses, cell counts of human body etc. They play an important role in collecting the information's needed, sampling, testing, reporting and documentation of these investigations.

3.1.1 Certificate Programme in Medical Laboratory Technician (CMLT)

Programme Duration: 1 Year (2 Semesters)

Program Objective:

The certificate course in Medical Laboratory Technique has been developed to meet the increasing demand for trained man power in various medical laboratories, dealing with medical tests. The course is structured to provide basic theoretical knowledge and the practical skills needed to work as **Medical Laboratory Assistant**.

Degree: After successful completion of one year programme the candidate will be awarded with degree of **Certificate in Medical Laboratory Technology (CMLT)** from the University.

Summary of Program Structure:

For detailed syllabus, please visit: <http://cutm.ac.in/images/syllabus/New/CMLT.pdf>

Table 3.1

SI No	Course Type	Theory Courses (T)	Practice Courses (P)	Total Number of courses (T+P)	Credits to be acquired
1	Foundation Course	5	1	6	24
2	Core Course	3	1	4	16
3	Humanities & Communication Skills	NA	2	2	4
Total		8	4	12	44

3.1.2 Diploma in Medical Laboratory Technology (DMLT)

Program Duration: 2 Years

This program is governed by the academic rules and regulations of Department of Medical Education and Training (DMET), Government of Odisha. Details of this programme is attached in Annexure-I. The prospectus of this program can be downloaded from <http://www.dmetorissa.gov.in>

Program Objective:

The course is structured to provide basic theoretical and practical knowledge. It also imparts the skills needed to work as **Medical Laboratory Technician**. It aims to meet the demand for trained man power in various medical laboratories, dealing with medical tests. The course structure provides a balanced exposure to the theoretical as well as practical aspects of MLT. It also aims at upgrading the skill and competencies of those who are intending to work and who are already working in medical laboratories at Laboratory Assistant level or equivalent.

Summary of Program Structure

For detailed information, availability of syllabus etc., please visit: <http://www.dmetorissa.gov.in>

Table 3.2

Sl No	Course Type	Theory Courses(T)	Practice Courses (P)	Total number of courses (T+P)	Credits to be acquired	
1	Foundation Course	Course Structure of this Programme will be the same as the DMLT Programme run by the DMET and DMRT Board, Government of Odisha. Course structure is available at the website mentioned above.				
2	Core Course					
3	Interdisciplinary					
4	Humanities & Communication Skills					
Total						

Award: After successful completion of this two-and-a half year programme, the candidate will be awarded **Diploma in Medical Laboratory Technology (DMLT)** from the **DMET and DMRT Board, Government of Odisha**.

3.1.3 B.Sc Degree in Medical Laboratory Technology (B.Sc. in MLT):

Programme Duration: 3 Years (6 Semesters)

Programme Objective:

Medical Laboratory Technologists having B.Sc MLT qualification can work in supervisory or management positions in laboratories and hospitals. **They can also work as Laboratory Supervisor, Hospital Outreach Coordinator, Laboratory Information System Analyst /Consultant etc. Additional opportunities are available in molecular diagnostics, molecular biotechnology companies and in vitro fertilization laboratories as well as in research labs.**

Internship: Students will undergo internship during their last semester in a hospital/ duly approved Diagnostics Centre or Pathology Laboratory approved by CUTM.

Project: During the final semester, students will carry out dissertation work individually or in the groups of not more than five students. They shall submit a Project Report written and printed in an approved format at the end of the Semester.

Degree: On successful completion of three year programme, the candidate will be awarded with **“Bachelor of Science in Medical Laboratory Technology (B.Sc.-MLT)”** from Centurion University.

Summary of Program Structure

For detailed syllabus, please visit: http://cutm.ac.in/images/Academic_pdf/MLTsyllabus.pdf

Table 3.3

Sl No	Course Type	Theory Courses (T)	Practice Courses (P)	Total No. of courses (T+P)	Credits to be acquired
1	Foundation Course	10	2	12	48
2	Core Course	10	3	13	52
3	Advance course	3	NA	3	12
4	Humanities & Communication Skills	NA	2	2	4
5	Project & Internship	NA	NA	2	24
Total		23	7	32	140

3.1.4 M.Sc Degree in Medical Laboratory Technology (M.Sc.-MLT):

Programme Duration: 2 years (4 Semesters)

Programme Objective: M.Sc. Medical Laboratory Technology is a four semester Post-Graduation program to impart in-depth knowledge of General and Clinical Biochemistry, Haematology, Clinical Pathology, Histo & Cytopathology, Immunology, Medical and Diagnostic Microbiology, Genetics & molecular cell biology and other relevant areas of medicine and their applications.

Career Prospects: After completion of this Program one can opt for a career in-

- Hospital and individual laboratories as Clinical technologist/Lab managers.
- Research and development laboratories as a research scholar /Scientist
- In various biotechnological industries as research assistant/Fellow
- As a medical laboratory Scientist in abroad hospitals and laboratories
- ISO and NABL certified laboratories as senior technologist.
- Teaching jobs in allied health colleges
- Self-employment.

Internship: Students will undergo internship during the last semester of the Program in a hospital/ duly approved Diagnostics Centre or Pathology Laboratory approved by CUTM.

Project: During the final semester, students will carry out dissertation work individually or in the groups of not more than five students. They shall submit a Project Report written and printed in an approved format at the end of the Semester.

Degree: On successful completion of two year programme, the candidate will be awarded with “**Master of Science in Medical Laboratory Technology (M.Sc.-MLT)**” from Centurion University.

Summary of Program Structure

For detailed syllabus, please visit: http://cutm.ac.in/images/syllabus/New/MSc_MLT.pdf

Table 3.4

Sl No	Course Type	Theory Courses (T)	Practice Courses(P)	Total No of Courses (T+P)	Credits to be acquired
1	Foundation Course	7	2	9	36
2	Core Course	7	0	7	24
3	Advance course	NA	1	1	4
4	Humanities & Communication Skills	NA	2	2	4
5	Project/internship	NA	NA	2	24
Total		14	5	21	96

3.2 Radiology and Imaging Technology (RIT):

Radiology and Imaging Technology (RIT), also referred to as Medical Radiography and Imaging, is the health profession concerned with the direct administration of radiation, primarily x-rays, in disease diagnosis and injury assessment. Medical imaging studies have been a cornerstone in medical diagnosis for decades. However, technological advances and the advent of new imaging methods now place medical imaging among the most dynamic, expanding and high demand fields in clinical medicine.

Medical Imaging clinical practices include general radiography procedures such as orthopedic and pediatric and mammography, vascular imaging, cardiac catheterization studies, computerized tomography, and magnetic resonance imaging. Medical imaging professionals are employed in medical centers, community and private hospitals, clinics, and physicians' offices.

3.2.1 Diploma in Medical Radiation Technology (DMRT)

Program Duration: 2 years

This program is governed by the academic rules and regulations of Department of Radiology and Imaging Technology (DRIT), Government of Odisha. Details of this programme is attached in Annexure-II. The prospectus of this program can be downloaded from <http://www.dmetorissa.gov.in>

Program Objective:

This program has been developed to meet the demand for trained man power in various imaging and diagnostics laboratories. The course structure provides a balanced exposure to the theoretical as well as practical aspects of RIT. It also aims at upgrading the skill and competencies of those who are intending to work and who are already working in imaging and diagnostics centers. The course is structured to provide basic theoretical and practical knowledge. It also imparts the skills needed to work as **Radio Imaging Technician**.

Summary of Program Structure

For detailed information, availability of syllabus etc., please visit: <http://www.dmetorissa.gov.in>

Table 3.5

Sl No	Course Type	Theory Courses (T)	Practice Courses(P)	Total No. of Courses (T+P)	Credits to be acquired
1	Foundation Course	Course Structure of this Programme will be the same as the DMLT Programme run by the DMET and DMRT Board, Government of Odisha. Course structure is available at the			
2	Core Course				
3	Interdisciplinary				

4	Humanities & Communication Skills	website mentioned above.			
Total					

Award: After successful completion of this two-and-a half year programme, the candidate will be awarded **Diploma in Medical Radiation Technology (DMRT)** from the **DMET and DMRT Board, Government of Odisha.**

3.2.2 B.Sc. in Radiology and Imaging Technology (B.Sc.-RIT)

Programme Duration: 3 years (6 Semesters)

Programme Objective: This programme aims at generating trained man power appropriate for higher technical and also supervisory levels in imaging and diagnostics centers. The course structure provides a balanced exposure to the theoretical as well as practical aspects of RIT. It also imparts the skills needed to work as **Radio Imaging Technician and/or Supervisor.**

Internship: Students will undergo internship during the last semester of the Programme in a recognized hospital/ duly approved Diagnostics Centres approved by CUTM.

Project: During the final semester, students will carry out dissertation work individually or in the groups of not more than five students. They shall submit a Project Report written and printed in an approved format at the end of the Semester.

Degree: On successful completion of three year programme, the candidate will be awarded with “**Bachelor of Science in Radio and Imaging Technology (B.Sc.-RIT)**” from Centurion University.

Summary of Program Structure:

For detailed syllabus, please visit: http://cutm.ac.in/images/Academic_pdf/BscRITsyllabus.pdf

Table 3.6

SI No	Course Type	Theory Courses (T)	Practice Courses (P)	Total No. of courses (T+P)	Credits to be acquired
1	Foundation Course	13	1	14	56
2	Core Course	8	4	12	58
3	Advance course	2	NA	2	8
4	Humanities & Communication Skills	NA	2	2	4
5	Internship/project	NA	NA	2	24
Total		23	7	32	140

3.3 Clinical Microbiology (CMB)

Clinical microbiology is the branch of medical science concerned with the prevention, diagnosis and treatment of infectious diseases. In addition, this field of science studies various clinical

applications of microbes for the improvement of health. There are four kinds of micro-organisms that cause infectious diseases: bacteria, fungi, parasites and viruses and one type of infectious protein called Prion.

A medical microbiologist studies the characteristics of pathogens, their modes of transmission, mechanism of infection and growth. Using this information, a treatment can be developed and/or revised.

Clinical Microbiology helps diagnose diseases through clinical laboratory tests and thus facilitates their prevention and cure. It is complementary to medical science. It involves analysis of body matter such as collection of samples like body fluid, tissue, and blood and their systematic examination. It also covers micro-organism screening, sterilization of laboratorial environment and equipment, antibiotic sensitivity tests etc.

Clinical Microbiologists are an integral part of the medical profession. These professionals get involved in practical and technical work to aid correct diagnosis and effective functioning of Microbiological Laboratory.

3.3.1 B.Sc. in Clinical Microbiology (B.Sc. -CMB)

Programme Duration: 3 years (6 Semesters)

Programme Objective: With new hospitals and diagnostics centres coming up in urban and semi-urban areas, there is a need for trained and skilled man power and it has a potential to grow in foreseeable future. This Programme aims at generating this man power.

Internship: Students will undergo internship during the last semester of the Programme in a hospital/ duly approved Diagnostics Centre or Pathology Laboratory equipped with modern microbiology laboratory facility and also approved by CUTM.

Project: During the final semester, students will carry out dissertation work individually or in the groups of not more than five students. They shall submit a Project Report written and printed in an approved format at the end of the Semester.

Degree: On successful completion of three year programme, the candidate will be awarded with “Bachelor of Science in Clinical Microbiology (B.Sc.-CMB)” from Centurion University.

Summary of Program Structure

For detailed syllabus, please visit:

http://cutm.ac.in/images/Academic_pdf/BScClinicalMicrobiology.pdf

Table 3.7

SI No	Course Type	Theory Courses	Practice Courses	Total Number of Courses	Credits to be acquired
1	Foundation Course	10	1	11	44
2	Core Course	9	4	13	52
3	Advance course	4	0	4	16
4	Humanities &	NA	2	2	4

	Communication Skills				
5	Internship/project	NA	NA	2	24
Total		23	7	32	140

3.3.2 M.Sc. in Applied and Clinical Microbiology (M.Sc.-CMB)

M.Sc. Clinical Microbiology is a four semester Post-Graduation program to impart in-depth knowledge of General and Clinical Biochemistry, Haematology, Clinical Pathology, Histo & Cytopathology, Immunology, Medical and Diagnostic Microbiology, Genetics & molecular cell biology and other relevant areas of medicine and their applications.

Programme Duration: 2 years (4 Semesters).

Programme Objective:

A student with this training can work as Laboratory Manager/Consultant, Laboratory information system Analyst/Consultant to Physician, Educational Consultant/ Coordinator etc. With experience, they can also contribute significantly as Consultants on various national/international disease control programmes on epidemiology of infectious diseases etc. Other prospective career domains include molecular diagnostics, molecular biotechnology companies and in vitro fertilization laboratories as well as in research labs.

Internship: Students will undergo internship during the last semester of the Program which will be carried out in a hospital/ duly approved Diagnostics Centre, Research Centre or Pathology Laboratory equipped with modern microbiology laboratory facility and also approved by CUTM.

Project: During the final semester, students will carry out dissertation work individually or in the groups of not more than five students. They shall submit a Project Report written and printed in an approved format at the end of the Semester.

Degree: On successful completion of two-year programme, the candidate will be awarded with “Master of Science in Applied and Clinical Microbiology (M.Sc.-CMB)” from Centurion University.

Summary of Program Structure

For detailed syllabus, please visit: http://cutm.ac.in/images/syllabus/New/MSc_CMB.pdf

Table 3.8

SI No.	Course Type	Theory Courses	Practice Courses	Total No. of courses	Credits to Total be acquired
1	Foundation Course	7	1	8	32
2	Core Course	7	2	9	36
3	Advance course	-	-		
4	Humanities & Communication Skills	-	-	2	4
5	Internship/project	-	-	2	24
Total		14	3	21	96

3.4 Optometry:

Optometry is a health care profession that is concerned especially with

- (i) examining the eye for defects and faults of refraction,
- (ii) prescribing correctional lenses or eye exercises,
- (iii) diagnosing diseases of the eye, and with
- (iv) treating such diseases or referring them for treatment.

Optometry as a profession has the primary public health responsibility for eliminating uncorrected refractive error (the leading cause of vision impairment globally). As primary eye care practitioners, optometrists have a vital role in detecting potentially serious eye diseases such as cataract, glaucoma and age-related maculopathy, as well as general health conditions such as hypertension and diabetes.

3.4.1 Bachelor of Optometry (B. Optom); Programme Duration: 4 years (8 Semesters)

3.4.2 Bachelor of Optometry – Lateral Entry (B. Optom-LE) Programme Duration: 3 years (6 Semesters)

Programme Objective:

Students trained in Optometry, can act as primary eye health care professionals. They can play a major role in helping alleviate the burden of uncorrected refractive error and other causes of eye sight related problems through diagnosis, referral and in some cases co-management. Optometry can and should play a leading role in primary eye-care system of the country. Optometrists can also assist at secondary and tertiary levels wherever possible, working with ophthalmologists and other eye care providers towards the unified goal of combating blindness.

Internship: A candidate has to undergo internship during the last year of the program in a Govt. hospital/ private hospital/ Tertiary eye-care center which fulfill the norms decided by CUTM. Internship is a phase of training wherein a graduate is expected to conduct actual practice of Clinical Optometry and acquires skills under supervision so that he /she may become capable of functioning independently.

Project: Each **Bachelor of Optometry (B. Optom)** student will carry out project and dissertation work under the supervision of a faculty member (Guide) during the last year of the Program. This work may be carried out by the students individually or in a group of size not exceeding five. The progress of project work will be monitored regularly by the Guide. They shall submit a Project Report written and printed in an approved format at the end of the Project.

Degree: On successful completion of the programme, the candidate will be awarded with “**Bachelor of Optometry (B. Optom)**” from Centurion University.

Summary of Program Structure

For detailed syllabus, please visit: http://cutm.ac.in/images/syllabus/BSc_Optomtry.pdf

Tables 3.9A (for B. Optom 4-year programme)

Sl. No.	Course Type	Theory Courses	Practice Courses	Total No. of course	Credits to be acquired
1	Foundation Course	5	5	10	30
2	Core Course	13	6	19	64
3	Interdisciplinary Course	5	0	5	20
4	Advance course	4	4	8	24
5	Humanities & Communication Skills	3	2	5	10
6	Project and internship	--	---	2	32
Total		30	17	49	180

Table 3.9B (For B. Optom.-LE (3-year) Programme)

(Note: All courses mentioned in the 4-year B.Sc. Optometry Course Structure and syllabus starting from 3rd Semester onwards are applicable)

Sl. No.	Course Type	Theory Courses	Practice Courses	Total No. of courses	Credits to be acquired
1	Foundation Course	0	1	1	2
2	Core Course	11	5	16	54
3	Interdisciplinary Course	4	0	4	16
4	Advance course	4	4	8	24
5	Humanities & Communication Skills	0	2	2	4
6	Project and internship	--	---	2	32
Total		19	12	33	132

4. Registration & Enrollment

(i) Except for the first semester of any academic programme, registration for a semester will be done on dates stipulated by the University on the prescribed formats.

(ii) During the course of study the students may register in any number of (2nd semester onwards) backlog (failed) subjects of their lower semesters; preference being given to lowest possible semester in addition to the prescribed subjects of that semester. After completing the last stipulated semester of the Program, a student may register in any number of backlog (failed) subjects and attempt to clear them during appropriate semester examinations. The student once registered for a set of backlog subjects cannot change them during the semester.

(iii) Candidates, failing in a course item are required to register to appear at the end-semester examination in that course item with the specified date.

(iv) Candidates, detained for shortage of attendance have to register for the course item at the beginning of the semester, complete all requirements as specified to appear at the end semester examination and obtain a passing grade.

(v) A student shall be admitted to any examination in a subject only if he / she has registered for that subject and paid necessary registration and examination fees in the beginning of the semester.

5. Eligibility to Appear at Examinations:

- 5.1 A student is eligible to appear in an examination provided he/she pursues a regular course of study in respective stream and attends at least 75% of classes in aggregate both in theory & practical subjects scheduled during the semester. The attendance is considered from the date of commencement of classes as per academic calendar of the university. The schedule of classes is notified through a Time Table before the beginning of the classes in a Semester.
- 5.2 A student who is absent for short periods on health ground or due to participation in cultural, sports, other academic/official assignments in the interest of the institution/college/university/government with prior written permission of the head of the institution/college is permitted a maximum of additional concession of 10% in attendance and is eligible to appear in examination with a minimum of 65% of attendance in aggregate both in theory & practical subjects in a semester.

6. Evaluation System:

The University has a continuous evaluation system for each type of Subjects (Theory, Practice, Project and Internship). For this purpose the university holds the following examinations.

- End Semester Examinations at the end of the Odd and Even Semester course work
- Examination on Demand (EOD) to be notified from time to time. In general, there will be one EOD in each semester, in addition to a special EOD towards the end of Academic Year.

Details of evaluations of various items are given as under:-

6.1. Evaluation scheme of Theory papers:

A theory paper will have 100 percentage points. The weightage for three class tests and the end semester examinations will be as follows:

- Internal - I of one hour duration = 10 percentage points.
- Internal - II of one hour duration = 10 percentage points.
- Internal - III of one hour duration = 10 percentage points.
- Assignments / quiz / viva-voce /attendance = 10 percentage points.
- End Semester External Examination of three hours duration = 60 percentage points.

Total = 100 percentage points.

Note: 1. Preferably, Internal Examination and External Examination will be for 1 hr and 3 hrs respectively.

2. Any one of the Internal Examination can be done in project, presentation and any other innovative mode.

6.2 Practice papers:

A practice paper shall have 100 percentage points divided equally between Internal and External evaluation. The detailed scheme is given below. Each practical experiment shall have equal percentage points as its weightage and shall be evaluated under the Internal Evaluation component. A practical paper shall have 2,3& 6 contact hours/week for 1,2 & 4 credit papers

respectively. A practical experiment shall be completed in all respect within the allotted hours. All data analysis and calculations of the experiment to be done by the candidate is to be completed within the allotted hour. A practical experiment will be evaluated based on the following components. The relative weightage of the components are given in Table 6.1 below:

Table 6.1: Evaluation scheme of Practice courses

SI No	Evaluation Component	Internal Evaluation Weightage	External Evaluation Weightage	Total Weightage
1	Experiment planning & execution	10	10	20
2	Results and Interpretation	20	10	30
3	Report	10	10	20
4	Lab Record	5	5	10
5	Viva voce	5	15	20

Note: A candidate shall clear a practical paper if his/her score in the paper is minimum of 50 percentage points.

6.3 Internships:

- (i) Log report/ daily report (signed by company person in the field) --- 10% weightage
- (ii) Report submission (log report to be a part of the report) – 20% weightage
- (iii) Assessment* by the company/ organisation where internship is done --- 40% weightage
- (iv) Presentation and Viva at Department level – 20% weightage.
- (v) Clinical case study-10% weightage

* Assessment by the company to be carried out on the format provided by the University

6.4 Project:

A Project/Dissertation course shall have 100 percentage points divided equally between Internal and External evaluation. Each B.Sc. and M.Sc. student shall do a project/dissertation under the supervision of a Supervisor as a part of the Course structure mentioned in respective tables of Section 2 above. There could be a Co-Supervisor if the project/dissertation is interdisciplinary in nature. The evaluation shall be done by a committee of teachers including an External Expert where the Project Supervisor(s) shall be a member(s). The relative weightage of the components are given in Table 6.2 below:

Table 6.2: Evaluation scheme of Project type courses

SI No	Evaluation Component	Internal Evaluation Weightage	External Evaluation Weightage	Total Weightage
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1	Understanding the relevance, scope & dimension of the project/dissertation	5	5	10
2	Relation to literature/application	5	5	10
3	Methodology	5	5	10
4	Quality of Analysis & Results	5	5	10
5	Interpretation and conclusions	10	10	20
6	Report	10	10	20
7	Defence	10	10	20

Note: Minimum score to pass in a Project type course is 50 percentage points.

7. Grading System:

7.1 University follows a nine point grading system on base of 10 point scale according to the performance of a student in all subject items. The grades along with the corresponding grade points are categorized as follows:

7.2 Grades, Criteria and Grade Points

Table 7.1

Qualification	Grade	Score on 100 percentage points	Grade Point
Outstanding	O	90 & above up to 100	10
Excellent	E	80 & above but less than 90	9
Very good	A	70 & above but less than 80	8
Good	B	60 & above but less than 70	7
Fair	C	50 & above but less than 60	6
Pass	D	40 & above but less than 50	5
Failed	F	Below 40	2
Malpractice	M	--	0
Absent	S	--	0

N.B.:

- Grade **C** is the **pass grade** for each Practical/Seminar/ Project/Dissertation.
- Grade **D** is the **pass grade** for each theory subject.
- Grade **C** is the **satisfactory grade** for CSR (Cultural, Sports and Socially Responsible) activities.

7.3 A student's level of overall competence is measured by a **GRADE POINT AVERAGE** as specified below:

- **SGPA – Semester Grade Point Average:** a number between 0 to 10 that reflects the performance of the student during a particular semester
- **CGPA – Cumulative Grade Point Average:** a number between 0 to 10 that reflects the cumulative performance of the student in all subjects up to the end of a particular semester

7.3.1 The SGPA of a semester is calculated based on the prescribed subjects of a semester as

$$SGPA = \frac{\sum_{i=1}^N C_i * P_i}{\sum_{i=1}^N C_i}$$

Where,

C_i = Credits assigned to the i^{th} subject as indicated by the Course Structure of the particular Semester

P_i = Grade Point corresponding to a grade as shown in Table 4.1 above, obtained by a student in that particular subject

N = Number of subjects taken during the semester

7.3.2. The CGPA is calculated based on all subjects up to the end of a particular semester as

$$CGPA = \frac{\sum_{i=1}^N C_i * P_i}{\sum_{i=1}^N C_i}$$

Where,

C_i = Credits assigned to a subject item as indicated by the Course structure

P_i = Grade Point corresponding to a grade as shown in Table 4.1 above, obtained by a student in that particular subject

N = Number of subjects taken up to the end of a semester

8. Regulations for the Award of Certificate / Degree:

8.1 Certificate in a Discipline

A student is eligible for the award of the Certificate in a Discipline (as in CMLT of Table 1.1) if he / she has

(i) undergone the prescribed programme of study successfully and secured at least pass grade (as defined in Section 7.2) in each of the Theory & Practical mentioned in the respective course structure (referred to in Table 3.1) within the stipulated duration as mentioned in Table 2.1 but not later than 2 years from the date of registration into the Programme.

(ii) obtained at least satisfactory grade in CSR activities (i.e. NCC/ NSS/Games /Sports/ Music/

Debate/ Quiz/ Yoga) during the study period.

(iii) no dues to the University / Library / Hostels etc.

(iv) no disciplinary action pending against him / her.

8.2 Diploma in a Discipline:

Both the Diploma programmes mentioned in Table 2.1, namely Diploma in Medical Laboratory Technology (DMLT) and Diploma in Medical Radiation Technology (DMRT) will be governed by the Academic Regulations formed by Directorate of Medical Education and Training (DMET), Government of Odisha.

8.3 B.Sc. Degree:

A student is eligible for the award of the B.Sc. Degree mentioned in Table 2.1 if he / she has

(i) undergone the prescribed programme of study successfully and secured at least pass grade (as defined in Section 7.2) in each of the Theory, Practical, Project and Internship subjects mentioned in the respective Course Structure referred to in:

- Table 3.3 for B.Sc. in Medical Laboratory Technology (B.Sc.-MLT)
- Table 3.6 for B.Sc. in Radiation and Imaging Technology (B.Sc.-RIT)
- Table 3.7 for B.Sc. in Clinical Microbiology (B.Sc.-CMB)

and within the stipulated duration as mentioned in Table 2.1 but not later than 6 years from the date of registration into the Programme.

(ii) obtained at least satisfactory grade in CSR activities (i.e.NCC/ NSS/ Games/ Sports/ Music/ Debate/ Quiz/ Yoga) during the study period.

(iii) no dues to the University / Library / Hostels etc.

(iv) no disciplinary action pending against him / her.

8.4 B. Optometry Degree:

A student is eligible for the award of the Bachelor of Optometry (B. Optom) or Bachelor of Optometry- Lateral Entry (B. Optom (LE)) mentioned in Table 2.1 if he / she has

(i) undergone the prescribed programme of study successfully and secured at least pass grade (as defined in Section 7.2) in each of the Theory, Practical, Project and Internship subjects mentioned in the respective Course Structure referred to in:

- Tables 3.9A for B. Optom programme
- Tables 3.9B for B. Optom-LE programme

and within the stipulated duration as mentioned in Table 2.1 but not later than 8 years (6 years for LE students) from the date of registration into the Programme.

(ii) obtained at least satisfactory grade in CSR activities (i.e.NCC/ NSS/ Games/ Sports/ Music/ Debate/ Quiz/ Yoga) during the study period.

(iii) no dues to the University / Library / Hostels etc.

(iv) no disciplinary action pending against him / her.

8.5 M.Sc Degree:

A student is eligible for the award of the M.Sc. Degree (as mentioned in Table 2.1) if he / she has

(i) undergone the prescribed programme of study successfully and secured at least pass grade (as defined in Section 7.2) in each of Theory, Practical, Project and Internship subjects mentioned in the respective Course Structure referred to in:

- Table 3.4 for M.Sc. in Medical Laboratory Technology (M.Sc.-MLT)
- Table 3.8 for M.Sc. in Applied and Clinical Microbiology (M.Sc.-CMB)

and within the stipulated duration as mentioned in Table 1.1 but not later than 4 years from the date of registration into the Programme.

(ii) obtained at least satisfactory grade in CSR activities(i.e. NCC/ NSS/ Games /Sports/ Music/ Debate/ Quiz/ Yoga) during the study period as mentioned in 5.1.

(iii) no dues to the University / Library / Hostels etc.

(iv) no disciplinary action pending against him / her.

9. General

11.1 The academic regulations should be read as a whole for the purpose of interpretation.

11.2 In case of doubt or ambiguity in the interpretation of the above regulations, the decision of the Vice-Chancellor is final.

11.3 The University may change or amend the academic regulations or syllabus at any time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the University.