# **Goa University**



# 2025

# NAAC -SSR CRITERION VI

6.5.2 Academic and Administrative Audit Reports

# Table of Contents

1. Internal Academic Audit Reports	3
2. Financial Audit reports	88
1. Minutes of the Finance Committee meeting	89
2. Minutes of the University Court	94
3. Half Point Note	109

**1.** Internal Academic Audit Reports

#### Internal Academic Audit Report of School of Chemical Sciences: Biochemistry Discipline

#### Internal Academic Audit Report:

School of Chemical Sciences offers M.Sc. Biochemistry with 80 Credit course as per NEP 2020 since AY 2022-23. Each semester covers 20 credits with mixture of theory and practical courses. The list of courses offered per semester, and the Internal Academic Audit Report for each of the courses offered is enclosed herewith.

The SWOC analysis of the Biochemistry Discipline is given below.

# SWOC Analysis Report:

#### A. Strength:

- Qualified and experienced faculty members for guidance and mentorship of students.
- Faculty members have experience in diverse research field allowing collaborative
- multidisciplinary research.
- Well-structured and timely updated curriculum.

#### B. Weaknesses:

- Limited infrastructure and equipment.
- Poor or no connectivity of university WiFi and mobile phone network in major parts of building.
- Lack of trained support staff.

#### C. Opportunities:

- Collaborations with clinical laboratories and pharmaceutical industries.
- Good scope for bio entrepreneurship.
- Potential for internship and research assistantship in industries.

#### D. Challenges:

- Limited job opportunities in Goa.
- Unwillingness of students to relocate outside Goa.

#### Submitted by:

Dr. Digamber G. Porob - Vice Dean (Academics) - Coordinator

Dr. Prachi S. Torney - Program Director – Biochemistry

Dr. Anjani Nagvekar – member (Assistant Professor in Physical chemistry)

Dr. Shrikant Naik – member (Assistant Professor in Inorganic chemistry)

Page 1 of 1

# Internal Academic Audit Report of School of Chemical Sciences: Chemistry Discipline

submitted by:

#### Internal Academic Audit Report:

School of Chemical Sciences offers M.Sc. Chemistry with 80 Credit course as per NEP 2020 since AY 2022-23. There are four individual programmes, M.Sc. Analytical Chemistry, M.Sc. Inorganic Chemistry, M.Sc. Organic Chemistry and M.Sc. Physical Chemistry within Chemistry Discipline. The semester I (MSc Part I) is common for all the four programmes and from semester II student take up courses in individual specialization. For each semester, 20 credit courses are offered (highlighted in yellow in list of courses by semester) The Internal Academic Audit Report for each of the courses offered within individual programmes is enclosed herewith.

The SWOC analysis of the Chemistry Discipline was also conducted and the same is reported below.

#### SWOC Analysis Report:

# A. Strength:

- Almost all chemistry faculties are Ph. D guides and have variety of research expertise.
- Faculties with diverse experience in Industry and academia.
- Courses are designed with relevance to research perspective and industrial requirements.
- Have significant number of publications and granted patents.
- Adequate instrumental facilities are available in SCS to conduct research.

#### B. Weaknesses:

- Repair of instruments is time consuming affecting curriculum and research.
- Concealed pipeline leakages at several places.
- Lack of instrument handling experts to make extensive use of scientific instrument.
- · Poor or no connectivity of university WiFi in major parts of building.
- No PWD water pipeline for the school.

# C. Opportunities:

- Hands on training of advanced instruments is needed to make students industry ready.
- Summer training for interested students.
- Explore new research areas in, computational studies, advanced nanotechnology, energy storage material, novel bioorganic molecules, drug discovery, etc.
- Invited talks from Industry experts to keep students updated about requirements of industry.
- Improve on collection of software, databases, computer facilities etc.
- Repair of building leakages and putting a new water pipeline.
- Writing research projects in newer research areas.

#### D. Challenges:

- Lack of access to some important journals from publishers like ACS, Wiley, etc.
- Tough competition for getting high end research projects.

Page 1 of 2

#### Internal Academic Audit Report of School of the end of Sciences in outry in

# Submitted by:

Dr. Digamber G. Porob - Vice Dean (Academics) – Coordinator

Dr. Kanchanmala Deshpande – member (Assistant Professor in Biochemistry) Kaneband

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#### D. Challenges:

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	GOA UNIVERSITY School of Biological Sciences and Biotechnology PGDCG & MLT Programme
<b>ubjec</b> Acade	t: Submission of Internal Academic Audit Report for the PGDCG & MLT Programme mic Years 2022–2023 and 2023–2024) – Approval and Signature
00010	ternal Academic Audit for the Post Graduate Diploma in Clinical Genetics & Medical tory Techniques (PGDCG & MLT) programme has been successfully conducted for ademic years 2022–2023 and 2023–2024.
he fo	lowing documents are attached herewith for your kind perusal and approval:
1.	Minutes of the Internal Academic Audit Committee Meeting
2.	Internal Academic Audit Report (2022–2024)
3.	Annexure I – Course-wise Internal Audit Reports (MLT-501 to MLT-524) for both academic years
	e kindly requested to review the attached documents and provide your signatures as nation of approval and validation of the audit process.
ignati	ures:
1.	Coordinator – Internal Academic Audit Committee
	Name: Sr. Prof. Sanjeev Ghad
2.	Member – Internal Academic Audit Committee
	Name: Dr. Shanti N. Dessai
	Signature:
3.	Member – Internal Academic Audit Committee
	Name: Ms. Dviti Mapari
	Signature:
4.	
	Name: Dr. Aditi Naik Signature:

### **Minutes of the Internal Academic Audit**

# Zoology Discipline, School of Biological Sciences and Biotechnology, Goa University Postgraduate Diploma in Clinical Genetics & Medical Laboratory Techniques Date: 13/02/2025 Venue: Zoology Discipline, SBSB

The Internal Academic Audit for the Zoology Discipline, PGDCG & MLT Programme for the academic years 2022–2023 and 2023–2024 was held on 13/02/2025 from 11:15 am to 1.15pm in the Zoology Discipline, School of Biological Sciences and Biotechnology (SBSB). The meeting was chaired by Prof. Sanjeev Ghadi, Vice-Dean (Academic), SBSB, and Senior Professor in Biotechnology.

# Audit Committee Members Present:

- Chairperson:
- Sr.Prof. Sanjeev Ghadi (Vice-Dean, Academics, SBSB)
- Programme Director:
- Dr. Shanti Dessai, Programme Director, Zoology Discipline, PGDCG & MLT Programme
- Internal Audit Committee Members:
   Dr. Aditi Naik, Assistant Professor, Botany
   Ms. Dviti Mapari, Assistant Professor, Biotechnology

The chairperson welcomed the committee and initiated the process of the audit. First, the committee sought to comprehensively assess the academic progress and performance of the Zoology Discipline PGDCG & MLT Programme. The Programme Director briefed the committee about the course curriculum and its evolution over the period of time from an hours-based to a credit-based system. The Academic audit for the period under assessment fell in the credit-based system but not under the NEP structure. Since it is one of the stand-alone programmes on the Goa University Campus, it followed the OA-28 and not OA-35. Also, the course evaluation of this programme evaluation constituted only the semester-end assessment and followed the OB-4 structure of Goa University. Due to this evaluation protocol, the answer books were retained by the AR(Exam) section for their evaluations and result preparation. The programme director also mentioned that initially, the original attendances for the teaching that is held at GMC are submitted to the finance section for their remuneration purpose, due to which it was found difficult to maintain the originals of this attendance, therefore in such circumstances only photocopies of the attendance were maintained for the record.

The audit committee conducted a thorough review of:

- Course curriculum and syllabus updates.
- Student performance records including mark sheets and attendance registers.
- Question papers and its attendances.
- Hard Copy records of internship certificates and internship attendance records from various departments of Goa Medical College.
- Appendix I for all the courses for the academic year 2022-2023 and 2023-2024.

Based on the audit conducted, the following recommendations were conveyed by the committee,

- To confirm the procurement of SEA answer book records maintained by AR (EXAM) if needed at the time of External Academic Audit for verification purposes at the discipline's premises.
- To maintain academic year-wise, the syllabi, attendance records, question papers, class timetables, Exam Time tables and internship certificates, and attendance reports.
- To update the missing dates and number of lectures and absent marks wherever they were found to be not written in attendance documents.

The internal audit of the Zoology Discipline PGDCG & MLT Programme revealed robust academic practices with commendable documentation efforts. Nonetheless, the committee recommends focused improvements in curriculum mapping, standardized record-keeping, and enhanced assessment protocols to further strengthen the programme's quality and compliance with accreditation standards.

The meeting concluded with a discussion on the prompt implementation of the above recommendations and with a vote of thanks to the chair as well as by acknowledging the contributions of all other committee members

Minutes Prepared By: Dr. Shanti N. Dessai Programme Director, Zoology Discipline, PGDCG & MLT Programme

Approved By: Chairperson/Coordinator, Internal Academic Audit Committee Prof. Sanjeev Ghadi Vice-Dean (Academic), SBSB PGDCG & MLT Appendix I Internal Academic Audit Committee Report 2022-2023 Semester I

Name of the School: School of Biological Sciences and Biotechnology Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT) Academic Year: 2022–23 Semester: I Credits: 5 Course: MLT-500 — Clinical Genetics I Name of Faculty Member Teaching the Course: Dr. Shanti N. Dessai, Dr. Avelyno D'Costa and Ms. Gandhita Kundaikar

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the objectives of *Clinical Genetics I* align well with the PGDCG & MLT programme's goals. The course provides an in-depth understanding of genetic principles, inheritance patterns, genetic disorders, and molecular genetic techniques, ensuring students are well-prepared for careers in genetic diagnostics, counseling, and research.

2. Has the syllabus been handled so that it achieves/improves on the course objectives? Response: Yes, the syllabus covers fundamental and advanced concepts in medical genetics, cytogenetics, molecular techniques, and genetic counseling. It ensures that students develop both theoretical knowledge and practical expertise in clinical genetics.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: The course has a strong practical component (2 credits) covering karyotyping, chromosomal analysis, DNA extraction, PCR, gel electrophoresis, and genetic screening techniques. It provides students with hands-on training in laboratory methods essential for clinical genetics applications.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: Yes, evaluation is conducted through semester-end examinations, laboratory practicals, and problem-based assessments. The course also includes case studies, problem-solving exercises, and discussions, enhancing student comprehension and application of genetic principles.

5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: The course incorporates 15% flipped classroom strategies, where students receive preclass reading materials and are expected to engage in discussions, case studies, and problem-solving activities during class sessions.

6. Has any prior reading material been given to the participants for learning engagement? Response: Yes, structured prior reading materials are provided, helping students prepare for class discussions, problem-solving exercises, and case-based learning. This has improved student engagement and knowledge retention. 7. What has been the level of participants' (students) engagement in the course through prior reading?

Response: Moderate to high engagement, as structured reading materials and flipped classroom strategies encourage students to prepare before attending lectures, leading to more interactive discussions.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication? Response: Communication skill development is significant, as students actively participate in case-based discussions, problem-solving activities, and oral presentations on genetic disorders.

9. Are enough books and reference materials available to the course participants? Response: Yes, students have access to standard clinical genetics textbooks, journal articles, and online genetic databases, which are integrated into the course through structured assignments and discussions.

10. Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member:

- Increase the proportion of flipped classroom activities to enhance student-led discussions and critical thinking.
- Integrate advanced molecular genetics techniques such as next-generation sequencing (NGS) and CRISPR.
- Expand case-based learning with real-world clinical scenarios to improve diagnostic decisionmaking skills.
- Enhance problem-solving sessions with genetic data interpretation exercises.

1. Coordinator – Internal Academic Audit Committee

Name: Sr. Prof. Sanjeev Ghadi

2. Member – Internal Academic Audit Committee/Programme Director-PGDCG&MLT

Signature:

	Name: Dr. Shanti N. Dessai	Signature:	Boray	
3.	Member – Internal Academic Audit	Committee		
	Name: Ms. Dviti Mapari	Signature:	Properi	
1.	Member – Internal Academic Audit	Committee		
	Name: Dr. Aditi Naik	Signature:	VOOmid	

Name of the School: School of Biological Sciences and Biotechnology Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT) Academic Year: 2022–23 Semester: I Credits: 5 Course: MLT-501 — Clinical Biochemistry I Name of Faculty Member Teaching the Course: Department of Biochemistry, GMC Contributory teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the objectives of *Clinical Biochemistry I* align well with the broader goals of the PGDCG & MLT programme. The course explains human cell organization and its role in metabolic functions, evaluates the chemistry of biomolecules, and demonstrates their estimation from blood and body fluids. These aspects contribute to developing skills relevant to medical laboratory techniques.

2. Has the syllabus been handled so that it achieves/improves on the course objectives? Response: Yes, the syllabus covers essential biochemical concepts, from cell organization and pH balance to metabolic pathways of carbohydrates, proteins, and lipids. The inclusion of enzyme kinetics, vitamin and mineral metabolism ensures that the course comprehensively meets its intended objectives.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: The course has a strong practical component (2 credits) that includes pH estimation, qualitative and quantitative biomolecule tests, and the use of advanced biochemical techniques such as chromatography, electrophoresis, and colorimetry. However, there is limited hands-on exposure to automated biochemical analyzers.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: Yes, evaluation is conducted through semester-end assessments that include written exams and practical skill demonstrations. However, GMC staff do not incorporate quizzes, class discussions, student presentations, or case study discussions, limiting opportunities for interactive and continuous assessment.

5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: Currently, 0% of the sessions incorporate flipped classroom methodologies, as prior reading materials are not provided, and students do not engage in pre-class learning activities.

6. Has any prior reading material been given to the participants for learning engagement? Response: No prior reading materials are provided to students, which affects engagement and preparedness for theoretical and practical sessions. This lack of structured reading resources hinders conceptual understanding and reduces active participation in learning activities. 7. What has been the level of participants' (students) engagement in the course through prior reading?

Response: Extremely low. Observations indicate that students do not engage in prior reading, primarily because structured reading materials are not provided and there is no assessment mechanism (such as quizzes or discussions) to reinforce the importance of pre-class study.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication?

Response: Communication skills development is minimal, as student presentations, quizzes, and discussions are not incorporated into the course delivery at GMC. Opportunities to present case studies or biochemical disorder analyses are absent, which limits the enhancement of verbal and written scientific communication skills.

9. Are enough books and reference materials available to the course participants?

Response: While the university library holds copies of standard textbooks, these are not actively recommended or assigned for structured pre-reading. The lack of guidance on specific reference materials results in poor student engagement with course literature.

10. Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member:

- Ensure provision of structured prior reading materials to encourage student engagement before lectures and lab sessions.
- Introduce quizzes, class discussions, and student presentations to improve comprehension and participation.
- Implement flipped classroom techniques to facilitate active learning.
- Enhance hands-on exposure to automated biochemical analyzers and clinical applications.
- 1. Coordinator Internal Academic Audit Committee

Name: Sr. Prof. Sanjeev Ghadi

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2. Member – Internal Academic Audit Committee/Programme Director-PGDCG&MLT

Signature: \_\_\_\_

Name: Dr. Shanti N. Dessai

Signature: \_\_\_\_\_\_ BOD ~\_\_\_

3. Member – Internal Academic Audit Committee

Name: Ms. Dviti Mapari

Signature: \_\_\_\_

4. Member – Internal Academic Audit Committee

Name: Dr. Aditi Naik

Signature: \_\_\_\_\_\_

 Name of the School: School of Biological Sciences and Biotechnology
 Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT)
 Academic Year: 2022–23 Semester: I Credits: 5
 Course: MLT-502 — Clinical Microbiology (General & Systematic)
 Name of Faculty Member Teaching the Course: Department of Microbiology, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the objectives of *Clinical Microbiology (General & Systematic)* align well with the PGDCG & MLT programme's goals. The course provides a comprehensive understanding of microbial taxonomy, morphology, and pathogenicity. It covers systematic bacteriology, virology, mycology, and parasitology, preparing students for roles in clinical diagnostics and research laboratories.

2. Has the syllabus been handled so that it achieves/improves on the course objectives? Response: Yes, the syllabus covers fundamental microbiological concepts, including microbial structure, classification, diagnostic techniques, and antimicrobial susceptibility testing. The systematic approach ensures students gain both theoretical knowledge and practical expertise in clinical microbiology.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: The course includes a well-defined practical component (2 credits) covering microbial culture techniques, Gram and acid-fast staining, biochemical identification of bacteria, antibiotic sensitivity testing, and the handling of clinical specimens. However, hands-on exposure to advanced molecular diagnostic techniques is limited.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: Yes, evaluation is conducted through semester-end assessments that include written exams and practical demonstrations. However, GMC staff do not incorporate interactive assessments such as quizzes, case discussions, or student-led presentations, which could enhance deeper learning.

5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: Currently, 0% of the sessions use flipped classroom methods due to the absence of structured pre-class reading materials and interactive learning strategies. 6. Has any prior reading material been given to the participants for learning engagement? Response: No prior reading materials are provided, limiting student preparedness and engagement in theoretical and practical components of the course.

7. What has been the level of participants' (students) engagement in the course through prior reading?

Response: Extremely low, as structured pre-class reading assignments are not provided, and there are no assessments (such as quizzes) to reinforce student engagement.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication? Response: Communication skill development is minimal due to the lack of student presentations, discussions, and case-study analyses within the course.

9. Are enough books and reference materials available to the course participants? Response: While standard microbiology textbooks are available in the university library, they are not actively recommended or integrated into the learning process through structured assignments.

10. Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member:

- Ensure structured pre-reading assignments to improve student preparedness.
- Introduce case discussions, quizzes, and student-led presentations to reinforce learning.
- Incorporate molecular diagnostic techniques in the practical curriculum.
- Increase focus on antimicrobial resistance testing methodologies.

1. Coordinator – Internal Academic Audit Committee		a la	
	Name: Sr. Prof. Sanjeev Ghadi	Signature:	Columnia /
2.	Member – Internal Academic Audit	Committee/Prog	ramme Director-PGDCG&MLT
	Name: Dr. Shanti N. Dessai	Signature:	Ber
3.	Member – Internal Academic Audit	Committee	
	Name: Ms. Dviti Mapari	Signature:	happin
4.	Member – Internal Academic Audit	Committee	and
	Name: Dr. Aditi Naik	Signature:	<u></u> .

Name of the School: School of Biological Sciences and Biotechnology Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT) Academic Year: 2022–23 Semester: I Credits: 5 Course: MLT-503 — Clinical Pathology & Histology Name of Faculty Member Teaching the Course: Department of Pathology, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the objectives of *Clinical Pathology & Histology* align well with the PGDCG & MLT programme's goals. The course provides foundational knowledge of human pathology, tissue processing, and histological techniques, which are essential for clinical diagnostics and laboratory applications.

2. Has the syllabus been handled so that it achieves/improves on the course objectives? Response: Yes, the syllabus covers essential aspects such as hematological disorders, urine and body fluid analysis, histopathological techniques, and special staining methods. The structured approach ensures that students develop both theoretical knowledge and practical skills in clinical pathology and histology.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: The course includes a strong practical component (2 credits), covering tissue fixation, microtomy, hematology procedures, cytological techniques, and histological staining. However, there is limited exposure to advanced automated histopathology techniques and digital pathology applications.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: Yes, evaluation is conducted through semester-end assessments, which include written examinations and practical demonstrations. However, there is minimal use of interactive learning methods such as case-based discussions, student presentations, and formative assessments.

5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: Currently, 0% of the sessions utilize flipped classroom methodologies, as structured prereading assignments and interactive learning approaches are not incorporated into the curriculum.

6. Has any prior reading material been given to the participants for learning engagement?

Response: No prior reading materials are provided, leading to reduced engagement and preparedness for both theoretical and laboratory sessions.

7. What has been the level of participants' (students) engagement in the course through prior reading?

Response: Extremely low, as structured pre-class reading materials are not provided, and no mechanisms (such as quizzes or assignments) exist to ensure engagement with course content before lectures.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication? Response: Communication skill development is minimal, as case discussions, student-led presentations, and pathology report interpretation exercises are not incorporated into the teaching methodology.

9. Are enough books and reference materials available to the course participants? Response: While standard pathology and histology textbooks are available in the university library, they are not actively recommended or integrated into the course through structured assignments and reading lists.

10. Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member:

- Ensure provision of structured prior reading materials to encourage self-directed learning.
- Incorporate student-led case discussions, quizzes, and pathology report analysis to enhance conceptual understanding.
- Introduce digital pathology and advanced histological techniques in the practical sessions.
- Increase interactive assessments to evaluate clinical decision-making skills.

1. Coordinator – Internal Academic Audit C		udit Committee
	Name: Sr. Prof. Sanjeev Ghadi	Signature:
2.	Member – Internal Academic Audit	Committee/Programme Director-PGDCG&MLT
	Name: Dr. Shanti N. Dessai	Signature:
3.	Member – Internal Academic Audit	Committee
	Name: Ms. Dviti Mapari	Signature:
4.	Member – Internal Academic Audit	Committee
	Name: Dr. Aditi Naik	Signature:

PGDCG & MLT Appendix I Internal Academic Audit Committee Report 2022-2023 Semester II

Name of the School: School of Biological Sciences and Biotechnology
 Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory
 Techniques (PGDCG & MLT)
 Academic Year: 2022–23 Semester: II Credits: 5
 Course: MLT-521 — Clinical Genetics II
 Name of Faculty Member Teaching the Course: Dr. Shanti N. Dessai, Dr. Avelyno D'Costa and Ms. Gandhita Kundaikar

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the objectives of *Clinical Genetics II* align well with the PGDCG & MLT programme's goals. The course builds upon fundamental genetic principles, focusing on advanced topics such as epigenetics, population genetics, genetic screening, and gene therapy, preparing students for careers in genetic diagnostics, counseling, and research.

2. Has the syllabus been handled so that it achieves/improves on the course objectives? Response: Yes, the syllabus covers chromosomal disorders, genetic syndromes, prenatal and postnatal genetic diagnostics, advanced molecular genetic techniques, and ethical considerations in clinical genetics. It ensures that students develop a comprehensive understanding of the latest advancements in clinical genetics.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: The course includes a strong practical component (2 credits) covering FISH (Fluorescence in situ Hybridization), microarray techniques, karyotyping, PCR-based diagnostics, and next-generation sequencing (NGS) principles. Students receive hands-on exposure to modern diagnostic tools essential for genetic testing.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: Yes, the course employs semester-end examinations, laboratory practical assessments, and problem-solving evaluations. Additionally, students participate in case discussions and genetic counseling role-play exercises to enhance their applied knowledge and communication skills.

5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: The course incorporates 15% flipped classroom strategies, where students engage with structured reading materials before lectures, allowing for deeper discussions and interactive problem-solving sessions in class.

6. Has any prior reading material been given to the participants for learning engagement?

Response: Yes, structured reading materials are provided, encouraging students to engage with course content before attending classes. This has significantly improved student participation in discussions and case-based learning exercises.

7. What has been the level of participants' (students) engagement in the course through prior reading?

Response: Moderate to high engagement, as students are expected to complete assigned readings before class and contribute to case discussions and problem-based learning sessions.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication? Response: Communication skill development is significant, as students regularly participate in case-based learning, genetic counseling simulations, and oral presentations on genetic disorders.

9. Are enough books and reference materials available to the course participants? Response: Yes, students have access to standard clinical genetics textbooks, journal articles, and online genetic databases, which are actively integrated into learning activities through structured assignments and discussions.

10. Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member:

- Expand the use of flipped classroom strategies beyond 15% to further encourage selfdirected learning.
- Introduce hands-on training in CRISPR and genome editing techniques to enhance exposure to emerging genetic therapies.
- Strengthen the clinical genetics internship program with more case-based training in realworld diagnostic settings.
- Develop bioinformatics-focused modules to enhance skills in genetic data analysis.

Coordinator – Internal Academic Audit Committee
 Name: Sr. Prof. Sanjeev Ghadi Signature: \_\_\_\_\_

2. Member – Internal Academic Audit Committee/Programme Director-PGDCG&MLT

Name: Dr. Shanti N. Dessai

Signature: \_

3. Member – Internal Academic Audit Committee

Name: Ms. Dviti Mapari

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4. Member – Internal Academic Audit Committee

Name: Dr. Aditi Naik

Signature:

Name of the School: School of Biological Sciences and Biotechnology Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT) Academic Year: 2022–23 Semester: II Credits: 5 Course: MLT-522 — Clinical Biochemistry II Name of Faculty Member Teaching the Course: Department of Biochemistry, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the objectives of *Clinical Biochemistry II* align well with the PGDCG & MLT programme's goals. The course builds on fundamental biochemistry principles and focuses on advanced clinical diagnostic techniques, metabolic disorders, and biochemical markers of diseases.

2. Has the syllabus been handled so that it achieves/improves on the course objectives? Response: Yes, the syllabus covers essential biochemical diagnostic concepts, including enzymology, metabolic pathways, biochemical markers of disease, and quality control in biochemical assays. The curriculum ensures a well-rounded understanding of the clinical applications of biochemistry.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: The course has a strong practical component (2 credits), including enzyme activity assays, biomarker quantification, automated biochemical analysis, and quality control measures in diagnostic biochemistry. However, exposure to advanced molecular biochemical techniques is limited.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: Yes, assessment is conducted through semester-end examinations and laboratory practicals. However, GMC staff do not incorporate quizzes, interactive case studies, or student-led discussions, limiting opportunities for conceptual reinforcement and critical thinking.

5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: Currently, 0% of sessions use flipped classroom methodologies due to the lack of structured pre-class reading assignments and active learning strategies.

6. Has any prior reading material been given to the participants for learning engagement? Response: No prior reading materials are provided, which results in reduced engagement and preparedness for lectures and laboratory sessions.

7. What has been the level of participants' (students) engagement in the course through prior reading?

Response: Extremely low, as structured reading assignments are not integrated into the course, and there is no assessment mechanism (such as quizzes) to encourage engagement.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication? Response: Communication skill development is minimal, as student presentations, biochemical case study discussions, and critical analysis of biochemical reports are not part of the course methodology.

9. Are enough books and reference materials available to the course participants? Response: While standard clinical biochemistry textbooks are available in the university library, they are not actively integrated into the course structure through assigned readings or recommended references.

10. Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member:

- Ensure provision of structured prior reading materials to encourage self-directed learning.
- Incorporate case-based discussions, quizzes, and student presentations to enhance conceptual engagement.
- Introduce molecular diagnostic techniques in clinical biochemistry practicals.
- Expand quality control and laboratory management topics for improved professional preparedness.

1.	Coordinator – Internal Academic Audit Committee		
	Name: Sr. Prof. Sanjeev Ghadi	Signature:	aluer,
2.	Member – Internal Academic Audit	Committee/Prog	ramme Director-PGDCG&ML
	Name: Dr. Shanti N. Dessai	Signature:	(Bloday
3.	Member – Internal Academic Audit	Committee	
	Name: Ms. Dviti Mapari	Signature:	Prapani
4.	Member – Internal Academic Audit	Committee	l_
	Name: Dr. Aditi Naik	Signature:	VOOMO-

 Name of the School: School of Biological Sciences and Biotechnology
 Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT)
 Academic Year: 2022–23 Semester: II Credits: 5
 Course: MLT-523 — Clinical Parasitology, Mycology and Virology
 Name of Faculty Member Teaching the Course: Department of Microbiology, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the objectives of *Clinical Parasitology, Mycology, and Virology* align well with the PGDCG & MLT programme's goals. The course provides a thorough understanding of parasitic, fungal, and viral infections, their pathogenesis, diagnostic techniques, and clinical implications, preparing students for diagnostic laboratory and research roles.

2. Has the syllabus been handled so that it achieves/improves on the course objectives? Response: Yes, the syllabus covers taxonomy, morphology, life cycles, clinical significance, and laboratory diagnosis of parasites, fungi, and viruses. It ensures that students acquire theoretical knowledge and practical skills relevant to clinical microbiology.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based? Response: The course includes a well-defined practical component (2 credits), covering microscopy, culture methods, staining techniques, antigen detection, serological assays, and molecular diagnostic approaches. However, hands-on exposure to advanced molecular techniques, such as PCR for viral and fungal detection, remains limited.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: Yes, assessment is conducted through semester-end examinations and laboratory practicals. However, GMC staff do not integrate interactive learning tools such as quizzes, case studies, or student presentations, which could enhance conceptual understanding and problem-solving skills.

5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: Currently, 0% of the sessions incorporate flipped classroom methodologies due to the lack of structured pre-class reading materials and active learning exercises.

6. Has any prior reading material been given to the participants for learning engagement? Response: No prior reading materials are provided, reducing student preparedness and limiting their ability to engage in discussions and hands-on laboratory work. 7. What has been the level of participants' (students) engagement in the course through prior reading?

Response: Extremely low, as structured reading assignments and preparatory materials are not provided, and there is no assessment mechanism (such as quizzes or discussions) to reinforce pre-class learning.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication?

Response: Communication skill development is minimal, as student presentations, discussionbased learning, and case-study analysis are not part of the course delivery methodology.

9. Are enough books and reference materials available to the course participants? Response: While standard parasitology, mycology, and virology textbooks are available in the university library, they are not actively incorporated into the learning process through structured reading assignments.

10. Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member:

- Ensure structured prior reading materials to enhance pre-class preparedness.
- Incorporate quizzes, case-based discussions, and student-led presentations to reinforce learning.
- Introduce molecular diagnostic techniques such as PCR and real-time PCR for viral and fungal detection in the practical sessions.
- Expand hands-on exposure to serological and antigen detection assays for viral and fungal pathogens.

1.	Coordinator – Internal Academic Au	a la	
	Name: Sr. Prof. Sanjeev Ghadi	Signature:	alue /
2.	Member – Internal Academic Audit	Committee/Pr	ogramme Director-PGDCG&MLT
	Name: Dr. Shanti N. Dessai	Signature:	(DD)-y
3.	Member – Internal Academic Audit	Committee	
	Name: Ms. Dviti Mapari	Signature:	Dapan
4.	Member – Internal Academic Audit		l
	Name: Dr. Aditi Naik	Signature:	VOOMA-

Name of the School: School of Biological Sciences and Biotechnology
Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT)
Academic Year: 2022–23 Semester: II Credits: 5
Course: MLT-524 — Hematology and Transfusion Medicine
Name of Faculty Member Teaching the Course: Department of Pathology, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the objectives of *Hematology and Transfusion Medicine* align well with the PGDCG & MLT programme's goals. The course provides an in-depth understanding of hematopoiesis, blood disorders, hemostasis, and transfusion science, ensuring students are well-prepared for careers in clinical laboratories and blood banks.

2. Has the syllabus been handled so that it achieves/improves on the course objectives? Response: Yes, the syllabus covers blood cell morphology, hematological malignancies, coagulation disorders, immunohematology, and transfusion practices. It ensures that students develop theoretical knowledge and practical expertise in hematology and transfusion medicine.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: The course includes a well-defined practical component (2 credits) covering blood smear preparation, differential leukocyte count, coagulation tests, blood grouping, cross-matching, and compatibility testing. However, limited exposure to molecular hematology techniques and automation in blood banking is a drawback.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: Yes, evaluation is conducted through semester-end examinations and laboratory practicals. However, interactive assessments such as case-based discussions, student presentations, and transfusion reaction analyses are not integrated into the evaluation methods.

5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: Currently, 0% of the sessions incorporate flipped classroom methodologies due to the absence of structured pre-class reading materials and active learning strategies.

6. Has any prior reading material been given to the participants for learning engagement? Response: No prior reading materials are provided, which negatively impacts student preparedness and engagement with course content. 7. What has been the level of participants' (students) engagement in the course through prior reading?

Response: Extremely low, as structured reading assignments and preparatory materials are not provided, and there is no assessment mechanism (such as quizzes or discussions) to reinforce preclass learning.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication? Response: Communication skill development is minimal, as student presentations, discussion-based learning, and transfusion reaction case study analysis are not part of the course delivery methodology.

9. Are enough books and reference materials available to the course participants? Response: While standard hematology and transfusion medicine textbooks are available in the university library, they are not actively incorporated into the learning process through structured reading assignments.

10. Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member:

- Ensure structured prior reading materials to improve pre-class preparedness.
- Incorporate quizzes, case-based discussions, and student-led presentations to reinforce learning.
- Introduce molecular hematology techniques such as flow cytometry and PCR in transfusion medicine.
- Expand hands-on exposure to automation in hematology and transfusion practices.

L.	Coordinator – Int	ernal Academic Audit	Committee

Name: Sr. Prof. Sanjeev Ghadi

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Name: Dr. Shanti N. Dessai

3. Member – Internal Academic Audit Committee

Name: Ms. Dviti Mapari

Signature:

4. Member – Internal Academic Audit Committee

Name: Dr. Aditi Naik

Signature: \_\_\_\_\_

# PGDCG & MLT Appendix I Internal Academic Audit Committee Report 2023-2024 Semester I

 Name of the School: School of Biological Sciences and Biotechnology
 Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT)
 Academic Year: 2023–24 Semester: I Credits: 5
 Course: MLT-500 — Clinical Genetics I
 Name of Faculty Member Teaching the Course: Dr. Shanti N. Dessai, Dr. Avelyno D'Costa and Ms. Gandhita Kundaikar

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the course objectives are well-aligned with the broader goals of the PGDCG & MLT programme. *Clinical Genetics I* provides a foundational understanding of genetic principles, inheritance patterns, genetic disorders, and diagnostic genetic techniques, equipping students with essential knowledge for clinical and research applications.

2. Has the syllabus been structured to effectively achieve the course objectives?

Response: Yes, the curriculum is designed to cover essential topics such as Mendelian and non-Mendelian inheritance, chromosomal abnormalities, molecular basis of genetic diseases, and diagnostic genetic methodologies. The syllabus ensures that students develop both conceptual clarity and hands-on expertise.

3. Does the course incorporate adequate practical components to develop relevant skills, or is it predominantly theory-based?

Response: The course includes a strong laboratory component (2 credits), allowing students to gain practical exposure in DNA extraction, polymerase chain reaction (PCR), karyotyping, electrophoresis, and genetic screening techniques. This ensures that students acquire the technical proficiency necessary for genetic diagnostics.

4. Do the evaluation methods effectively assess the intended course outcomes? Are relevant competencies being tested?

Response: Yes, assessment is conducted through semester-end examinations, laboratory practical assessments, and problem-based evaluations. Additionally, students engage in case-based discussions and interactive learning, fostering their ability to apply genetic concepts to real-world scenarios.

5. What percentage of the classes employ Flip Classroom strategies?

Response: The course integrates flipped classroom strategies in approximately 15% of sessions, wherein students are provided with pre-class reading materials to facilitate meaningful discussions and enhance concept application during in-class activities.

6. Are students provided with prior reading material to engage in self-directed learning?

 Name of the School: School of Biological Sciences and Biotechnology
 Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT)
 Academic Year: 2023–24 Semester: I Credits: 5
 Course: MLT-500 — Clinical Genetics I
 Name of Faculty Member Teaching the Course: Dr. Shanti N. Dessai, Dr. Avelyno D'Costa and Ms. Gandhita Kundaikar

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, the course objectives are well-aligned with the broader goals of the PGDCG & MLT programme. *Clinical Genetics I* provides a foundational understanding of genetic principles, inheritance patterns, genetic disorders, and diagnostic genetic techniques, equipping students with essential knowledge for clinical and research applications.

2. Has the syllabus been structured to effectively achieve the course objectives?

Response: Yes, the curriculum is designed to cover essential topics such as Mendelian and non-Mendelian inheritance, chromosomal abnormalities, molecular basis of genetic diseases, and diagnostic genetic methodologies. The syllabus ensures that students develop both conceptual clarity and hands-on expertise.

3. Does the course incorporate adequate practical components to develop relevant skills, or is it predominantly theory-based?

Response: The course includes a strong laboratory component (2 credits), allowing students to gain practical exposure in DNA extraction, polymerase chain reaction (PCR), karyotyping, electrophoresis, and genetic screening techniques. This ensures that students acquire the technical proficiency necessary for genetic diagnostics.

4. Do the evaluation methods effectively assess the intended course outcomes? Are relevant competencies being tested?

Response: Yes, assessment is conducted through semester-end examinations, laboratory practical assessments, and problem-based evaluations. Additionally, students engage in case-based discussions and interactive learning, fostering their ability to apply genetic concepts to real-world scenarios.

5. What percentage of the classes employ Flip Classroom strategies?

Response: The course integrates flipped classroom strategies in approximately 15% of sessions, wherein students are provided with pre-class reading materials to facilitate meaningful discussions and enhance concept application during in-class activities.

6. Are students provided with prior reading material to engage in self-directed learning?

Response: Yes, students receive structured reading materials, which are essential for reinforcing fundamental concepts and encouraging independent study. This has enhanced participation in discussions and problem-solving exercises.

7. How engaged have students been in pre-class learning?

Response: Moderate to high engagement has been observed, as students utilize the reading materials to better understand key concepts before classroom interactions. This has resulted in more informed discussions and improved analytical thinking.

8. How has the course facilitated communication skill development among students? Do instructors employ specific techniques to enhance this aspect?

Response: The course includes discussion-based learning, case studies, and student presentations, which significantly contribute to the improvement of scientific communication skills. The interactive approach encourages students to articulate complex genetic concepts effectively.

9. Are there sufficient books and reference materials available for students?

Response: Yes, the course provides access to recommended textbooks, peer-reviewed journal articles, and online genetic databases, which are integrated into the learning experience through structured assignments and research activities.

10. Recommendations for enhancing course delivery, content, or evaluation methods:

- Increase flipped classroom implementation beyond 15% to enhance self-directed learning.
- Introduce training in next-generation sequencing (NGS) and genome editing techniques to expose students to emerging advancements in clinical genetics.
- Expand case-based learning with real-world genetic counseling scenarios to strengthen analytical skills.
- Develop bioinformatics-focused modules to train students in genetic data interpretation.

1. Coordinator – Internal Academic Audit Committee

Name: Sr. Prof. Sanjeev Ghadi

2. Member – Internal Academic Audit Committee/Programme Director-PGDCG&MLT

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Name:	Dr.	Shanti	Ν.	Dessai
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3. Member – Internal Academic Audit Committee

Name: Ms. Dviti Mapari

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4. Member – Internal Academic Audit Committee

Name: Dr. Aditi Naik

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Name of the School: School of Biological Sciences and Biotechnology Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT) Academic Year: 2023–24 Semester: I Credits: 5 Course: MLT-501 — Clinical Biochemistry I Name of Faculty Member Teaching the Course: Department of Biochemistry, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, *Clinical Biochemistry I* aligns with the objectives of the PGDCG & MLT programme. The course provides an introduction to biochemical principles, biomolecule chemistry, metabolic pathways, and their relevance in clinical diagnostics, ensuring foundational competency in laboratory-based biochemical analysis.

2. Has the syllabus been structured effectively to achieve the course objectives? Response: Yes, the syllabus includes essential topics such as enzyme kinetics, metabolic pathways of carbohydrates, lipids, and proteins, along with clinical significance in disease states. The curriculum is designed to provide a comprehensive understanding of biochemical functions in human health and disease.

3. Does the course include enough practical exposure, or is it primarily theory-based? Response: The course includes a practical component (2 credits) covering pH measurement, qualitative and quantitative biomolecule analysis, chromatography, electrophoresis, and colorimetric assays. However, limited hands-on exposure to automated biochemical analyzers and advanced diagnostic tools is observed.

4. Do the evaluation methods assess the intended course outcomes effectively? Are key skills being measured?

Response: Yes, evaluation is conducted through semester-end assessments comprising written theory exams and practical laboratory demonstrations. However, interactive assessments such as quizzes, case studies, or student presentations are not included.

What percentage of the course incorporates Flip Classroom teaching methods?
 Response: 0% flipped classroom strategies are used in this course. Reading materials are not provided before lectures, and class sessions are delivered in a traditional lecture format.

6. Are students provided with structured reading materials before class? Response: No structured pre-class reading materials are provided. Students receive lecture-based instruction without pre-learning engagement. 7. What has been the level of engagement from students in self-learning and discussions? Response: Minimal engagement in pre-class learning and discussion-based activities, as there are no assigned pre-class materials, discussions, or problem-solving sessions.

8. How has the course contributed to students' communication skills? Are there specific strategies for improvement?

Response: Communication skill development is limited, as the course delivery does not involve student-led presentations, discussions, or case-based problem-solving exercises.

9. Are students provided with sufficient reference books and learning resources? Response: While textbooks and reference materials are available in the library, they are not actively incorporated into structured assignments or pre-class reading activities.

10. Recommendations for improving course content, teaching strategies, and evaluation methods:

- Introduce structured reading assignments to encourage pre-class preparation.
- Incorporate quizzes, case-based discussions, and student-led presentations to enhance • conceptual understanding.
- Expand hands-on training to include automated biochemical analyzers.
- Consider adopting a partial flipped classroom model to improve student engagement and • critical thinking.

1.	Coordinator – Internal Academic Audit Committee		$\int I_{\bar{a}}$
	Name: Sr. Prof. Sanjeev Ghadi	Signature:	(aluer)
2.	Member – Internal Academic Audit Committee/Programme Director-PGDCG&M		
	Name: Dr. Shanti N. Dessai	Signature:	(De)-y
3.	Member – Internal Academic Audit Committee		
	Name: Ms. Dviti Mapari	Signature:	Property
4.	Member – Internal Academic Audit Committee		l
	Name: Dr. Aditi Naik	Signature:	VOOMa-

Name: Dr. Aditi Naik

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 Name of the School: School of Biological Sciences and Biotechnology
 Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT)
 Academic Year: 2023–24 Semester: I Credits: 5
 Course: MLT-502 — Clinical Microbiology (General & Systematic)
 Name of Faculty Member Teaching the Course: Department of Microbiology, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, *Clinical Microbiology (General & Systematic)* is structured to provide students with a fundamental and applied understanding of microbiology, infectious diseases, and diagnostic techniques, ensuring alignment with the PGDCG & MLT programme's objectives.

2. Has the syllabus been structured effectively to achieve the course objectives? Response: Yes, the syllabus comprehensively covers general microbiology principles, microbial classification, pathogen identification, antimicrobial susceptibility testing, and clinical diagnostics. It ensures that students gain a theoretical and practical understanding of infectious agents and their role in human diseases.

3. Does the course include sufficient practical training, or is it mainly theory-based? Response: The course includes a strong practical component (2 credits), exposing students to bacterial culture techniques, staining methods, biochemical tests, antimicrobial susceptibility assays, and molecular detection techniques for clinical pathogens. However, limited exposure to automation in microbiological diagnostics is observed.

4. Do the evaluation methods effectively assess the course outcomes? Are students' competencies in microbiology adequately tested?

Response: Yes, evaluation consists of semester-end theoretical examinations and practical laboratory assessments. However, quizzes, case-based problem-solving, and real-world microbiological diagnostic simulations are not included as assessment tools.

5. What percentage of the course incorporates Flip Classroom teaching methods? Response: 0% flipped classroom methodology is implemented. The course is delivered primarily through traditional lectures and laboratory demonstrations.

6. Are students provided with structured reading materials before class? Response: No structured reading materials are provided before lectures, and learning is based entirely on in-class instruction. 7. How engaged have students been in self-learning and pre-class preparation? Response: Student engagement in pre-class learning is minimal, as there is no structured assignment of pre-class reading or discussion-based sessions.

8. Has the course contributed to communication skill development in students? Are any specific strategies used for this purpose?

Response: Minimal communication skill development is observed, as the course does not include student-led presentations, case-based discussions, or collaborative learning activities.

9. Are students provided with access to adequate reference books and resources? Response: Yes, students have access to standard microbiology textbooks, diagnostic manuals, and reference literature, but these are not integrated into structured pre-class learning.

10. Recommendations for improving course content, teaching strategies, and assessment methods:

- Provide structured reading materials to improve student preparedness and engagement.
- Incorporate quizzes, case-based problem-solving, and student presentations to enhance learning.
- Introduce digital tools and simulation-based microbiology learning.
- Enhance practical training by including exposure to automated microbiology diagnostic systems.
  - 1. Coordinator Internal Academic Audit Committee

Name: Sr. Prof. Sanjeev Ghadi

2. Member – Internal Academic Audit Committee/Programme Director-PGDCG&MLT

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Name: Dr. Shanti N. Dessai

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3. Member – Internal Academic Audit Committee

Name: Ms. Dviti Mapari

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4. Member – Internal Academic Audit Committee

Name: Dr. Aditi Naik

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# APPENDIX I (INTERNAL ACADEMIC AUDIT COMMITTEE REPORT TEMPLATE)

 Name of the School: School of Biological Sciences and Biotechnology
 Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT)
 Academic Year: 2023–24 Semester: I Credits: 5
 Course: MLT-503 — Clinical Pathology & Histology
 Name of Faculty Member Teaching the Course: Department of Pathology, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, *Clinical Pathology & Histology* aligns well with the overall objectives of the PGDCG & MLT programme. The course provides students with an in-depth understanding of human tissues, their microscopic structure, and pathological alterations associated with diseases, which are critical for laboratory diagnostics.

2. Has the syllabus been structured effectively to achieve the course objectives? Response: Yes, the syllabus covers essential topics including histological techniques, tissue processing, staining methods, cytopathology, hematopathology, and disease pathology. This structured approach ensures that students develop both theoretical knowledge and practical competence in histopathological techniques.

3. Does the course provide sufficient hands-on training, or is it more theory-focused? Response: The course includes a practical component (2 credits), offering students hands-on experience with tissue fixation, sectioning, histological staining techniques (H&E and special stains), and cytopathology sample processing. However, limited access to advanced histological imaging techniques is observed.

4. Do the evaluation methods effectively assess the course outcomes? Are key competencies adequately tested?

Response: Yes, assessment includes semester-end written examinations and laboratory practical evaluations. However, continuous assessment methods, such as structured assignments, case-based discussions, and real-time histopathology case evaluations, are currently not incorporated.

5. What percentage of the course incorporates Flip Classroom teaching methods? Response: 0% flipped classroom methodology is used, as learning is conducted through traditional lectures and laboratory practical demonstrations. 6. Are students provided with structured reading materials before class? Response: No structured reading materials are provided before lectures; all learning is based on classroom instruction.

7. How engaged have students been in self-learning and independent study? Response: Minimal engagement in pre-class preparation, as students are not given assigned readings or discussion-based sessions before lectures.

8. Does the course contribute to the development of students' communication skills? Are there specific strategies in place to improve them?

Response: Limited emphasis on communication skill development, as the course lacks case-based discussions, oral presentations, and student-led learning activities.

9. Are students provided with adequate reference books and learning resources? Response: Yes, standard pathology and histology textbooks, atlases, and reference guides are available, but they are not integrated into structured assignments or pre-class reading activities.

10. Recommendations for improving course content, teaching methods, and evaluation:

- Introduce structured reading materials to encourage pre-class engagement.
- Incorporate quizzes, interactive case discussions, and student presentations for better concept reinforcement.
- Enhance practical exposure with digital histopathology tools and automated tissue processing techniques.
- Consider implementing continuous assessment methods to evaluate student progress more effectively.

1.	Coordinator – Internal Academic Au	idit Committee	C Li
	Name: Sr. Prof. Sanjeev Ghadi	Signature:	alue /
2.	Member – Internal Academic Audit	Committee/Prog	ramme Director-PGDCG&MLT
	Name: Dr. Shanti N. Dessai	Signature:	(Be)-y
3.	Member – Internal Academic Audit	Committee	
	Name: Ms. Dviti Mapari	Signature:	Dapan
4.	Member – Internal Academic Audit		
	Name: Dr. Aditi Naik	Signature:	VOOMA-

PGDCG & MLT Appendix I Internal Academic Audit Committee Report 2023-2024 Semester II

#### APPENDIX I (INTERNAL ACADEMIC AUDIT COMMITTEE REPORT TEMPLATE)

Name of the School: School of Biological Sciences and Biotechnology
 Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory
 Techniques (PGDCG & MLT)
 Academic Year: 2023–24 Semester: II Credits: 5
 Course: MLT-521 — Clinical Genetics II
 Name of Faculty Member Teaching the Course: Dr. Shanti N. Dessai, Dr. Avelyno D'Costa and Ms. Gandhita Kundaikar

1. Are the Course Objectives in line with the Programme Objectives?

Response: Yes, *Clinical Genetics II* is designed to build upon the foundational knowledge introduced in *Clinical Genetics I*. The course expands into complex genetic disorders, population genetics, epigenetics, gene therapy, and emerging technologies in genetic diagnostics, ensuring students are well-prepared for careers in clinical genetics and medical research.

2. Has the syllabus been structured effectively to achieve the course objectives? Response: Yes, the syllabus comprehensively covers prenatal and postnatal genetic screening, molecular cytogenetics, genetic risk assessment, pharmacogenomics, and ethical considerations in genetic testing. The curriculum integrates both theoretical and practical components to enhance clinical application.

3. Does the course include enough practical exposure, or is it primarily theory-based? Response: The course incorporates a robust practical component (2 credits), providing students hands-on experience with Fluorescence in situ Hybridization (FISH), chromosomal microarrays, PCR-based diagnostic techniques, and principles of next-generation sequencing (NGS). Practical exposure ensures that students develop competencies in advanced genetic diagnostic techniques.

4. Do the evaluation methods assess the intended course outcomes effectively? Are key skills being measured?

Response: Yes, assessments include semester-end examinations, practical tests, and casebased evaluations. Students also participate in genetic counseling role-plays, discussions on real-life clinical cases, and problem-solving exercises, which help them apply their theoretical knowledge to practical scenarios.

5. What percentage of the course incorporates Flip Classroom teaching methods? Response: Approximately 15% of the course integrates flipped classroom strategies, where students review pre-class reading materials and engage in interactive discussions and problem-based learning during lectures.

6. Are students provided with structured reading materials to promote self-learning? Response: Yes, structured reading materials and curated research articles are provided. This enhances self-directed learning and prepares students for in-depth discussions, case studies, and critical analysis of genetic testing methodologies. 7. What has been the level of engagement from students in prior reading and self-learning activities?

Response: Moderate to high engagement has been observed, as the structured reading materials and flipped classroom strategy encourage students to familiarize themselves with concepts before interactive sessions.

8. How has the course contributed to students' communication skills? Are there specific strategies for improvement?

Response: The course emphasizes genetic counseling role-play exercises, discussions on genetic case reports, and student presentations, helping to enhance scientific communication and patient interaction skills.

9. Are students provided with sufficient reference books and learning resources? Response: Yes, the university provides access to textbooks, peer-reviewed journals, and online genetic databases, which are actively integrated into coursework through structured assignments and research discussions.

10. Recommendations for improving course content, teaching strategies, and evaluation methods:

- Increase the proportion of flipped classroom activities beyond 15% to foster a more student-driven learning approach.
- Introduce practical exposure to CRISPR-based gene editing techniques to align with advancements in genetic therapy.
- Expand digital case-based learning using AI-driven genetic analysis platforms.
- Enhance bioinformatics training to include genetic variant interpretation and clinical genomics applications.

1.	Coordinator – Internal Academic Au	idit Committee	a la
	Name: Sr. Prof. Sanjeev Ghadi	Signature:	Colum-1
2.	Member – Internal Academic Audit	Committee/Pro	ogramme Director-PGDCG&MLT
	Name: Dr. Shanti N. Dessai	Signature:	Ber
3.	Member – Internal Academic Audit	Committee	
	Name: Ms. Dviti Mapari	Signature:	Dapan
4.	Member – Internal Academic Audit	Committee	
	Name: Dr. Aditi Naik	Signature:	$\sqrt{00000}$

#### APPENDIX I (INTERNAL ACADEMIC AUDIT COMMITTEE REPORT TEMPLATE)

Name of the School: School of Biological Sciences and Biotechnology Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT) Academic Year: 2023–24 Semester: II Credits: 5 Course: MLT-522 — Clinical Biochemistry II Name of Faculty Member Teaching the Course: Department of Biochemistry, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, *Clinical Biochemistry II* aligns well with the programme objectives by expanding on the fundamental biochemical concepts introduced in *Clinical Biochemistry I*. The course focuses on metabolic disorders, enzymology, endocrinology, toxicology, and advanced biochemical diagnostics, ensuring students gain relevant expertise for clinical applications.

2. Has the syllabus been structured effectively to achieve the course objectives? Response: Yes, the syllabus comprehensively covers hormonal regulations, enzyme kinetics, clinical toxicology, biochemical markers of diseases, and advanced laboratory techniques, equipping students with theoretical knowledge and practical skills necessary for clinical and diagnostic applications.

3. Does the course provide sufficient hands-on training, or is it primarily theory-based? Response: The course includes a practical component (2 credits), where students gain hands-on experience in enzyme assays, hormone analysis, chromatography techniques, and interpretation of biochemical markers. However, limited exposure to automation in biochemical diagnostics is observed.

4. Do the evaluation methods effectively assess the course outcomes? Are key competencies adequately tested?

Response: Yes, evaluation is conducted through semester-end theory examinations and laboratory practical assessments. However, there is no inclusion of quizzes, student-led discussions, or case-based biochemical problem-solving assessments.

5. What percentage of the course incorporates Flip Classroom teaching methods? Response: 0% flipped classroom methodology is applied, as the teaching primarily follows a lecturebased instructional format with practical demonstrations. 6. Are students provided with structured reading materials before class? Response: No structured reading materials are provided before lectures, and students rely solely on in-class explanations and practical demonstrations.

7. How engaged have students been in independent study and self-learning? Response: Minimal engagement in self-directed learning is observed due to lack of pre-class assignments or structured discussions.

8. Has the course contributed to the development of students' communication skills? Are there specific strategies to enhance this aspect?

Response: Limited focus on communication skill development, as the course does not incorporate student-led discussions, presentations, or case-based learning activities.

9. Are students provided with adequate reference books and learning resources? Response: Yes, students have access to standard clinical biochemistry textbooks, reference manuals, and biochemical databases. However, these resources are not actively integrated into structured assignments or guided learning activities.

10. Recommendations for improving course content, teaching methods, and evaluation:

- Provide structured reading materials to enhance pre-class preparation and engagement.
- Incorporate quizzes, case-based learning, and student-led discussions to improve understanding.
- Introduce digital learning tools for biochemical simulations and automated diagnostic techniques.
- Expand hands-on exposure to automation in biochemical diagnostics.

1.	Coordinator – Internal Academic	Audit Committee	
	Name: Sr. Prof. Sanjeev Ghadi	Signature:	aluer
2.	Member – Internal Academic Au	dit Committee/Pro	gramme Director-PGDCG&MLT
	Name: Dr. Shanti N. Dessai	Signature:	Bory
3.	Member – Internal Academic Au	dit Committee	
	Name: Ms. Dviti Mapari	Signature:	Dapon
4.	Member – Internal Academic Au	dit Committee	
	Name: Dr. Aditi Naik	Signature:	VOOMISE.

# APPENDIX I (INTERNAL ACADEMIC AUDIT COMMITTEE REPORT TEMPLATE)

Name of the School: School of Biological Sciences and Biotechnology Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT) Academic Year: 2023–24 Semester: II Credits: 5 Course: MLT-523 — Clinical Parasitology, Mycology, and Virology Name of Faculty Member Teaching the Course: Department of Microbiology, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, *Clinical Parasitology, Mycology, and Virology* aligns with the programme's objectives by providing students with a thorough understanding of pathogenic parasites, fungi, and viruses, their transmission, diagnosis, and clinical significance. This course ensures students develop expertise in infectious disease diagnostics and laboratory techniques.

2. Has the syllabus been structured effectively to achieve the course objectives? Response: Yes, the syllabus is well-structured and includes identification and classification of medically important parasites, fungi, and viruses; their pathogenicity; diagnostic techniques; and antimicrobial resistance patterns. The course also covers host-pathogen interactions and emerging infectious diseases.

3. Does the course provide sufficient hands-on training, or is it primarily theory-based? Response: The course includes a practical component (2 credits), allowing students to gain handson experience in microscopy-based parasite identification, fungal culture techniques, viral serology, molecular diagnostic methods (PCR), and antimicrobial susceptibility testing. However, limited access to advanced virology diagnostic tools is observed.

4. Do the evaluation methods effectively assess the course outcomes? Are key competencies adequately tested?

Response: Yes, evaluation includes semester-end theoretical examinations and laboratory practical assessments. However, continuous assessment strategies such as case-based learning, quizzes, and structured discussions are not integrated.

5. What percentage of the course incorporates Flip Classroom teaching methods? Response: 0% flipped classroom methodology is applied, as lectures follow a traditional lecturebased instructional format with laboratory demonstrations.

6. Are students provided with structured reading materials before class? Response: No structured reading materials are provided before lectures, and students rely entirely on in-class lectures and laboratory sessions for learning. 7. How engaged have students been in independent study and self-learning? Response: Minimal engagement in self-directed learning, as there are no structured pre-class reading assignments or discussion sessions.

8. Has the course contributed to the development of students' communication skills? Are there specific strategies to enhance this aspect?

Response: Limited development of communication skills, as the course does not incorporate student-led presentations, case-based discussions, or collaborative learning activities.

9. Are students provided with adequate reference books and learning resources? Response: Yes, students have access to standard parasitology, mycology, and virology textbooks, research journals, and laboratory manuals. However, these resources are not actively integrated into guided learning or structured assignments.

10. Recommendations for improving course content, teaching methods, and evaluation:

- Introduce structured reading materials to encourage pre-class preparation and engagement.
- Integrate case-based learning, quizzes, and student-led discussions to enhance learning outcomes.
- Adopt digital learning tools for microbial simulations and virology-based case studies.
- Enhance practical exposure by incorporating advanced molecular diagnostic techniques and automation.
- 1. Coordinator Internal Academic Audit Committee

Name: Sr. Prof. Sanjeev Ghadi

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2. Member – Internal Academic Audit Committee/Programme Director-PGDCG&MLT

Signature: \_

Name: Dr. Shanti N. Dessai

Signature: (DO)

3. Member – Internal Academic Audit Committee

Name: Ms. Dviti Mapari

Signature:	Dapari		

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4. Member – Internal Academic Audit Committee

Name: Dr. Aditi Naik

Signature: \_

#### **APPENDIX I (INTERNAL ACADEMIC AUDIT COMMITTEE REPORT TEMPLATE)**

Name of the School: School of Biological Sciences and Biotechnology Name of Programme: Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT) Academic Year: 2023–24 Semester: II Credits: 5 Course: MLT-524 — Hematology and Transfusion Medicine Name of Faculty Member Teaching the Course: Department of Pathology, GMC Contributory Teaching Staff

1. Are the Course Objectives in line with the Programme Objectives? Response: Yes, *Hematology and Transfusion Medicine* aligns well with the programme objectives by providing students with a comprehensive understanding of blood components, hematological disorders, transfusion protocols, and laboratory diagnostic techniques. The course ensures competency in clinical hematology and transfusion science applications.

2. Has the syllabus been structured effectively to achieve the course objectives? Response: Yes, the syllabus is well-designed to include hematopoiesis, blood cell morphology, coagulation disorders, blood banking, and transfusion reactions, equipping students with both theoretical knowledge and practical skills required for laboratory-based hematology diagnostics.

3. Does the course provide sufficient hands-on training, or is it primarily theory-based? Response: The course includes a practical component (2 credits), allowing students to gain handson experience in complete blood count (CBC) analysis, blood grouping, cross-matching, coagulation assays, and transfusion reaction monitoring. However, limited access to advanced automated hematology analyzers is observed.

4. Do the evaluation methods effectively assess the course outcomes? Are key competencies adequately tested?

Response: Yes, assessments include semester-end theoretical examinations and laboratory practical assessments. However, continuous assessment tools such as case-based studies, quizzes, and student-led presentations are not incorporated.

5. What percentage of the course incorporates Flip Classroom teaching methods? Response: 0% flipped classroom methodology is applied, as learning is conducted in a traditional lecture format with laboratory practical demonstrations.

6. Are students provided with structured reading materials before class? Response: No structured pre-class reading materials are provided, and learning is primarily lecturebased without pre-assigned materials. 7. How engaged have students been in independent study and self-learning? Response: Minimal engagement in self-directed learning, as there are no structured reading assignments or interactive discussion sessions.

8. Has the course contributed to the development of students' communication skills? Are there specific strategies to enhance this aspect?
 Response: Limited emphasis on communication skills, as the course lacks student presentations, case discussions, and interactive learning methods.

9. Are students provided with adequate reference books and learning resources? Response: Yes, students have access to standard hematology and transfusion medicine textbooks, laboratory manuals, and clinical guidelines. However, these resources are not actively integrated into structured learning activities.

10. Recommendations for improving course content, teaching methods, and evaluation:

- Introduce structured reading materials to encourage pre-class preparation and selflearning.
- Incorporate quizzes, case-based discussions, and student-led presentations for better comprehension and engagement.
- Adopt digital hematology tools for blood cell morphology analysis and transfusion case simulations.
- Enhance hands-on exposure to advanced automated hematology analyzers and transfusion medicine protocols.

1.	Coordinator – Internal Academic Au	udit Committee	d to
	Name: Sr. Prof. Sanjeev Ghadi	Signature:	alue-1
2.	Member – Internal Academic Audit	Committee/Pro	gramme Director-PGDCG&MLT
	Name: Dr. Shanti N. Dessai	Signature:	Ber
3.	Member – Internal Academic Audit	Committee	
	Name: Ms. Dviti Mapari	Signature:	Prapani
4.	Member – Internal Academic Audit		d
	Name: Dr. Aditi Naik	Signature:	VODIMA .

Course Title	Academic Year	Strengths Score	Weaknesses Score	Opportunities Score	Challenges Score
MLT-501: Clinical	2022-2023	10.3	5.7	11.3	7.8
Biochemistry I (Sem I)					
MLT-501: Clinical	2023-2024	10.3	5.7	11.3	7.8
Biochemistry I (Sem I)					
MLT-502: Clinical	2022-2023	10.3	5.7	11.3	7.8
Microbiology					
(General &					
Systematic) (Sem I)					
MLT-502: Clinical	2023-2024	10.3	5.7	11.3	7.8
Microbiology					
(General &					
Systematic) (Sem I)					
MLT-503: Clinical	2022-2023	10.3	5.7	11.3	7.8
Pathology & Histology					
(Sem I)					
MLT-503: Clinical	2023-2024	10.3	5.7	11.3	7.8
Pathology & Histology			CSP-0-CP-		ACVIENCE.
(Sem I)					
MLT-500: Clinical	2022-2023	13.1	5.7	11.3	7.8
Genetics I (Sem I)					0.1043196780
MLT-500: Clinical	2023-2024	13.1	5.7	11.3	7.8
Genetics I (Sem I)			(B) (C)		
MLT-521: Clinical	2022-2023	10.3	5.7	11.3	7.8
Genetics II (Sem II)					
MLT-521: Clinical	2023-2024	10.3	5.7	11.3	7.8
Genetics II (Sem II)					
MLT-522: Clinical	2022-2023	10.3	5.7	11.3	7.8
Biochemistry II (Sem					
II)					
MLT-522: Clinical	2023-2024	10.3	5.7	11.3	7.8
Biochemistry II (Sem					
II)					
MLT-523: Clinical	2022-2023	10.3	5.7	11.3	7.8
Parasitology,					
Mycology, and					
Virology (Sem II)					
MLT-523: Clinical	2023-2024	10.3	5.7	11.3	7.8
Parasitology,	and a second sec				
Mycology, and					
Virology (Sem II)					
MLT-524: Hematology	2022-2023	10.3	5.7	11.3	7.8
and Transfusion	<ul> <li>Construction and accounting and accounting of the second se Second second s</li></ul>				Invalues Accesso
Medicine					
(Sem II)					
MLT-524: Hematology	2023-2024	10.3	5.7	11.3	7.8
and Transfusion	- 100 A	10000000000	-2014年1月11日 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1075031878
Medicine					
(Sem II)					

# Combined SWOC Analysis – PGDCG & MLT Programme (2022–2023 & 2023–2024)

#### **Descriptive SWOC Analysis Report**

**Programme:** Post Graduate Diploma in Clinical Genetics & Medical Laboratory Techniques (PGDCG & MLT)

School: School of Biological Sciences and Biotechnology, Goa University

Academic Years: 2022–2023 and 2023–2024

Semesters: I and II

# S – Strengths

The programme consistently demonstrated strong alignment between course objectives and the broader programme learning outcomes across both years. Each course maintained a significant practical component (2 credits), ensuring hands-on exposure in areas like hematology, biochemistry, microbiology, molecular diagnostics, histopathology, and parasitology. Students are trained using classical methods (e.g., staining, microscopy, biochemical assays) and modern molecular techniques such as PCR and FISH. Notably, **MLT-500 (Clinical Genetics I)** received the highest Strengths Score (13.1) due to its strong integration of structured reading materials, case-based learning, and problem-solving components. The engagement of experienced contributory faculty from Goa Medical College (GMC) further enhances the clinical relevance and real-world applicability of course content.

#### W – Weaknesses

Despite theoretical and practical strengths, all courses lacked structured pre-class reading materials, flipped classroom practices, and interactive teaching tools like quizzes and student presentations. Across both years, a static lecture-based format dominated course delivery, limiting opportunities for student-led inquiry and communication skill development. Additionally, exposure to advanced diagnostics, automation, and informatics (e.g., flow cytometry, CRISPR, automated analyzers) was either limited or absent, especially in courses like Clinical Biochemistry and Hematology.

## **O** – Opportunities

The programme is well-positioned to benefit from:

- > Digital transformation (e-learning platforms, AI-based simulations, virtual labs)
- > Collaborations with diagnostic labs, genetic testing centres, and blood banks
- > Integration of emerging technologies such as NGS, CRISPR, and digital pathology
- Expansion of flipped classroom, continuous assessments, and clinical case-based teaching strategies

Structured learning modules with pre-readings, followed by application-based sessions, can enhance both academic depth and employability.

#### C – Challenges

Budgetary limitations remain a critical constraint, particularly in acquiring automated instrumentation and simulation tools. Faculty resistance to transitioning from traditional methods to more student-centric pedagogies poses an institutional challenge. Further, the absence of continuous assessments, real-time feedback mechanisms, and interdisciplinary linkages limit the full potential of outcome-based education.

# **Conclusion and Recommendations**

The PGDCG & MLT programme exhibits a strong foundational structure and relevance to clinical and diagnostic sciences. Its emphasis on practical training is commendable. However, instructional innovation, digital integration, and curriculum modernization are urgently needed.

# **Action Priorities:**

- Short-term: Introduce structured reading materials and quizzes, and implement discussionbased learning.
- Mid-term: Integrate digital simulations and expand flipped classroom adoption.
- Long-term: Establish partnerships with diagnostic/research labs and upgrade lab infrastructure with advanced tools.

Category	Factor	Weight	Rating	Weighted Score
		(0.1–1.0)	(1-5)	(W × R)
Strengths	Curriculum aligned with programme	0.8	5	4.0
	objectives and strong theoretical			
	foundation			
5	Robust practical components across all	0.8	5	4.0
	courses (clinical and diagnostic labs)			
	Experienced faculty from GMC with	0.7	4	2.8
	clinical insights			
	Initial integration of flipped classroom	0.6	4	2.4
	and role-play methods in Clinical			
	Genetics II			
Total Strength Score			5	13.2
Weaknesses	Lack of structured reading materials	0.6	4	2.4
	reducing student preparedness			
	Minimal use of flipped classroom and	0.6	3	1.8
	case-based learning			
	Limited exposure to automation,	0.6	3	1.8
	digital diagnostics, and bioinformatics			140(94,000)31
Total Weakness				6.0
Score				
Opportunities	Scope for digital learning tools, e-	0.9	5	4.5
	modules, and AI-based diagnostic			
	simulations			
	Potential collaborations with diagnostic	0.8	5	4.0
	labs, hospitals, and research centers			
	Curriculum upgrade potential to	0.7	4	2.8
	include NGS, CRISPR, and automation			
Total Opportunity				11.3
Score				
Challenges	Budget constraints for modern	0.8	4	3.2
	equipment and digital infrastructure			
	Resistance to adopting interactive and	0.7	4	2.8
	student-led pedagogies			
	Assessment restructuring needed to	0.6	3	1.8
	incorporate continuous and formative			
	tools			
Total Challenge				7.8
Score				

Detailed SWOC Analysis Scores for PGDCG & MLT Programme (2022–2024)

Summary of SWOC Scores

Strengths Score:	Weaknesses Score:	Opportunities
13.2	6.0	Score: 11.3

Challenges Score: 7.8

#### **Interpretation & Recommendations**

### 1. Strengths vs. Weaknesses → (+7.2 net positive impact)

The programme exhibits strong curriculum design and practical implementation. Faculty expertise and selected pedagogical innovations like role-play in genetics are commendable. However, the lack of structured self-learning support and automation in labs reduces learner independence and readiness.

## 2. Opportunities vs. Challenges → (+3.5 net external advantage)

Significant opportunities exist in digital innovation, industry tie-ups, and genomic upgrades. These can be leveraged despite budgetary constraints and initial resistance to pedagogical shifts by adopting phased and scalable improvements.

#### 3. Action Priorities:

**Short-term Fixes:** Introduce pre-class reading assignments, quizzes, and structured case-based learning activities across all courses.

**Mid-term Improvements:** Adopt digital diagnostic simulations, bioinformatics tools, and enhance flipped classroom strategies.

**Long-term Strategy:** Strengthen partnerships with clinical and diagnostic institutions, upgrade lab facilities, and restructure assessments for continuous evaluation.

1. Coordinator – Internal Academic Audit Committee

Name: Sr. Prof. Sanjeev Ghadi Signature: \_\_\_\_



2. Member – Internal Academic Audit Committee

Name: Dr. Shanti N. Dessai

Signature: \_\_\_\_\_

3. Member – Internal Academic Audit Committee

Name: Ms. Dviti Mapari

bolopani Signature: \_\_\_\_\_

4. Member – Internal Academic Audit Committee Name: Dr. Aditi Naik Signature: \_\_\_\_\_\_

## **SWOC Score Calculation**

### 1. Weight (W): Importance of the Factor

**Definition:** Weight represents the **relative importance or significance** of a particular factor (within Strengths, Weaknesses, Opportunities, or Challenges) in the context of the course or programme.

Scale: The value of W ranges from 0.1 to 1.0, where:

0.1 indicates a factor of very low importance

1.0 indicates a factor of critical importance

**Purpose:** It ensures that more important aspects (e.g., curriculum alignment, practical training) have a greater influence on the total score than less significant ones.

## 2. Rating (R): Level of Performance

**Definition:** Rating refers to the **actual performance or effectiveness** of the course with respect to that factor.

Scale: The value of R ranges from 1 to 5, where: 1 = Very Poor; 2 = Poor; 3 = Average; 4 = Good; 5 = Excellent

Purpose: It evaluates how well the course/programme addresses or performs in that specific area.

## **Combined Use in SWOC**

#### Weighted Score = Weight × Rating (W × R)

This formula gives a balanced measure of both **importance** and **performance** for each factor, and contributes to the total score under each SWOC dimension.

#### Interpreting Weighted Score (W × R) Values

Weighted Score Range	Interpretation	Implication
0.1 - 1.0	Low Importance or Poor Performance	Either the factor is minor in importance or very poorly addressed
1.1 – 2.5	Moderate Importance or Average Performance	Factor is relevant but may not be a key contributor; needs some improvement
2.6 – 3.5	High Importance and Good Performance	Factor is important and well-implemented; continue strengthening this area
3.6 – 5.0	Critical Importance and Excellent Performance	Strong feature or opportunity; a strategic asset for the course/programme

## Examples

W = 0.9, R = 5  $\rightarrow$  Score = 4.5. This is a highly important factor very well implemented (e.g., curriculum alignment).

W = 0.7, R = 2  $\rightarrow$  Score = 1.4. Important area but underperforming (e.g., case-based learning not yet adopted).

W = 0.3, R = 5  $\rightarrow$  Score = 1.5. Excellent performance in a less critical area (e.g., minor administrative detail).

## Use in Audit

Higher scores (closer to 5.0) signal strengths or valuable opportunities.

Lower scores (below 2.5) signal weaknesses or challenges that need attention.

Comparing scores helps in **prioritizing action plans**, allocating resources, and focusing improvement efforts.

# SWOC Score Calculation for MLT-501: Clinical Biochemistry I (Sem I) Academic Year: 2022–2023

## **Strengths Score Calculation**

Factor	Weight (W)	Rating (R)	W × R
Strong theoretical and practical foundation	0.8	5	4.0
Hands-on training in enzyme kinetics toxicology, endocrinology	0.7	5	3.5
Relevance to clinical diagnostics	0.7	4	2.8
			Total: 10.3

## Weaknesses Score Calculation

Factor	Weight (W)	Rating (R)	W×R
Lack of structured reading materials	0.6	4	2.4
Absence of case-based learning/quizzes	0.6	3	1.8
Minimal automation and digital tool integration	0.5	3	1.5
			Total: 5.7

# **Opportunities Score Calculation**

Factor	Weight (W)	Rating (R)	W×R
Digital learning tools for biochemical simulations	0.9	5	4.5
Collaborations with diagnostic labs for automation exposure	0.8	5	4.0
Integration of flipped classroom strategies	0.7	4	2.8
			Total: 11.3

# **Challenges Score Calculation**

Factor	Weight (W)	Rating (R)	W×R
Budget limitations for procuring advanced equipment	0.8	4	3.2
Resistance to interactive, student-led methods	0.7	4	2.8
Lack of continuous assessment and problem- solving modules	0.6	3	1.8
			Total: 7.8

## Maximum Possible Score

Category	Typical No. of Factors	Max Score per Factor (W × R)	Theoretical Maximum Score
Strengths	4	1.0 × 5 = 5.0	4 × 5 = <b>20.0</b>
Weaknesses	3	1.0 × 5 = 5.0	3 × 5 = <b>15.0</b>
Opportunities	3	1.0 × 5 = 5.0	3 × 5 = <b>15.0</b>
Challenges	3	1.0 × 5 = 5.0	3 × 5 = <b>15.0</b>

Note: if factors increase then maximum scores will also increase.

#### SWOC Score Calculation for MLT-500: Clinical Genetics I (Sem I) Academic Year: 2022–2023

# **Strengths Score Calculation**

Factor	Weight (W)	Rating (R)	W×R
Comprehensive theoretical and practical coverage of clinical genetics	0.8	5	4.0
Structured reading materials enhance student preparedness and engagement	0.7	5	3.5
Integration of problem-based learning, case studies, and discussions	0.7	4	2.8
Hands-on training in molecular genetic diagnostic techniques (e.g., PCR, FISH)	0.7 4	4	2.8
			Total: 13.1

## Weaknesses Score Calculation

Factor	Weight (W)	Rating (R)	W×R
Limited exposure to next-generation sequencing (NGS) and genome editing tools	0.6	4	2.4
Flipped classroom methodology is only 15%, with potential for further growth	0.6	3	1.8
Assessment methods lack continuous evaluation and genetic data interpretation	0.5 3		1.5
			Total: 5.7

# **Opportunities Score Calculation**

Factor	Weight (W)	Rating (R)	W×R
Adoption of digital learning tools for genetic case simulations	0.9	5	4.5
Collaboration with clinical genetics labs for diagnostic skill enhancement	0.8	5	4.0
Integration of AI-based variant interpretation and bioinformatics tools	nd 0.7 4	4	2.8
		2	Total: 11.3

# **Challenges Score Calculation**

Factor	Weight (W)	Rating (R)	W×R
Budget limitations for procuring advanced sequencing/genetic tools	0.8	4	3.2
Resistance to expanding student-led learning and flipped classrooms	0.7	4	2.8
Need for restructuring evaluation methods to include applied assessments	0.6	3	1.8
			Total: 7.8

# Goa University School of Physical and Applied Sciences Internal Academic Audit Consolidated Report: B.Voc

The Internal Academic Audit of B.Voc programme at School of Physical and Applied Sciences, Goa University for the AY-2022-2023 & AY-2023-2024 was conducted on 5.2.2025 from 11.30AM onward.

The Purpose of the Audit is to provide the opportunity for a regular strategic overview of the entirety of a Programme Teaching and Learning activity. The Self Evaluation Document of the Department was presented to the Internal Committee Experts.

This report consolidates the findings of the Internal Experts and put forth the suggestions and SWOC analysis

Overall assessment:

1. Course is Skilled based and Industry oriented, which can lead to startup by individual.

2. Fewer higher education opportunities

3. Invite experts from industry for interaction through lectures.

4. Managing course with less number of faculties

Suggestions: For some of the courses alternate evaluation methods can be used.

Different pedagogical may be used to simplify the course content.

Internal Academic Audit Committee Members

Prof. Jivan S. Parab, Coordinator Vice-Dean (Academic), SPAS

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Dr. Reshma Raut Dessai Assistant Professor of Physics, SPAS

Df. Marlon Sequeira Programme Director of B.Voc, SPAS

Dr. Mridini Gawas Assistant Professor of Mathematics, SPAS

#### Goa University School of Physical and Applied Sciences Internal Academic Audit Consolidated Report: M. Sc. Electronics

The Internal Academic Audit of M.Sc Electronics program at School of Physical and Applied Sciences, Goa University for the AY-2022-2023 & AY-2023-2024 was conducted on 5.2.2025 from 2.30PM onward. The Purpose of the Audit is to provide the opportunity for a regular strategic overview of the entirety of a Programme Teaching and Learning activity. The Self Evaluation Document of the Programme was presented to the Internal Audit Committee members.

This report consolidates the findings of the Internal Audit Committee members and put forth the suggestions and SWOC analysis

Overall assessment:

A. Strength:

- **Theoretical & Practical Knowledge:** The program curriculum includes a balance of theory and practicals in electronics, embedded systems, and communication technologies.
- Research & Development Opportunities: Encourages innovation through research projects, seminars, and dissertations in emerging fields like IoT, VLSI, and robotics.
- Qualified Faculty: Experienced faculty members with expertise in Multivariate Signals & Systems, Computer Networks, Embedded System Instrumentation, Fiber optic sensors etc.
- Job & Higher Education Prospects: Graduates can pursue careers in academia, research, as well as semiconductor manufacturing, VLSI systems, and automation industries and startups.

B. Weaknesses:

- Limited Industry Support: Some of the courses lack industry tie-ups, leading to fewer job placements.
- Low Enrollment Rates: Interest in core electronics is seen to be lower compared to Engineering and Computer Science, leading to fewer applicants.

C. Opportunities:

- **Industry Collaboration:** Collaboration with local industries for internships, research projects, can be targeted.
- **Growing Electronics Industry:** Implement practical component in courses like embedded systems, IoT, etc to provide skilled graduates in this field.
- Interdisciplinary Integration: Collaboration with AI, image processing and data science to enhance career prospects for the students.

#### D. Challenges:

• Competition with IT & Computer Science: It is challenging to attract students in core Electronics program compared to Engineering and Computer Science.

**Internal Academic Audit Committee Members** 

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Prof. Jivan S. Parab, Coordinator Vice-Dean (Academic), SPAS SPAS

Dr. ElaineT. Dias Assistant Professor of Physics, SPAS

Dr. Narayan Vetrekar Programme Director of Electronics,

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Dr. Bhargav K. Alavani Assistant Professor of Physics, SPAS

## Goa University School of Physical and Applied Sciences Internal Academic Audit Consolidated Report: M. Sc. Mathematics

The Internal Academic Audit of M.Sc Mathematics programme at the School of Physical and Applied Sciences, Goa University for the AY-2022-2023 & AY-2023-2024 was conducted on 11.02.2025 from 2.30 PM onward. It was aimed at an overview of the teaching and learning activities towards achieving the desired results from the programme. The Self Evaluation Document of the Programme was presented to the Internal Audit Committee members.

This report consolidates the findings of the Internal Audit Committee members and put forth the suggestions and SWOC analysis.

## A. Strengths:

- Good and updated syllabus providing strong foundations for both pure and applied Mathematics components
- · Dedicated and qualified faculty with diverse expertise
- NBHM supported library

## B. Weaknesses:

- · Less representation of major branches of Mathematics in faculty specialization
- Unfilled posts in Mathematics

## C. Opportunities:

- · Possibility of interdisciplinary courses and research
- · Developing more collaborative research/industry projects

#### D. Challenges:

- Maintaining student enrollment
- Motivating students for self-study

Internal Academic Audit Committee Members

Prof. Jivan S. Parab, Coordinator Vice-Dean (Academic), SPAS

Dr. Sudhir Cherukulappurath Assistant Professor of Physis, SPAS

Dr. M.Kunhanandan Programme Director of Mathematics,SPAS

Dr. Rajeshkumar Hyam Assistant Professor of Physiscs, SPAS

# Goa University School of Physical and Applied Sciences Internal Academic Audit Consolidated Report: M. Sc. Physics

The Internal Academic Audit of M.Sc Physics programme at the School of Physical and Applied Sciences, Goa University for the AY-2022-2023 & AY-2023-2024 was conducted on 11.02.2025 from 4.00 PM onward. It was aimed at an overview of the teaching and learning activities towards achieving the desired results from the programme. The Self Evaluation Document of the Programme was presented to the Internal Audit Committee members.

This report consolidates the findings of the Internal Audit Committee members and put forth the suggestions and SWOC analysis.

A. Strength:

- Coverage of major three specializations in physics (Solid state physics, Computational physics and Biophysics)
- · Good blend of theory and practical courses
- Availability of good research facilities
- · Qualified faculties with diverse expertise
- National and international collaborations
- Elective papers on recent research trends

B. Weaknesses:

- Vacant posts in Computational physics and Bio physics specializations
- · Reducing student enrolments

C. Opportunities:

- · Integration of practical components in advanced elective courses
- Possibility of interdisciplinary courses and research
- D. Challenges:
  - · Motivating students for self-study
  - Attracting good students

Internal Academic Audit Committee Members

Prof. Jivan S. Parab, Coordinator Vice-Dean (Academic), SPAS

Dr. Jessica Fernandes e Pereira Assistant Professor of Mathematics, SPAS

Dr. Venkatesha Hathwar Programme Director of Physics, SPAS

Dr. Mridini Gawas Assistant Professor of Mathematics, SPAS

Internal Academic Audit of Master of Commerce (M.Com) Programme of Goa Business School was conducted on 11<sup>th</sup> February, 2025, 11.30 am in Room No GF-9 of GBS. The following committee members were present for conducting the audit:

- 1. Prof Nilesh Borde
- 2. Dr Nirmala Rajanala
- 3. Dr Albino Thomson

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets

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Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director

Mémber (Dr Albino R. Thomson)

Member (Dr Nirmala Rajanala)

Vice - Dean (Academic)

(Nilesh Borde)

Internal Academic Audit of M.A Economics Programme of Goa Business School was conducted on 12/02/2025 at Room No FF-9 of GBS. The following committee members were present for conducting the audit:

- 1. Prof K. B. Subhash
- 2. Dr Rajanala Nirmala
- 3. Ms. Heena Gaude

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets
- Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director (Ms Heena Gaude)

Sulhar

Member (Dr Rajanala Nirmala)

Member (Prof K. B. Subhash)

Vice – Dean (Academic) (Nilesh Borde)

Internal Academic Audit of MBA Executive Programme of Goa Business School was conducted on 13/02/2025 at Room No FF41 of GBS. The following committee members were present for conducting the audit:

- 1. Prof Nilesh Borde
- 2. Prof Jyoti Pawar
- 3. Ms Teja Khandolkar

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets
- Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director (Dr Narayan Parab)

Member (Prof Jyoti Pawar)

Member (Ms Teja Khandolkar)

Vice - Dean (Academic) (Nilesh Borde)

Internal Academic Audit of M.Sc AI Programme of Goa Business School was conducted on 11/02/2025 at Room No F4 of GBS. The following committee members were present for conducting the audit:

- 1. Prof Anjana Raju
- 2. Dr Harip Khanapuri
- 3. Mr S. Baskar

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets
- Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director (Mr S. Baskar)

Member (Dr Anjana Raju)

Member (Dr Harip Khanapuri)

Vice - Dean (Academic) (Nilesh Borde)

Internal Academic Audit of MCA Programme of Goa Business School was conducted on 13/02/2025 at Room No CS Lab of GBS. The following committee members were present for conducting the audit:

- 1. Prof Nilesh Borde
- 2. Dr Sanjeeta Parab
- 3. Mr Sadanand Gaonkar

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets
- Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director (Mr Ramrao Wagh)

Member (Dr Sanjeeta Parab)

Member (Mr Sadanand Gaonkar)

Vice - Dean (Academic) (Nilesh Borde)

Internal Academic Audit of MBA (Financial Services) Programme of Goa Business School was conducted on 11/02/2025 at Room No GF-5 of GBS. The following committee members were present for conducting the audit:

- 1. Prof K. G. Sankaranarayanan
- 2. Mr Ramdas Karmali
- 3. Dr Prachi P. Kolamker

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets
- Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director

(Dr Prachi P. Kolamker)

Member

Member (Mr Ramdas Karmali)

(Prof K. G. Sankaranarayanan )

Vice – Dean (Academic) (Nilesh Borde)

Internal Academic Audit of MBA Programme of Goa Business School was conducted on 13/02/2025 at Room No GF-9 of GBS. The following committee members were present for conducting the audit:

- 1. Prof B. P. Sarath Chandran
- 2. Mr Rohan Parab
- 3. Dr Suraj Velip (PD, MBA)

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets
- Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director (Dr Suraj Velip)

Member (Prof B. P. Sarath Chandran )

Member (Mr Rohan Parab)

Vice - Dean (Academic)

(Nilesh Borde)

Internal Academic Audit of Library and Information Science Programme of Goa Business School was conducted on 12/02/2025 at Library and Information Science Programme of GBS. The following committee members were present for conducting the audit:

- 1. Dr Jyoti Pawar
- 2. Ms Teja Khandolkar
- 3.

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets
- Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director (Dr Milind Mhamal)

Member (Prof Jyoti Pawar)

Lolkas

Member (Ms Teja Khandolkar)

Vice – Dean (Academic) (Nilesh Borde)

#### School of Biological Sciences and Biotechnology, Goa University Date: 11/02/2025 at 11 a.m. onwards Venue: Botany Discipline, SBSB

### Internal Academic Audit Report of Botany Discipline

Coordinator: Prof. Sanjeev C. Ghadi, Vice-Dean (Academic), Senior Professor in Biotechnology, SBSB, Goa University.

Program Director: Dr. Rupali Bhandari, Assistant Professor, Botany Discipline, SBSB, Goa University.

#### **Internal Auditors:**

Dr. Bhakti Salgaonkar, Assistant Professor in Microbiology, SBSB, Goa University.
 Dr. Avelyno D'Costa, Assistant Professor in Zoology, SBSB, Goa University.

The Internal Academic Audit for the Botany Discipline for the academic year 2022-2023 and 2023-2024 was held on 11/02/2025 at 10: 30 am at Botany Discipline, SBSB. The meeting was chaired by Prof. Sanjeev Ghadi, Vice-Dean (Academic), SBSB and Senior Professor in Biotechnology. The internal audit committee faculty members Dr. Bhakti Salgaonkar, Assistant Professor in Microbiology, Dr. Avelyno D'Costa, Assistant Professor in Zoology, and Programme Director of Botany discipline Dr. Rupali Bhandari were present for the audit.

The primary objectives of the audit were to assess the academic progress and performance of the department, to evaluate the effectiveness of teaching-learning processes and to ensure adherence to curriculum standards and accreditation guidelines.

The audit panel members led by Prof. Sanjeev Ghadi conducted a thorough review of documents and an assessment of teaching methodologies such as course curriculum, syllabus updates, student performances, mark sheets, teaching schedule, question papers (ISA and SEA), attendance, dissertations, swayam course certificates and other extension activities. The key observations included well-structured curriculum aligned with educational standards, effective student mentoring and academic support. Also it was pointed out that in academic year 2022 - 2023, M. Sc. Part I students had 80 credits (NEP based) and part II students had 64 credits. In academic year 2023- 2024, both part I and part II had 80 credits (NEP) system.

Based on the internal audit, the following recommendations were made:

- Course objectives (COs) should be in line with the programme specific outcomes (PSOs) according to the blooms taxonomy.
- Improve assessment methods for better learning outcomes.
- ISA time table should be prepared and implemented by the faculty members.
- Proper marks split up for some of the courses should be done.
- Some of the missing details on the attendance sheets should be filled by the faculty members.
- SEA assessment in Dr. Aditi Naik's Lab in Ecotourism paper is in the form of poster.

After the internal audit, Annexure I was discussed. It was decided that all faculty members would complete the soft copies of the annexure and submit them to the internal auditors for review and signatures.

The syllabus for both, the old 64-credit curriculum and the new NEP-based 80-credit curriculum was also reviewed. The following decisions were made against each query in the Annexure I form:

- Are the Course Objectives in line with the Programme Objectives? Response: Yes. Course Objectives are in line with the Programme Objectives.
- Has the syllabus been handled so that it achieves/improves on the course objective? Response: All courses, including SWAYAM courses, were reviewed, and it was found that the syllabus had been effectively covered.
- 3. Has the course incorporated enough practical components in terms of skill development? Response: This was subject to individual papers as few papers have their corresponding practical component, while few are entirely theory-based.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated? Response: It was concluded that the evaluation methods have incorporated the evaluation of most course outcomes.

- 5. What percentage of the classes have used Flip Classroom pedagogy methods? Response: It was noted that Flip classroom is not entirely incorporated in the system, however it was recommended to incorporate some percentage of flip classroom pedagogy method for each course.
- 6. Has any prior reading material been given to the participants for learning engagement? Response: The faculty agreed that enough material is being provided to the students in addition to the initially briefing of the course.
- What has been the level of participants' (Students) engagement in the course through prior reading? Response: It was concluded that the level of participation of the students was moderate for all courses.
- 8. What has been the level of communication enhancement in the participants through the Course? Do faculty members use any specific methods to improve the participants' communication?

Response: The faculties informed the committee that most of the course incorporated multiple class discussions and seminar presentations to enhance student engagement.

 Are enough books and reference materials available to the course participants? Response: The internal auditors were informed that the discipline has an in-house library for M.Sc. students, where they can issue books and access reference materials as needed.  Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member.
 Response: This provement of the course content/handling/evaluation methods by the

Response: This response shall be tailored as per individual course.

11. SWOC Analysis within the Discipline / Programme:

Response: It was decided since this a program-related query, the response can be consistent throughout all the annexures submitted. The following were discussed:

- Strength: Excellent subject knowledge and classroom management skills. Experienced and highly qualified faculty members, Well-structured curriculum aligned with industry and research needs. Active participation in conferences, workshops, and collaborative projects.
- Weaknesses: Limited access to advanced tools, experimental facilities and highperformance computational resources. Inadequate industry exposure or internships for students. Limited alumni engagement and networking opportunities.
- Opportunities: New Curriculum development and exploring new emerging educational technologies and skills. Collaboration with other disciplines for interdisciplinary teaching and research.
- Challenges: Rapid advancements in technology requiring continuous curriculum updates and adapting to changing curriculum standards. Competition from other national and international institutions. Ensuring accessibility and affordability for all students. Maintaining research excellence while balancing teaching responsibilities.

The audit concluded with a discussion on the implementation of recommendations and the department was appreciated for its efforts in maintaining all the documents. The meeting ended with thanks to the chair, acknowledging the contributions of all participants.

Dr. Rupali Bhandari, Programme Director, Botany discipline

Dr. Bhakti Salgaonkar, Internal auditor

Dr. Avelýno D'Costa, Internal auditor

Prof. Sanjeev Ghadi, Coordinator of Internal audit & Vice-Dean (Academic), SBSB

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#### Minutes of the Internal Academic Audit Botany Discipline, School of Biological Sciences and Biotechnology, Goa University Date: 11/02/2025 Venue: Botany Discipline, SBSB

The Internal Academic Audit for the Botany Discipline for the academic year 2022-2023 and 2023-2024 was held on 11/02/2025 at 10: 30 am at Botany Discipline, SBSB. The meeting was chaired by Prof. Sanjeev Ghadi, Vice-Dean (Academic), SBSB and Senior Professor in Biotechnology. The internal audit committee faculty members Dr. Bhakti Salgaonkar, Assistant Professor in Microbiology, Dr. Avelyno D'Costa, Assistant Professor in Zoology, and Programme Director of Botany discipline Dr. Rupali Bhandari were present for the audit.

The primary objectives of the audit were to assess the academic progress and performance of the department, to evaluate the effectiveness of teaching-learning processes and to ensure adherence to curriculum standards and accreditation guidelines.

The audit panel members led by Prof. Sanjeev Ghadi conducted a thorough review of documents and an assessment of teaching methodologies such as course curriculum, syllabus updates, student performances, mark sheets, teaching schedule, question papers (ISA and SEA), attendance, dissertations, swayam course certificates and other extension activities. The key observations included well-structured curriculum aligned with educational standards, effective student mentoring and academic support. Also it was pointed out that in academic year 2022 - 2023, M. Sc. Part I students had 80 credits (NEP based) and part II students had 64 credits. In academic year 2023- 2024, both part I and part II had 80 credits (NEP) system.

Based on the audit, the following recommendations were made:

- Course objectives (COs) should be in line with the programme specific outcomes (PSOs) according to the blooms taxonomy.
- Improve assessment methods for better learning outcomes.
- ISA time table should be prepared and implemented by the faculty members.
- · Proper marks split up for some of the courses should be done.
- Some of the missing details on the attendance sheets should be filled by the faculty members.
- SEA assessment in Dr. Aditi Naik's Lab in Ecotourism paper is in the form of poster.

The audit concluded with a discussion on the implementation of recommendations and the department was appreciated for its efforts in maintaining all the documents.

The meeting ended with a vote of thanks to the chair, acknowledging the contributions of all participants.

Minutes prepared by Dr. Rupali Bhandari, Programme Director, Botany Discipline, SBSB

Prof. Sanjeev Ghadi Name & Signature of the Coordinator of Internal audit Committee

### GOA UNIVERSITY SCHOOL OF BIOLOGICAL SCIENCES AND BIOTECHNOLOGY BIOTECHNOLOGY DISCIPLE

### MINUTES OF THE INTERNAL AUDIT - M.Sc. BIOTECHNOLOGY HELD ON 13/02/2025 at 2.30 p.m. to 4.00 p.m.

### Coordinator of Internal Audit Committee:

Prof. Sanjeev C. Ghadi, Vice-Dean (Academics), SBSB, Goa University.

#### Program Director (M.Sc. Biotechnology):

Dr. Meghanath Prabhu, Assistant Professor, Biotechnology Discipline, SBSB, Goa University.

#### **Internal Auditors:**

- 1. Dr. Nitin Sawant, Assistant Professor, Zoology Discipline, SBSB, Goa University.
- 2. Dr. Milind Naik, Assistant Professor, Zoology Discipline, SBSB, Goa University.

#### Other Faculty Members Present:

- 1. Dr. Dhermendra Tiwari
- 2. Dr. Sanika Samant
- 3. Dr. Meghanath Prabhu
- 4. Ms. Dviti Volvoikar
- 5. Ms. Snesha Umesh Bhomkar
- 6. Dr. Vikash Kumar Yadav
- 7. Dr. Samantha Fernandes D'mello

#### Proceedings:

The coordinator, Professor Sanjeev C. Ghadi, extended a formal welcome to the internal auditors, Dr. Nitin Sawant and Dr. Milind Naik.

The audit panel members led by Prof. Sanjeev Ghadi conducted a thorough review of documents and an assessment of teaching methodologies such as course curriculum, syllabus updates, student performances, teaching schedule, question papers (ISA and SEA), attendance, dissertations, internship and field trip reports.

During the review of the documents, the internal auditors provided the following recommendations and observations:

#### **Question** papers

 A uniform format should be maintained across all question papers, ensuring consistency in font size, font style, and essential details, including the school and program name, course code, paper title, theory/practical designation, semester, month and year, date, duration, and maximum marks.

- For objective question such as multiple-choice questions, it should be noted that the options provided have uniform numbering (e.g. A, B, C, D or i, ii, iii, iv).
- In case of question-cum-answer booklets, a proper provision has to be made for the student to write their seat numbers.
- It was suggested that copies of all SEA question papers (both theory and practical) should be filed separately. The faculty member teaching each course must sign the respective paper for record-keeping purposes.
- It was suggested that the question paper pattern should align with Bloom's Taxonomy, emphasizing the use of appropriate keywords when framing questions.

#### Answer booklet

- It was informed that all student details on answer sheets must be fully completed, including the seat number (in figures and words), paper code and title, date of examination, examination centre, number of supplements issued and any other required details.
- It was also emphasised that the supervisor's details should be duly filled wherever required on the answer booklet.
- For the SEA examination, the marking section of the main answer booklet must be properly completed, with marks assigned according to the respective question numbers. The total marks obtained should be clearly recorded alongside the maximum marks for the paper, for both ISA as well as SEA examinations.
- For ISAs being evaluated as assignments, the hardcopies should be maintained for records, with examiners signature of the respective faculty.
- It was recommended that all students should sign the answer sheets post-evaluation as a confirmation of review.

### Examination attendance sheet

- All required details should be carefully filled in the attendance form.
- The supervisor should thoroughly check for the duplication of student signatures if any.
- The total number of students present for the exam should be clearly stated.
- The supervisor must sign the attendance sheet after verifying the presence of students for the exam.
- Any unfilled section should be struck off.

### Field trip reports/ internship reports/ dissertation thesis

- Internship reports, field trip reports, and dissertation theses should follow a uniform certificate format. All faculty members must review and sign them as "examined." If a stamp/seal is required (Dean/School stamp), it must be properly applied.
- It was also recommended to ensure that the University logo being included in the report should be of the correct aspect ratio.

### Miscellaneous

- It was suggested to verify that the documents being filed are correct and arranged in the proper sequence and orientation.
- As some courses are shared between the M.Sc. Biotechnology and M.Sc. Marine Biotechnology programs, it has been advised to ensure that the exam papers for each program are packed in separate envelopes.
- The envelopes containing the answer booklets should be well labelled and properly sealed.
- Some of the missing details on the attendance sheets should be filled by the faculty members.

The audit concluded with the Chairperson, Prof. Ghadi, extending his gratitude to the auditors for their time and valuable recommendations.

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Minutes prepared by Dr. Meghanath Prabhu, Programme Director, Biotechnology Discipline, SBSB

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Dr. Nitin Sawant, Assistant Professor, Zoology Discipline, SBSB, Goa University. (Member, Internal Audit Committee)

Dr. Milind Naik, Assistant Professor, , Zoology Discipline, SBSB, Goa University. (Member, Internal Audit Committee)

Prof. Sanjeev Ghadi Name & Signature of the Coordinator of Internal audit Committee

### Appendix I

Name of the School: School of Biological Sciences and Biotechnology

Name of Programme: M.Sc. Biotechnology

Academic Year: 2022-23, and 2023-24

The syllabus for both, the old 64-credit curriculum and the new NEP-based 80-credit curriculum was also reviewed. The following decisions were made against each query in the appendix I form:

1. Are the Course Objectives in line with the Programme Objectives?

Response: Prof. Ghadi discussed the course objectives and program objectives of both, the foundational courses and the Biotechnology courses and it was concluded, that the COs and in line with the POs.

2. Has the syllabus been handled so that it achieves/improves on the course objectives?

Response: All courses, including SWAYAM courses, were reviewed, and it was found that the syllabus had been effectively covered.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: This was subject to individual papers as few papers have their corresponding practical component, while few are entirely theory-based.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: The evaluation methods have incorporated the evaluation of most course outcomes.

5. What percentage of the classes have used Flip Classroom pedagogy methods?

Response: Flip classroom is not entirely incorporated in the system, except for some courses where field component was demonstrated. However, it was recommended to incorporate some percentage of flip classroom pedagogy method for each course.

6. Has any prior reading material been given to the participants for learning engagement?

**Response:** Enough material is being provided to the students in addition to the initially briefing of the course. Additionally, list of books, pertaining to each paper, is available in the syllabus and students are informed to refer these books available in the library

. What has been the level of participants' (Students) engagement in the course through prior reading?

Response: The level of participation of the students was moderate for all courses.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication?

Response: Most of the course incorporated multiple class discussions and seminar presentations to enhance student engagement.

9. Are enough books and reference materials available to the course participants?

Response: The discipline has an in-house library for M.Sc. Biotechnology students, where they can issue books and access reference materials as and when needed.

 Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member.

Response: This response shall be tailored as per individual course.

11. SWOC Analysis within the Discipline / Programme:

Response: It was decided since this a program-related query, the response can be consistent throughout all the annexures submitted. The following were discussed:

- A. Strength:
- Admission of students through the GUART.
- Collaboration with various institutes of National importance like NIO (Goa Headquarters), NCPOR, BITS Pilani Goa campus and others.
- Strong Alumni network of M.Sc. Biotechnology students including entrepreneurs and mentors for start-ups.
- Curriculum offering internship opportunities.
- · Student placements, with graduates pursuing PhDs and qualifying competitive
- · Field-based learning through field trips,, enhancing practical knowledge.
- Hands-on exploration opportunities.

#### B. Weaknesses:

- Improvement in student strength.
- The lack of sufficient laboratory space for establishing dedicated lab facilities, including an animal tissue culture lab.

### C. **Opportunities:**

- The program offers opportunities for the inclusion of courses that support the sustainable development, while also fostering startups through the Goa University Research Park Unit (GURU).
- Students from various disciplines are eligible to take admission in M.Sc. Biotechnology, hence, there is a scope to build awareness of this among students of various disciplines in local colleges.
- Additionally, there is scope to encourage local students to prepare for and clear the GAT-B
- · examination, enhancing their access to the program.

### D. Challenges:

- Ensuring full enrolment.
- Motivating students to appear for competitive exams.

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Dean of School of Biological Sciences & Biotechnology Goe University, Goa-403206

#### GOA UNIVERSITY SCHOOL OF BIOLOGICAL SCIENCES AND BIOTECHNOLOGY BIOTECHNOLOGY DISCIPLE

### INTERNAL AUDIT - M.Sc. MARINE BIOTECHNOLOGY

DATE: 06 February 2025 TIME: 11:30 a.m. to 1:30 p.m.

#### Coordinator:

Prof. Sanjeev C. Ghadi, Vice-Dean (Academics), SBSB, Program Director, M.Sc. Marine Biotechnology, Goa University.

Appointed Program Director (M.Sc. Marine Biotechnology): Dr. Sanika Samant, Assistant Professor, Biotechnology Discipline, SBSB, Goa University.

#### Internal Auditors:

- 1. Dr. Shamshad Shaikh, Assistant Professor, Zoology Discipline, SBSB, Goa University.
- 2. Ms. Gandhita Kundaikar, Assistant Professor, Zoology Discipline, SBSB, Goa University.

Faculty Members Present:

- 1. Prof. Sanjeev C. Ghadi
- 2. Dr. Dhermendra Tiwari
- 3. Dr. Sanika Samant
- 4. Dr. Meghanath Prabhu
- 5. Ms. Dviti Volvoikar
- 6. Ms. Snesha Umesh Bhomkar
- 7. Dr. Vikash Kumar Yadav
- 8. Dr. Samantha Fernandes D'mello

### Proceedings:

The coordinator, Professor Sanjeev C. Ghadi, extended a formal welcome to the internal auditors, Dr. Shamshad Shaikh and Ms. Gandhita Kundaikar. He provided a concise overview of the internal audit protocol to be followed. Professor Ghadi clarified that, as per the Memorandum of Understanding (MoU), with the Department of Biotechnology (DBT), Government of India, he serves as the Coordinator, for the M.Sc. Marine Biotechnology Program. However, for the purpose of the audit, Dr. Sanika Samant is being designated as the Program Director In charge to oversee proceedings in his capacity as the Program Director for the day.

Professor Ghadi proceeded to brief the auditors on key aspects of the M.Sc. Marine Biotechnology program, including its eligibility criteria, which primarily requires Graduate Aptitude Test -Biotechnology (GAT-B) qualification, the student intake capacity, and the funding support received from the Department of Biotechnology (DBT). He informed that in the Academic year 2022-23, the second year comprised of 22 students who followed the old curriculum of 64 credits, while the fresh intake of 15 students followed the new National Education Policy (NEP) based curriculum of 80 credits. Similarly in the Academic year 2023-24, the fresh intake was of 16 students.

He further outlined the sequence of audit proceedings, which included:

- Examination of all SEA and ISA papers
- · Review of internship/field trip and dissertation reports
- · Discussion on Annexure I, to be completed by individual faculty members.

During the review of the documents, the internal auditors provided the following recommendations and observations:

- All ISA and SEA question papers should be compiled in a single file, with ISA papers placed immediately after the corresponding SEA paper for each course.
- Practical question papers should be filed separately.
- A uniform format should be maintained across all question papers, ensuring consistency in font size, font style, and essential details, including the program and school name, course code, paper title, theory/practical designation, semester, month and year, date, duration, and maximum marks.
- It was advised to do the proof reading of the question papers to minimise the errors.
- Internal auditors emphasized that questions must align with the course outcomes of the respective paper.
- All the final marks input sheet of assignment evaluation has to be maintained and filed for record purpose.
- It was informed that all student details on answer sheets must be fully completed, including the seat number (in figures and words), paper code and title, date of examination, examination centre, and any other required details.
- It was recommended that all students should sign the answer sheets and mark statement report
  post-evaluation of every paper as a confirmation of review.
- Regarding internship reports, field trip reports, and dissertation thesis, it was advised that
  certificate formats should be uniform across all reports. These documents should be checked
  and signed by all faculty members as "examined." If a stamp is required, it must be duly affixed.
- For regular lecture attendance records, it was recommended to ensure all student signatures are
  present, with absentees marked. Additionally, faculty members and the Program Director (PD)
  must sign the attendance sheets. At the end of the course, the attendance percentage should be
  calculated, and all other required details should be duly filled in.

After the internal audit, Annexure I was discussed. It was decided that all faculty members would complete the soft copies of the annexure and submit them to the internal auditors for review and signatures.

The syllabus for both, the old 64-credit curriculum and the new NEP-based 80-credit curriculum was also reviewed. The following decisions were made against each query in the Annexure I form:

### Annexure I forms

. Are the Course Objectives in line with the Programme Objectives?

Response: Prof. Ghadi discussed the course objectives and program objectives of both, the foundational courses and the Marine Biotechnology courses and it was concluded, that the COs and in line with the POs.

Additionally, Prof. Ghadi also informed that the Course curriculum of M.Sc. Marine Biotechnology is in line with the DBT Model course curriculum.

2. Has the syllabus been handled so that it achieves/improves on the course objectives?

Response: All courses, including SWAYAM courses, were reviewed, and it was found that the syllabus had been effectively covered. Additionally, it was decided to keep the approved MOOC course syllabus along with the regular curriculum syllabus for easy reference.

3. Has the course incorporated enough practical components in terms of skill development related to the content of the course, or is it only theory-based?

Response: This was subject to individual papers as few papers have their corresponding practical component, while few are entirely theory-based.

4. Have the evaluation methods incorporated the evaluation of course outcomes? Have any skills or competencies related to the content in the syllabus been evaluated?

Response: It was concluded that the evaluation methods have incorporated the evaluation of most course outcomes.

5. What percentage of the classes have used Flip Classroom pedagogy methods?

Response: It was noted that Flip classroom is not entirely incorporated in the system, however it was recommended to incorporate some percentage of flip classroom pedagogy method for each course.

6. Has any prior reading material been given to the participants for learning engagement?

Response: The teaching faculty agreed that enough material is being provided to the students in addition to the initially briefing of the course.

7. What has been the level of participants' (Students) engagement in the course through prior reading?

Response: It was concluded that the level of participation of the students was moderate for all courses.

8. What has been the level of communication enhancement in the participants through the course? Do faculty members use any specific methods to improve the participants' communication?

Dr. Shamehad SharkL MS. Gandhita V. Kundaikar

Dr- Sanka Samant Junes

Response: The faculties informed the committee that most of the course incorporated multiple class discussions and seminar presentations to enhance student engagement.

9. Are enough books and reference materials available to the course participants?

Response: The internal auditors were informed that the discipline has an in-house library for M.Sc. Marine Biotechnology students, where they can issue books and access reference materials as needed.

 Suggestions towards improvement of the course content/handling/evaluation methods by the course coordinator faculty member.

Response: This response shall be tailored as per individual course.

11. SWOC Analysis within the Discipline / Programme:

Response: It was decided since this a program-related query, the response can be consistent throughout all the annexures submitted. The following were discussed:

- A. Strength:
- Admission of highly qualified students through the national entrance exam.
- Student diversity in the program fostering an inclusive learning environment.
- Program curriculum aligning with the model curriculum DBT India
- Financial support through DBT funds, providing stipends and facilitating high-quality dissertation research.
- Collaboration with various institutes of National importance like NIO (Goa Headquarters), NCPOR, BITS Goa campus and others.
- Strong Alumni network of M.Sc. Marine Biotechnology including entrepreneurs and mentors for start-ups.
- Curriculum offering internship opportunities.
- Strong student placements, with graduates pursuing PhDs and qualifying competitive and patent agent exams.
- Field-based learning through field trips and trawler trips, enhancing practical knowledge.
- Hands-on marine exploration opportunities, including scuba diving training.

#### B. Weaknesses:

- Improvement in student strength.
- The lack of sufficient laboratory space for establishing dedicated marine lab facilities, including an aquaculture lab, seaweed culture setups, and plankton research infrastructure.
- Lack of student counselling sessions during admissions at central institutes was noted as a shortcoming, as it limits awareness among students about the program.

### C. Opportunities:

- The program offers opportunities for the development of courses that support the blue economy and sustainable development, while also fostering startups through the Goa University Research park Unit (GURU).
- Additionally, there is scope to encourage local students to prepare for and clear the GAT-B
  examination, enhancing their access to the program.

#### D. Challenges:

- Ensuring full enrolment, especially from the reserved categories remains a persistent challenge.
- Motivating local students to appear for competitive exams.

The aforementioned points were unanimously agreed upon by all. The audit concluded with the Chairperson, Prof. Ghadi, extending his gratitude to the auditors for their time, insights, and valuable recommendations.

Dr. Sanika Saman, Off. Program Director, M.Sc. Marine Biotechnology

Dr. Shamshad Sharkh, Internal Auditor for M.Sc. Marine Biotechnology



Ms. Gandhita Kundaikar, Internal Auditor for M.Sc. Marine Biotechnology

Prof. S. C. Ghadi, Vice-Dean (Academics), SBSB

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### Internal Academic Audit Report

Internal Academic Audit of MBA (I) in Hospitality Programme of Goa Business School was conducted on 14/02/2025 at Room No 2, IMBA Block 1. The following committee members were present for conducting the audit:

- 1. Prof Nilesh Borde
- 2. Prof Y. V. Reddy
- 3. Dr Pinky Pawaskar

The audit committee did a random check of the following documents:

- 1. Syllabus
- 2. Course outline
- 3. ISA Question Paper & Answer sheets
- 4. SEA Question Paper and Answer sheets
- Self-assessment form duly filled by the individual faculty either in hard copy or electronically.

The committee found that the Programme was conducted fairly well and achieved the course outcomes based on Outcome Based Education for the period under review.

The committee places on record gratitude and appreciation for the Non-Teaching staff and the Programme Director for efficiently conducting the audit.

Programme Director (Prof K. G. S. Narayanan)

Member

(Prof Y. V. Reddy)

enher (Dr Pinky Pawaskar)

Vice – Dean (Academic) (Nilesh Borde)

## 2. Financial Audit reports

### 1. Minutes of the Finance Committee meeting

1.		Xth F.C. 2nd 14-03-2022		
	MINUTES OF THE SECOND MEETING OF THE THE DON 14 <sup>TH</sup> MARCH 2022 AT 3.00 P.M.	TENTH FINANCE COMMITTEE		
The Second meeting of the Tenth Finance Committee was held under the Chairpersonship of Vice-Chancellor on Monday, 14.03.2022 at 3.00 p.m.in the Conference Hall, Goa University.				
	The following members attended the meeting:			
	1. Prof. H. B. Menon Vice-Chancellor	: Chairperson		
	2. Prof. V. S. Nadkarni Registrar	: Member		
С	3. Prof. M. S. Dayanand Dean, Goa Business School	: Member		
	<ol> <li>Shri Shrinivas Vasudeva Sinai Dempo Dempo House, Campal, Panaji, Goa</li> </ol>	: Member		
	5. Shri Ashish Verlekar C. A. Panaji, Goa	: Member		
	6. Shri Satyavan Talwadkar Officiating Finance Officer	: Member Secretary		
	Shri Rajesh Mahale, Joint Director of Accounts, D attended the meeting on behalf of Secretary (Educ	irectorate of Higher Education ation).		
2	The Secretary (Finance) and Shri Hinesh R. Doshi,			
	After ascertaining the required quorum, the V members for the Second Meeting of the Tenth Fina the Committee that the University is required to se Budget Estimates for the year 2021-22 and Budge 23 as well as Annual Accounts of the Goa Universi State Government for its consideration. Since the NAAC peer team visit for accreditation during April to conduct the meetings of the Finance Committee Court in the month of March 2022 itself. He documents as mentioned above shall be placed be its meeting scheduled on 17 <sup>th</sup> March 2022. There taken up for deliberation.	ice-Chancellor welcomed the ance Committee. He informed end the duly approved Revised t Estimates for the year 2022- ity for the year 2020-21 to the University is going to have its 1 4-6, 2022, we were required e, Executive Council and the also said that the approved		

The

#### 1) **DISCUSSION ITEM**

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D-1: Confirmation of the minutes of the First Meeting of the Tenth Finance Committee held on 30.03.2021.

The minutes of the First Meeting of Tenth Finance Committee held on 30.03.2021 had been circulated to the members of the Finance Committee. As there were no comments on the minutes received from any members of the Committee, the minutes were taken as read and confirmed. The confirmation of the minutes has been approved by all the members unanimously.

ACTION TAKEN REPORT ON MINUTES: The Finance Committee noted the action taken reports with respect to the following items approved in the first meeting of the tenth Finance Committee held on 30<sup>th</sup> March 2021.

- N-I Consideration of the Revised Budget Estimates for the year 2020-21 and Budget Estimates for the year 2021-22.
- N-II Consideration of the Annual Accounts of the Goa University for the year 2019-20.

### N-III To consider and approve the grant of financial concurrence for appointment of the Internal Auditor.

While the Finance Committee noted the action taken on this item, it was informed that the document containing the scope of the internal audit works has already been prepared by the Finance Division as per the advice of the honorable members of the Finance Committee. The members suggested to circulate the soft copy of the same in order to add further inputs to the same. Registrar assured that the soft copy of scope of audit will be forwarded to all the external members.

### N-IV To consider and approve the acceptance of depreciation of Fixed Assets as per Central Higher Education Institutions.

The members were of the opinion that it should be decided whether the acceptance of the depreciation of the Fixed Assets would be mandatory and beneficial for the Goa University. The members also discussed about the Act applicable for adoption of depreciation rates. Hon'ble Vice-Chancellor explained that it is as per the Company's Act. Finance Officer opined that the earlier CAG regular Audit party suggested that Goa University should adopt depreciation of Fixed Assets as per Central Higher Education Institutions whereas the current

<u>Xth F.C.</u> <u>2nd</u>14-03-

CAG periodic Audit party suggested to adopt depreciation of Fixed Assets as per the Company's Act 2013. In this regard the members suggested that a detailed note is to be placed for discussion before the Finance Committee after getting it confirmed from Central Higher Education/CAG Office about the same.

Registrar assured the members that necessary action in this regard will be taken at the earliest.

#### NEW ITEMS

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### N-I Consideration of the Revised Budget Estimates for the year 2021-22 and Budget Estimates for the year 2022-23.

The Finance Officer placed the Revised Budget Estimates for the year 2021-22and Budget Estimates for the year 2022-23 before the Committee.

The Finance Officer informed the Committee about actual funds received from the State Government and the estimated funds to be requested to DHE for Goa University in their Budget. The Finance Officer also explained details of the major expenditure which was utilized for salary, maintenance and creation of infrastructure i.e., constructions of building for Schools in University etc.

One of the members suggested for philanthropic donations which can be obtained for the constructions of the new buildings. The members gave suggestions that flexibility is to be maintained on the recurring expenditure on funds obtained from the Government. Members also discussed about the internal University receipts and enquired about the reduction of fees during the Covid-19pandemic. Vice-Chancellor explained that University has reduced the fees upto 50%. The Committee was informed about the bifurcation of the internal receipts. The members were informed that the Guest House expenditure was more than the receipts due to the effect of the pandemic.

After detailed discussion and deliberation on various other items/issues or/and budget provisions/ estimates, the Finance Officer sought the approval of Finance Committee to place the same before the Executive Council for approval pending finalization to these minutes. The Finance Committee approved revised estimates 2021-2022 and budget estimates 2022-2023 and recommended to be placed before the Executive Council during its scheduled meeting on 17<sup>th</sup> March 2022 for its approval.

N-II Consideration of the Annual Accounts of the Goa University for the year 2020-21

Xth F.C. 2nd 14-03-2022

The Finance Officer placed the Annual Accounts of the University for the year 2020-21 before the Finance Committee for consideration.

The Committee noted that there is reduction in the earnings towards the fees, subscription amount. The members were explained that it was due to Covid-19 pandemic. It was also suggested that University may raise revenue through hoardings at various points.

The Finance Committee after deliberations approved the annual account for the year 2020-21 and recommended for placing before the Executive Council for approval.

### N-III Report of the Internal Auditor M/s. Verenekar & Co. (Chartered Accountant) on the Annual Accounts for the year 2019-20.

The Finance Officer placed Internal Audit report on the Accounts for the year 2019-20 before the Finance Committee for consideration.

The members pointed out that the Internal Auditor's comments should have been more robust and guiding and the audit work should be in a time bound manner. One of the members enquired about the non-maintenance of Party Ledger. The Finance Officer informed that the Finance Division will work out the modalities in consultation with the Tally Software provider and Chartered Accountant to maintain the Party Ledger at the earliest in respect of Suppliers/Vendors except for hundreds of students for whom various refund payments are done.

The Finance Committee after deliberations approved the report of internal auditor for the year 2019-20 and recommended for placing before the Executive Council for approval.

# N-IV Report of the Internal Auditor M/s. Verenekar & Co. (Chartered Accountant) on the Annual Accounts for the year 2020-21 (to be placed on the table).

The Finance Officer placed Internal Audit report on the Accounts for the year 2020-21 before the Committee for its consideration. He informed the following about the Audit observation 2020-21.

- 1. As regard to short/Excess payment of TDS, the Finance Officer informed the Committee that at present there are no short payments of TDS. The present demand status shows zero balance till date.
- 2. As regard to unidentified items, Finance Officer informed the committee that the receipts which are unidentifiable are kept as unidentified item so that it

Xth F.C. 2nd 14-03-2022

can be traced easily. One of the honourable members suggested that unidentified receipts need to be identified with the help of the bank and faculty. Finance Officer informed the Committee that Reconciliation of unidentified receipt will be carried out on priority.

3. As regard to deposit from contractor and supplier there is a difference of Rs.1,23,870.00 between the contractor ledger and tally system of Finance Division. Same will be reconciled and necessary rectification will be carried out accordingly. Further, the Finance Officer informed the Committee that the balance appearing on the Ledger are carried forward from year to year and as and when claims are received from the concerned, the same are paid accordingly.

One of the members suggested that the ageing analysis of such deposits from contractors should be made at the earliest, so that the lapsed deposits could be credited in the account.

The Finance Committee after deliberations approved the report of internal auditor for the year 2020-21 and recommended for placing before the Executive Council for approval.

#### N-V Any other matter with the permission of the Chair.

As there was no other business, the meeting ended with thanks to the Chair and the members.

Date: 16.03.2022

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(Shri Satyavan Talwadkar) Offg. Finance Officer & Member Secretary

Approved by:

REGISTRAR

InA. B.M

### 2. Minutes of the University Court

ja .	IX COURT-4 <sup>th</sup>
	29/03/2019
	GOA UNIVERSITY Taleigao Plateau, Goa 403 206
	MINUTES OF THE FOURTH MEETING OF THE NINTH COURT HELD ON FRIDAY, 29 <sup>TH</sup> MARCH, 2019 AT 3:00 P.M. IN THE COUNCIL HALL, GOA UNIVERSITY.
	The Fourth Meeting of the Ninth Court was held on Friday, the 29 <sup>th</sup> March, 2019 at 3:00 p.m. in the Council Hall of Goa University. The Vice-Chancellor, Prof. Varun Sahni chaired the meeting.
$\bigcirc$	The list of members present and those who could not attend/sought leave of absence is appended.
	The Vice-Chancellor extended a warm welcome to all the distinguished members for the Fourth Meeting of the Ninth Court.
	Thereafter, the agenda was taken up for discussion.
	Item No.1: Vice-Chancellor's Report
	The Court approved the Report presented by the Vice-Chancellor.
0	Item No. 2: To confirm the Minutes of the Second Meeting of the Ninth Court held on 28 <sup>th</sup> March, 2018 and Third (Special) Meeting of the Ninth Court held on 26/09/2018.
	The Court confirmed the Minutes of the Second Meeting of the Ninth Court held on 28 <sup>th</sup> March, 2018 and Third (Special) Meeting of the Ninth Court held on 26/09/2018.
	(Action: Assistant Registrar – Admin. (Non-Teaching))
	Item No. 3 (i): Report of action taken on the minutes of the Second meeting of the Ninth Court held on 28 <sup>th</sup> March, 2018.
	The Court noted the follow-up action on the various decisions of the Second meeting of the Ninth Court held on $28^{th}$ March, 2018.
	(Action: Assistant Registrar - Admin. (Non-Teaching))
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### Item No. 3 (ii): Report of action taken on the minutes of the Third (Special) Meeting of the Ninth Court held on 26<sup>th</sup> September, 2018.

The Court noted the follow-up action on the various decisions of the Third (Special) Meeting of the Ninth Court held on 26<sup>th</sup> September, 2018.

#### (Action: Assistant Registrar – Admin. (Non-Teaching))

### Item No. 4: Presentation of the Revised Estimates for the year 2018-19 and Budget Estimates for the year 2019-20.

The Court adopted the Revised Estimates for the year 2018-19 and Budget Estimates for the year 2019-20.

The Court noted that soft copy of the Budget Estimates was circulated to the members and approved to continue the practice in future.

#### (Action: Finance Officer)

Item No. 5: Presentation of the Audited Annual Accounts of the Goa University for the year 2016-17.

The Court approved the Audited Annual Accounts of the Goa University for the year 2016-17.

#### (Action: Finance Officer)

Item No.6: To consider the Annual Report of Goa University for the year 2017-18.

The Court approved the draft Annual Report of Goa University for the year 2017-18 with the suggestions that the information pertaining to the Colleges are to be included as received by the University. It was also suggested that the Convenor shall ensure the correctness in the report before the final print for circulation.

(Action: Convenor - Annual Report Editorial Committee)

The meeting ended with thanks to the members.

(Prof. Y.V. Reddy) Registrar and Member Secretary

Approved by

(Prof. Varun Sahni) Vice-Chancellor

IX COURT-5th 30/10/2020



### GOA UNIVERSITY

Taleigao Plateau, Goa 403 206

### MINUTES OF THE FIFTH MEETING OF THE NINTH COURT HELD ONLINE ON FRIDAY, 30<sup>TH</sup> OCTOBER, 2020 AT 10:30 A.M. VIA GOOGLE MEET.

The Fifth Meeting of the Ninth Court was held online on Friday, the 30<sup>th</sup> October, 2020 at 10:30 a.m. via Google Meet. The Vice-Chancellor, Prof. Varun Sahni chaired the meeting.

The list of members present and those who could not attend/sought leave of absence is appended.

The Vice-Chancellor welcomed all the Hon'ble members for the Fifth Meeting of the Ninth Court.

Thereafter, the agenda was taken up for discussion.

#### Item No.1: Vice-Chancellor's Report

The Court approved the Report presented by the Vice-Chancellor.

### Item No. 2: To confirm the minutes of the Fourth meeting of the Ninth Court held on Friday, 29<sup>th</sup> March, 2019.

The Court confirmed the Minutes of the Fourth Meeting of the Ninth Court held on Friday, 29<sup>th</sup> March, 2019.

(Action: Assistant Registrar - Admin. (Non-Teaching))

Item No. 3: Report of action taken on the minutes of the Fourth meeting of the Ninth Court held on Friday, 29<sup>th</sup> March, 2019.

The Court noted the follow-up action on the various decisions of the Fourth meeting of the Ninth Court held on Friday, 29<sup>th</sup> March, 2019.

(Action: Assistant Registrar - Admin. (Non-Teaching))

IX COURT-5th 30/10/2020

### Item No. 4: Presentation of the Revised Estimates for the year 2019-2020 and Budget Estimates for the year 2020-2021.

The Court adopted the Revised Estimates for the year 2019-2020 and Budget Estimates for the year 2020-2021.

It was suggested to issue a corrigendum for the minor corrections in the Budget Estimates.

(Action: Finance Officer)

### Item No. 5: Presentation of the Audited Annual Accounts of the Goa University for the year 2017-2018.

The Court approved the Audited Annual Accounts of the Goa University for the year 2017-18.

(Action: Finance Officer)

### Item No.6: To consider the Annual Report of Goa University for the year 2018-2019.

The Court approved the draft Annual Report of Goa University for the year 2018-19. It was also suggested that the Librarian shall ensure the correctness in the report before the final print for circulation.

(Action: Librarian, Goa University)

The meeting ended with thanks to the members.

(Prof Registrar and Member Secretary

Approved by

(Prof. Varun Sahni) Vice-Chancellor

X<sup>th</sup> COURT -2<sup>nd</sup> 19-07-2021



#### **GOA UNIVERSITY**

Taleigao Plateau, Goa 403 206

### MINUTES OF THE SECOND MEETING OF THE TENTH COURT HELD ONLINE ON MONDAY, 19<sup>TH</sup> JULY, 2021 AT 11:00 A.M. VIA GOOGLE MEET.

The Second Meeting of the Tenth Court was held online on Monday, 19<sup>th</sup> July, 2021 at 11:00 a.m. via Google Meet. The Vice-Chancellor, Prof. Varun Sahni chaired the meeting.

The list of members present and those who could not attend/sought leave of absence is appended.

The Vice-Chancellor welcomed all the Hon'ble members for the Second Meeting of the Tenth Court.

Thereafter, the agenda was taken up for discussion.

Item No. 1: Presentation of the Revised Estimates for the year 2020-2021 and Budget Estimates for the year 2021-2022.

The Court adopted the Revised Estimates for the year 2020-21 and Budget Estimates for the year 2021-22 and permitted to present the same to the Government.

(Action: Finance Officer)

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The meeting ended with thanks to the members.

(Prof. Rac Navak Officiating Registrar

Approved by

(Prof. Varun Sahni) Vice-Chancellor

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#### GOA UNIVERSITY Taleigao Plateau, Goa 403 206

## MINUTES OF THE THIRD MEETING OF THE TENTH COURT HELD ON MONDAY, 21<sup>st</sup> MARCH, 2022 AT 10:00 A.M. IN THE CONFERENCE HALL, GOA UNIVERSITY.

The Third Meeting of the Tenth Court was held on Monday, 21<sup>st</sup> March, 2022 at 10:00 a.m. in the Conference Hall, Goa University. The Vice-Chancellor, Prof. H. B. Menon chaired the meeting.

The list of members present and those who could not attend/sought leave of absence is appended.

The Vice-Chancellor welcomed all the Hon'ble members for the Third Meeting of the Tenth Court.

Thereafter, the agenda was taken up for discussion.

### Item No. 1: Vice-Chancellor's Report.

The Court approved the Report presented by the Vice-Chancellor.

Item No. 2 (i) : To confirm the minutes of the First meeting of the Tenth Court held on Wednesday, 31<sup>st</sup> March, 2021.

The Court confirmed the Minutes of the First meeting of the Tenth Court held on Wednesday,  $31^{\rm st}$  March, 2021.

(Action: Assistant Registrar - Admin. (Non-Teaching))

Item No. 2 (ii) : To confirm the minutes of the Second meeting of the Tenth Court held on Monday, 19<sup>th</sup> July, 2021.

The Court confirmed the Minutes of the Second meeting of the Tenth Court held on Monday,  $19^{th}$  July, 2021.

(Action: Assistant Registrar - Admin. (Non-Teaching))

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Item No. 3 (i) : Report of action taken on the minutes of the First meeting of the Tenth Court held on Wednesday, 31<sup>st</sup> March, 2021.

The Court noted the follow-up action on the various decisions of the First meeting of the Tenth Court held on Wednesday, 31<sup>st</sup> March, 2021.

(Action: Assistant Registrar – Admin. (Non-Teaching))

### Item No. 3 (ii) : Report of action taken on the minutes of the Second meeting of the Tenth Court held on Monday, 19<sup>th</sup> July, 2021.

The Court noted the follow-up action on the various decisions of the Second meeting of the Tenth Court held on Monday, 19<sup>th</sup> July, 2021.

(Action: Assistant Registrar - Admin. (Non-Teaching))

### Item No. 4: Presentation of the Revised Estimates for the year 2021-22 and Budget Estimates for the year 2022-23.

The Court adopted the Revised Estimates for the year 2021-2022 and Budget Estimates for the year 2022-2023 and authorized the Vice-Chancellor to take necessary action pending finalization of the minutes.

(Action: Finance Officer)

### Item No. 5: Presentation of the Audited Annual Accounts of the Goa University for the year 2018-19.

It was informed that the University has received audited accounts for 2018-19 from CAG and the House may note the same.

The Court then noted the Audited Annual Accounts of the Goa University for the year 2018-19.

The Court further suggested to note the following while preparing accounts for the future:

- To carry out the physical inspection/verification of the furniture existing in all the buildings on the campus and noted depreciation.
- On page no.41 of the Audited Annual Accounts, under Expenditure on Scholarships & other Freeship to Post-Graduate/Departments, Student Aid Fund is shown as zero for the year 2017-18. Members sought clarification on the same.

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X <sup>th</sup> COURT -3 <sup>rd</sup>	
21-03-2022	

- The House suggested to either rename the Schedule-11 title "Income from Educational Activities" or to shift the sales which were shown under Schedule-11 to some other appropriate Schedule to bring better clarity.
- On page no.11 at sr. 8 Student Deposit Biotech JNU for the year 2018-19 the value is in negative.
- The House suggested to crosscheck and examine the original copy of Audited Annual Accounts with the printed one for any corrections. The Finance Officer has been advised to provide proper explanations at such instances.

(Action: Finance Officer)

The meeting ended with thanks to the members.

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(Prof. V. S. Nadkarni) REGISTRAR

Approved by

Horilal (Prof. H. B. Menon)

Vice-Chancellor

X<sup>th</sup> COURT 4<sup>th</sup> 28-03-2023



### **GOA UNIVERSITY**

### Taleigao Plateau, Goa 403 206

## MINUTES OF THE FOURTH MEETING OF THE TENTH COURT HELD ON TUESDAY, $28^{TH}$ MARCH, 2023 AT 10:30 A.M. IN THE CONFERENCE HALL, GOA UNIVERSITY.

The Fourth Meeting of the Tenth Court was held on Tuesday, 28<sup>th</sup> March, 2023 at 10:30 a.m. in the Conference Hall, Goa University. The Vice-Chancellor, Prof. H. B. Menon chaired the meeting.

The list of members present and those who could not attend/sought leave of absence is appended.

The Vice-Chancellor welcomed all the Hon'ble members for the Fourth Meeting of the Tenth Court and requested them to introduce themselves.

Thereafter, the agenda was taken up for discussion.

### Item No. 1: Vice-Chancellor's Report.

The members of the Court approved the Report presented by the Vice-Chancellor.

### Item No. 2 (i) : To confirm the minutes of the Third meeting of the Tenth Court held on Monday, 21<sup>st</sup> March, 2022.

The Court confirmed the Minutes of the Third meeting of the Tenth Court held on Monday, 21<sup>st</sup> March, 2022.

(Action: Assistant Registrar - Admin. (Non-Teaching))

## Item No. 3 (i) : Report of action taken on the minutes of the Third meeting of the Tenth Court held on Monday, 21<sup>st</sup> March, 2022.

The Court noted the follow-up action on the various decisions of the Third meeting of the Tenth Court held on Monday, 21<sup>st</sup> March, 2022.

(Action: Assistant Registrar – Admin. (Non-Teaching))

X<sup>th</sup> COURT 4<sup>th</sup> 28-03-2023

### Item No. 4: Presentation of the Revised Estimates for the year 2022-2023 and Budget Estimates for the year 2023-2024.

The Court adopted the Revised Estimates for the year 2022-2023 and Budget Estimates for the year 2023-2024 and permitted to present the same to the Government.

The following observations and suggestions were made by the Hon'ble members for inclusion in the budget estimates in future:

- To allocate funds for renovation of old guest house buildings.
- To introduce a course in 'Nano Technology or in AI/Data Science'.
- To allocate grants for sports activities for the students of the affiliated colleges.
- To increase the intercollegiate sports activities.
- To seek grants from the State Government for sports activities.
- Under Receipts, the received income/revenue to be shown in brief/detail.
- To modify appropriately the existing formatting of the budget book with inclusion of explanatory notes on each page against entries indicating substantial changes in allocations of funds from Revised Estimates to Budget Estimates.
- A summary of the budget estimates in brief to be shown at the beginning of the book under the suggested title 'Details at glance'.

#### (Action: Finance Officer)

### Item No. 5: Presentation of the Audited Annual Accounts of the Goa University for the year 2020-2021.

The Court approved the Audited Annual Accounts of the Goa University for the year 2020-2021 with the following suggestions:

- To check possibility of utilization of MFS Corpus Fund.
- To seek funds from the Government for Research activities.
- To encourage faculty members from language discipline to enroll for Ph.D. at the earliest so that they acquire the Ph.D. Degree before the next NAAC Cycle.
- To indicate details and no. of patents under the name of Goa University in the Annual Accounts book.

### X<sup>th</sup> COURT 4<sup>th</sup> 28-03-2023

- To check possibility of payment of stipend to the interested students who wish to contribute in the translation projects.
- To indicate the details of inputs of students progression.

### (Action: Finance Officer)

The meeting ended with thanks to the members.

28/4/23

(Prof. V. S. Nadkarni) REGISTRAR

Approved by

(Prof. H. B. Menon) 2 8/ 8 4/2013 Vice-Chancellor

X<sup>th</sup> COURT 5<sup>th</sup> 15-03-2024



Taleigao Plateau, Goa 403 206

## MINUTES OF THE FIFTH MEETING OF THE TENTH COURT HELD ON FRIDAY, 15<sup>TH</sup> MARCH, 2024 AT 10:30 A.M. IN THE CONFERENCE HALL, GOA UNIVERSITY.

The Fifth Meeting of the Tenth Court was held on Friday, 15<sup>th</sup> March, 2024 at 10:30 a.m. in the Conference Hall, Goa University. The Vice-Chancellor, Prof. H. B. Menon chaired the meeting.

The list of members present and those who could not attend/sought leave of absence is appended.

The Vice-Chancellor welcomed all the Hon'ble members for the Fifth Meeting of the Tenth Court.

Thereafter, the agenda was taken up for discussion.

### Item No.1: Vice-Chancellor's Report.

The Vice-Chancellor presented before the House progress made by the University in various academic and administrative matters during the academic year 2023-2024 and also mentioned about some issues being faced.

After deliberations, the members of the Court approved the Report presented by the Vice-Chancellor.

### Item No. 2 (i) :To confirm the minutes of the Fourth meeting of the Tenth Court held on Tuesday, 28<sup>th</sup> March, 2023.

The Court confirmed the Minutes of the Fourth meeting of the Tenth Court held on Tuesday, 28<sup>th</sup> March, 2023.

(Action: Assistant Registrar – Admin. (Non-Teaching))



### Item No. 3 (i) : Report of action taken on the minutes of the Fourth meeting of the Tenth Court held on Tuesday, 28<sup>th</sup> March, 2023.

The Court noted the follow-up action on the various decisions of the Fourth meeting of the Tenth Court held on Tuesday, 28<sup>th</sup> March, 2023.

(Action: Assistant Registrar – Admin. (Non-Teaching))

### Item No. 4: Presentation of the Revised Estimates for the year 2023-2024 and Budget Estimates for the year 2024-2025.

The Registrar briefed the Hon'ble members regarding status of vacancies & highlighted major points from Budget Estimates. It was suggested to include small note or footnote to highlight major changes or the noticeable changes in the figures of budgets.

It was suggested to discontinue showing of the Budget Heads towards courses in the budget books which has been stopped for e.g. M.Phil.

One of the members pointed out that the Swachh Bharat Summer Internship which was started in 2018 wherein cash prizes were being given to the winners have been discontinued later. It was informed that many students take interest in the internship because of the cash prize system. The same was changed to medals or other form. The Hon'ble members requested to reconsider the proposal to retain the prize as a cash prize instead of any other form. It was unanimously resolved by the House to take a positive decision in the interest of the students.

Some of the members suggested conducting training sessions for the officers of the University. Therefore, it was resolved to prepare budgetary provision for the conduct of training for officers.

The Hon'ble Members suggested that the typing errors pointed out by them may be passed on to the Finance Officer for carrying out necessary corrections.

After deliberations, the Court resolved to adopt the Revised Estimates for the year 2023-2024 and Budget Estimates for the year 2024-2025 and permitted to present the same to the Government.

(Action: Finance Officer)



### Item No. 5: Presentation of the Audited Annual Accounts of the Goa University for the year 2021-2022.

The Court approved the Audited Annual Accounts of the Goa University for the year 2021-2022.

Further, it was resolved to submit the Audited Annual Accounts to the Hon'ble Chancellor and the Government of Goa as required under Section 27 of Goa University Act, 1984.

(Action: Finance Officer)

### Item No. 6: To consider the Annual Report of Goa University for the year 2021-2022.

The Registrar informed the Hon'ble Members that the schedule of academic year 2021-2022 had to be different than any normal academic year due to COVID-19 pandemic issues at that time. He therefore said that it required little longer time to finalize the annual report for academic year 2021-2022 and the same could not be placed before the House during its last meeting and requested the members to consider the same.

The Court approved the draft Annual Report of Goa University for the year 2021-2022 with the following suggestions to be applied in future reports w.e.f. academic year 2023-2024.

- To drop some parameters which are not significant.
- 'Preface' or 'Foreword' by the Hon'ble Vice-Chancellor to be included from the next year onwards in order to highlight the major details of University.
- Some members suggested to explore the possibility of making University Library accessible to the college teachers with some nominal chargeable fees. However, it was informed that licensed data basis are meant for only on campus users as their cost is finalized based on no. of students and faculty on the campus.

Further, it was suggested to submit the Annual Report to the concerned bodies as per the statutory provisions and to upload the same on the University website.

(Action: Librarian, Goa University)



### Item No. 7: To consider the Annual Report of Goa University for the year 2022-2023.

The Court approved the draft Annual Report of Goa University for the year 2022-2023 with a suggestion to include 'Preface' or 'Foreword' by the Hon'ble Vice-Chancellor to be included from the next year onwards in order to highlight the major details of University.

Further, it was suggested to submit the Annual Report to the concerned bodies as per the statutory provisions and to upload on the University website.

(Action: Librarian, Goa University)

### A.O.B.(1):

The Hon'ble Members of the Court congratulated the University for getting sanctioned Hundred Crores from the Centre under Pradhan Mantri Uchchatar Shiksha Abhiyan (PM-USHA) Scheme for upgradation of Goa University as Multi-disciplinary Education & Research University (MERU).

The Vice-Chancellor further informed the Hon'ble Members that out of the amount received, approx. Rs.80 Crores will be utilized for the development of infrastructure including furnishing/renovation of buildings on the GU campus and Rs.20 Crores will be utilized for purchase of research related equipment and for research related facilities.

The meeting ended with thanks to the members.

Sd/-(Prof. V. S. Nadkarni) **REGISTRAR** 

Approved by

Sd/-(Prof. H. B. Menon) Vice-Chancellor

### 3. Half Point Note

### SEPARATE AUDIT REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA ON THE ACCOUNTS OF GOA UNIVERSITY FOR THE YEAR ENDED 31 MARCH 2023

We have audited the attached Balance Sheet of Goa University as at 31 March 2023 and the Income and Expenditure Account for the year ended on that date under Section 19(3) of the Comptroller and Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 27 of the Goa University Act, 1984. The audit has been entrusted for the period up to 31<sup>st</sup> March 2025. Preparation of these financial statements is the responsibility of the Goa University's Management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This Separate Audit Report contains the comments of the Comptroller and Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, *etc.*, if any are reported through Inspection Reports/CAG's Audit Report separately.

3. We have conducted our audit in accordance with the auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance as to whether the financial statements are free from material misstatements. An audit includes examining on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

- i. We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
- ii. The Balance Sheet, Income & Expenditure Account and Receipt & Payment Account dealt with by this report have been drawn up in the approved format by the Goa University.
- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Goa University as required in so far as it appears from our examination of such books.
- iv. We further report that:

### BALANCE SHEET AS AT 31.03.2023 A.

### Assets

### Fixed Assets, Gross Block (Schedule 6) Specific Grant Assets ₹ 20.70 crore

1. The above includes Capital expenditure aggregating ₹ 19.57 crore incurred out of specific grants received for the works of 'Construction of Building of the Manohar Parikar School of Law' (₹ 16.35 crore) and 'Bio Incubator'

(₹ 3.22 crore). As the works were not completed, depiction of the same as completed assets is not correct. The same should have been separately disclosed as Capital Work-in-Progress.

This has resulted in overstatement of 'Building and Other Works' and 'Equipment and Furniture' by ₹ 16.35 erore and ₹ 3.22 erore respectively with corresponding understatement of 'Capital Work-in-Progress' by ₹ 19.57 crore.

### B. ACCOUNTING POLICIES AND NOTES TO ACCOUNTS

2. The liability towards gratuity, pension and commuted pension payable on death/retirement of employees is borne by the State Government and the liability towards leave encashment benefit of employees is paid by the University as and when due. However, the University did not disclose the above significant facts in the Notes to Accounts and further it did not provide for the liability towards leave encashment benefits in the financial statements. In the absence of availability of the detailed records, the amount, if any, to be provided for the liability could not be ascertained in

Audit.

3. The University did not maintain details of student-wise and year-wise collection of fees and the amount of fees receivable. Therefore, fees received in advance/fees receivable from students were not available for 4. The balances of receivables and payables are subject to confirmation.

### D. MANAGEMENT LETTER

Deficiencies that have not been included in the Audit Report have been brought to the notice of the Institute through a management letter issued separately for remedial/corrective action.

- v) Subject to our observations in the preceding paragraphs, we report that the Balance Sheet and Income & Expenditure Account/Receipt & Payment Account dealt with by this report are in agreement with the books of accounts.
- vi) In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with Accounting Policies and Notes to Accounts, and subject to the significant matters stated above give a true and fair view in conformity with accounting principles generally accepted in India."
  - i) in so far as it relates to the Balance Sheet, of the state of affairs of the Goa University as at 31 March 2023; and
  - ii) in so far as it relates to Income & Expenditure Account of the deficit for the year ended on that date.

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Principal Accountant General