

ONLINE LEARNING MANAGEMENT SYSTEM POLICY

FMH College of Medicine & Dentistry



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1. PREAMBLE FOR ONLINE LEARNING MANAGEMENT POLICY

As we know that Covid-19 lockdown has changed the outlook of education in general. On one hand, it has introduced new challenges for institutions, teachers, and students but on the other hand, it has brought in its wake innovation and a new zeal to implement quality education.

This manual has been developed to ensure that online learning is not only standardized across 5 years of medical and 4 years of dental education but its quality is also up to the mark. This document will serve the purpose of a policy guideline for online teaching and learning. The document contains information about the learning management system, curricular framework, online assessment policy, student support services, quality assurance mechanism along with QEC performas for feedback. Finally, there is a training plan for faculty development, which aims to make online teaching interactive and worthwhile.

Development of a learning management system (LMS), which is tailored to the needs of FMHCMD's students and faculty members, speaks volumes about institutions' endeavour towards provision of quality education in challenging times. LMS developed for the education of medical and dental students has been designed in accordance with the HEC standards and guidelines. Therefore, in addition to the courses, there is an inbuilt system of students' progress tracking through quizzes and assignments. Whereas, online assessment is meant to ensure that academic calendar is implemented in letter and spirit. This assessment will be, predominantly, formative apart from 10% assessment, which shall contribute towards summative internal assessment through organization of online term and send-up examinations. Moreover, evaluation performas have been integrated in LMS for regular and periodic feedback from major stakeholders in order to embed the process of monitoring and continuous quality improvement.

We hope and pray that our sincere efforts to save our students' precious time will bear fruit in the form of stakeholder's satisfaction and will prove to be an important milestone in further advancing the established credibility of the institution.

2. LEARNING MANAGEMENT SYSTEM

1. A hybrid of two systems, that is Moodle and Zoom, is being used for learning management system.
2. The faculty members of all the disciplines, both basic and clinical, have been involved and trained in using these systems and delivering the lectures.
3. All the students have been given their separate logins to assess the lectures on Moodle and interact with the faculty members through Zoom.
4. The attendance of each academic activity: lectures, interactive sessions, quizzes, assignments, practicals shall be marked separately.
5. To mark the attendance of Moodle lectures and make it more authentic, double prong policy is in place;

- i. Students once logged in will be known to the institution through Moodle,
 - ii. A small quiz of maximum consisting either MCQs (5-10) or SEQ (3-5) will be mandatory for the students to answer. This will not be a part of assessment and will be done to only reconfirm their attendance.
6. The lectures will be available to the students for 24 hours. It is pertinent to note that during all these lectures, the academic calendars are strictly being followed but practically we are lagging a bit behind.

2.1 User Management & Access

In order to ensure privacy, protection of intellectual property and the integrity of materials, access to courses on the LMS is regulated. All members of the FMH College of Medicine & Dentistry with an official login name and password have a user account within the appropriate LMS. This includes faculty, students, and administrative and academic staff.

- Teacher’s / Demonstrator’s / Grader’s access to the LMS is associated with the official record of the college employee noted as the instructor of record for a given course.
- Student access to the LMS is associated with the official course/study registration record within the college’s Student Affairs department. Organization accounts for students must be approved by the Student Affairs department.
- Medical Education and QEC department have an access of “Manager” to all the courses for purpose of evaluation as per the instructions of the office of the principal.
- Special access to the staff of Medical Education Department and Q.E.C is provided based on the approval of the Principal – FMH College of Medicine and FMH College of Dentistry.
- MIS Staff has administrative access to the LMS for configuration, creation and management of users, courses and different elements required in the course.
- Special conditions: Student or instructor or any other office bearer’s access other than those described above will be determined in consultation with Principal.
- The MIS department shall disable access or remove users for inappropriate behavior according to college policies that define appropriate conduct for College employees and students.

2.2 Training & Support

- MIS department developed student/faculty user guides for LMS learning technologies like Moodle and zoom.
- Information about the access to and support for the LMS is incorporated into faculty and student training, printed materials and related online resources.

2.3 Roles and Responsibilities

LMS User Roles	Permissions conferred on roles
Instructor /Teacher	Access course; Access grade book; Access Activities Access student reports
	Mark assignments and tests;

Teaching Assistant / Demonstrator	Upload Contents on behalf of teacher
Medical Education / QEC	Review Course Contents Review Quizzes Review Assignments
Student	Read / Download Lectures Take Quizzes Submit Assignments
MIS	Change settings; Add, update or remove users; Enroll / Remove users; Add, update or remove courses Update security patches Update latest releases

2.4 System Maintenance, Outages, Upgrades

- The MIS department shall notify users of any planned outages of LMS. Notification of any unplanned outages shall be at the discretion of the Principal Office. The level of notice for planned outages will be determined by the estimated downtime of the system.
- Faculty should consider planned outages when scheduling assignments and tests, and unplanned outages when such outages interfere with the timely completion of student coursework.
- The MIS department shall be responsible for deploying new features to LMS.

2.5 Confidentiality and privacy of information

- All users of the LMS are required to comply with PMDC's Code of Ethics, Guideline by UHS and rule and regulations set by the college administration.
- All resources provided with access to the LMS for designated use will abide by the User Policy for the FMH-LMS.
- The system administrator will remove content that is in violation of college policies if requested by the instructor of record, or the QEC department.

3. CURRICULAR FRAMEWORK FOR MBBS

1 st Year	2 nd Year	3 rd Year	4 th Year	Final Year
Anatomy (including Histology, Embryology & General Anatomy) + Physiology+ Biochemistry+ Clinical Subjects (Surgery, Medicine, Pediatrics OBGYN, and Orthopedics) All these rotations are inclusive of patient safety and infection control learning*	Anatomy including Histology & Embryology+ Physiology+ Biochemistry + Clinical Subjects (Surgery + Orthopedics + OBGYN+ Medicine+ Peads Medicine + Eye+ ENT) All these rotations are inclusive of patient safety and infection control learning*	Pharmacology & Therapeutics & Practical + Clinical Rotation Disciplines (Medicine, Surgery, ENT, Eye, Behavioral Sciences) All these rotations are inclusive of patient safety and infection control learning.	Community Medicine & Community Visits + Clinical Rotations according to the roster (Medicine, Surgery, ENT, Eye, OBGYN, Peads Medicine) All these rotations are inclusive of patient safety and infection control learning.	Medicine lectures + Clinical Rotations according to the roster (Internal Medicine, Gastroenterology, Rheumatology, Dermatology, Pulmonology, Cardiology, Nephrology, Endocrinology) Surgery (General Surgery, Orthopedics, Urology) OBGYN Peads Medicine Anesthesiology. All these rotations are inclusive of patient safety and infection control learning*
		Forensic Medicine Lectures & Practical + Clinical Rotations (according to the roster*)	Special Pathology Lectures & Practical + Clinical Rotations according to the roster*	
		General Pathology + Clinical Subjects and Clinical Rotations* (according to the roster)	ENT Lectures + Clinical Rotations according to the roster*	
Pak Studies and Islamic Studies	Pak Studies & Islamic Studies	Community Medicine & Community Visits*	Ophthalmology Lectures + Clinical Rotations according to the roster	
Community Medicine & Community	Community Medicine & Community	Behavioral Sciences with Field Visits + Clinical	Medicine lectures + Clinical Rotations*	Obstetrics & Gynecology lectures + Clinical Rotations*

Visits + Family Medicine*	Visits + Family Medicine*	Rotations* (according to the roster)	according to the roster	according to the roster
Pathology	Pathology	Ophthalmology Lectures+ Clinical Rotations* (according to the roster)	Surgery lectures + Clinical Rotations* according to the roster	
Behavioral Sciences Field Visits*	Behavioral Sciences lectures with Field Visits*	ENT Lectures+ Clinical Rotations* (according to the roster)	Pediatric Medicine lectures + Clinical Rotations* according to the roster	Pediatric Medicine lectures + Clinical Rotations* according to the roster
		Medicine Lectures+ Clinical Rotations* (according to the roster)	Obstetrics & Gynecology lectures + Clinical Rotations* according to the roster	
		Surgery Lectures+ Clinical Rotations* (according to the roster)	Psychiatry Lectures + Clinical Rotations* according to the roster	
Medical Education	Medical Education	Medical Education	Medical Education Leadership and Management	Medical Education Leadership and Management

*Clinical rotations and field visits till COVID-19 lockdown have been substituted by videos of the relevant material. These videos will give theoretical knowledge of performance-oriented aspects and onsite learning in order to better prepare students for practical/clinical work on resumption of on-campus learning.

4. CURRICULAR FRAMEWORK FOR BDS

1 ST YEAR	2 nd Year	3 rd Year	Final Year
Anatomy + Clinical Subjects Rotations according to roster	Science of Dental Material + Clinical Subjects	Periodontology Lectures + Clinical Rotations according to the roster	Prosthodontics Lectures + Clinical Rotations according to the roster
Physiology+ Clinical Subjects Rotations according to roster	Gen. Pathology & Microbiology + Clinical Subjects	Oral Pathology + Clinical Rotations according to the roster	Operative Dentistry Lectures + Clinical Rotations according to the roster
Biochemistry + Clinical Subjects Rotations according to roster	Pharmacology & Practical +Clinical Rotation)All these rotations are inclusive of patient safety and infection control learning	Oral Medicine + Clinical Rotations according to the roster	Oral & Maxillofacial Surgery Lectures + Clinical Rotations according to the roster
Oral Biology & Tooth Morphology + Clinical Subjects Rotations according to the roster	Behavioural Sciences	Gen. Medicine Lectures + Clinical Rotations according to the roster	Orthodontics Lectures + Clinical Rotations according to the roster
Behavioural Sciences	Community Dentistry + field visits + Research	Gen. Surgery Lectures + Clinical Rotations according to the roster	
Pak studies & Islamic Studies	Pre-Prosthodontics skill lab rotation according to the roster	Oral & Maxillofacial Surgery + Clinical Rotations according to the roster	
	Pre-Operative Dentistry Skill lab rotations according to the roster	Prosthodontics + Clinical Rotations according to the roster	
		Operative Dentistry + Clinical Rotations according to the roster	
Medical Education	Medical Education	Medical Education Leadership and Management	Medical Education Leadership and Management
<p>Self-Directed Learning Sessions</p> <p>*All these rotations are inclusive of patient safety and infection control learning.</p> <p>Clinical rotations and field visits till COVID-19 lockdown have been substituted by videos of the relevant material. These videos will give theoretical knowledge of performance-oriented aspects and onsite learning in order to better prepare students for practical/clinical work on resumption of on-campus learning.</p>			

5. ONLINE EXAMINATION POLICY

This Online Examination Policy is only for Term and Sendup Examination. Departments are independent in taking routine Class tests that are already being taken on WhatsApp groups, and in maintaining their own record. Examination department will maintain Term and Sendup examination record for students' eligibility criteria for UHS examination.

5.1 Platforms Needed to Conduct Examination

LMS, Zoom and Safe-Exam Browser are essential to conduct online examination.

1. LMS would be used for
 - a. MCQ Exam : Students attempt this on the LMS
 - b. Short Answer Question Exam : Students type the answers on LMS and submit within the given time-limit
2. Zoom would be used for live invigilation:
 - a. Group of students should be of not more than 15 students
 - b. Students have a webcam on, on which the invigilator is watching them attempt the paper
 - c. This ensures students do not have notes or books open
 - d. Ensures students are not using each other's login to give exams
 - e. Ensures no other person is sitting with the student helping them
 - f. Ensures students are not using a device to help them
3. Safe-Exam Browser should be integrated with Moodle (LMS)

Safe-Exam Browser is a browser that works with Moodle to disable certain options on the candidate's computer or device so they cannot cheat. It does the following:

 - a. Prevents screen-sharing
 - b. Disables right click for copy-pasting
 - c. Disables search functions
 - d. URL filter allows access to only certain websites, this means students cannot open any other websites other than the LMS
 - e. Can also prevent students from opening e-books or slides, if option is enabled

5.2 How to Ensure Exam Integrity and Reliability?

Universities all over the world are conducting exams online on Moodle in a safe, reliable and accurate manner. If certain best practices are followed, they would ensure the student's grades are a true and reliable reflection of their learning, free from any bias or cheating. Following are the best practices for Moodle Examinations that should be followed to ensure exam integrity:

1. Quiz should be strictly timed using the LMS Exam Timer
2. Ideal time limit is 15-30 minutes; this ensures students do not have ample time for cheating.
3. "One Question Per Page" Option should be enabled on Moodle to ensure students do not take snapshots. As it takes more time to take pictures when there is only one question on one page, the chances of cheating are reduced.
4. Shuffled questions options should be enabled on LMS for less opportunity of cheating
5. Students should be given more problem-solving questions; this minimizes cheating as there is no direct answer to copy-paste.
6. Vivas should have more weightage than written tests.

5.3 Rules for Students

Students should be strictly informed to adhere to the following rules:

1. Students are informed that may encounter problems with internet connectivity or an uninterrupted electrical supply. However, they must ensure an uninterrupted internet and electrical supply for the duration of the exam. To ensure this, students must:
 - a. Ensure they have mobile internet enabled for the exam day. They can use the mobile internet hotspot in case of internet breakdown.
 - b. Ensure their laptops/tablets/mobile phones are fully charged.
2. For term exams, students would need one laptop/tablet.
3. For Sendup, students would need two laptops/tablets/mobile phone, one for zoom for online invigilation and one for LMS for attempting the exam. However, this is subject to approval.

5.4 Examination Conduction

1. Question paper with maximum 30 MCQs (30 minutes) and/or 3-5 SEQs (30 minutes) becomes available on LMS at a set time. The IT department should upload the MCQs and SEQs question paper.
2. The Zoom invigilator makes sure students take 30 minutes in attempting the SEQs.
3. After the 30 minutes are over, the Zoom invigilator asks the students to submit the attempt. Safe-Exam browser makes sure no typed answers are copy-pasted.
4. Multiple invigilators would be needed to conduct the exam for each group.

5.5 Paper Marking

1. MCQs will be marked automatically on Moodle. The IT Department will upload answer key along with questions when they make the Moodle MCQ Quiz.
2. SEQs would be marked by teachers. Teachers will use the marking key to manually mark these answers on the computer. NOTE: On Moodle, the SEQs option is called Essay Questions.
3. Moodle Gradebook automatically publishes and saves the marks of the students.
4. Marks and answers to MCQs should only become available to students after the exam closes.

6. STUDENT SUPPORT SERVICES

The department of Student Affairs provides continuous support and ensures that students get the right support by the right persons during their studies. These student support services are provided in coordination with following departments

1. Academic Support : The students are advised to contact their respective HODs / subject In charge for queries and concern. The academic support is provided to students by instructors via phone, e-mail, or online methods (including synchronous and/or asynchronous tools).
2. Exam Support : Examination department will address the queries related to online assessments and their marking.
3. Technical Support : MIS department provides technical support for online registration, online classes, and use of online platforms. Brief -manual of operation or other documentation for the CMS/LMS, available online

7. FACULTY DEVELOPMENT PLAN FOR ONLINE TEACHING

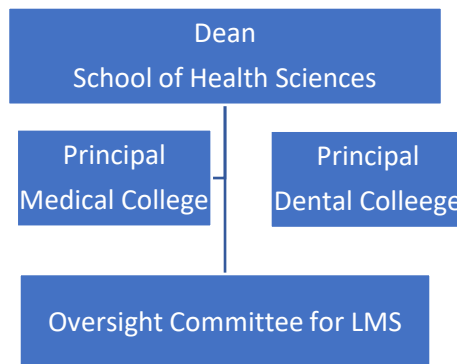
In the wake of these testing times, interactive teaching and students' engagement have emerged as new challenges. In order to address these challenges, DME at FMHCMD has designed Zoom-based 40-minute interactive sessions namely: Online teaching: A bandwagon or a blessing in disguise and learning to manage online learning. The former session is meant to address the

pedagogy of online learning whereas, the later one is designed to equip faculty members with the knowhow of gaining access to a zoom session and sending invites to students and technical aspects of learning management system. These sessions are being offered to all tiers of faculty across medical and dental colleges and are scheduled on weekly basis. Faculty members are informed about these workshops through professional WhatsApp groups and are requested to register through email. As this initiative is need-based, more workshops/sessions will be designed on topics suggested by faculty members.

8. QUALITY ASSURANCE OF LMS

To ensure that LMS of FMH College of Medicine & Dentistry is achieving its goals and objectives and to strengthen the internal quality assurance of online readiness, an oversight committee has been formed in the college. Heads of different teaching departments of both colleges and vital organs of college (i.e. Department of Medical Education, Department of Students Affairs and MIS Department) are included as members of the committee. The oversight committee is responsible for monitoring of:

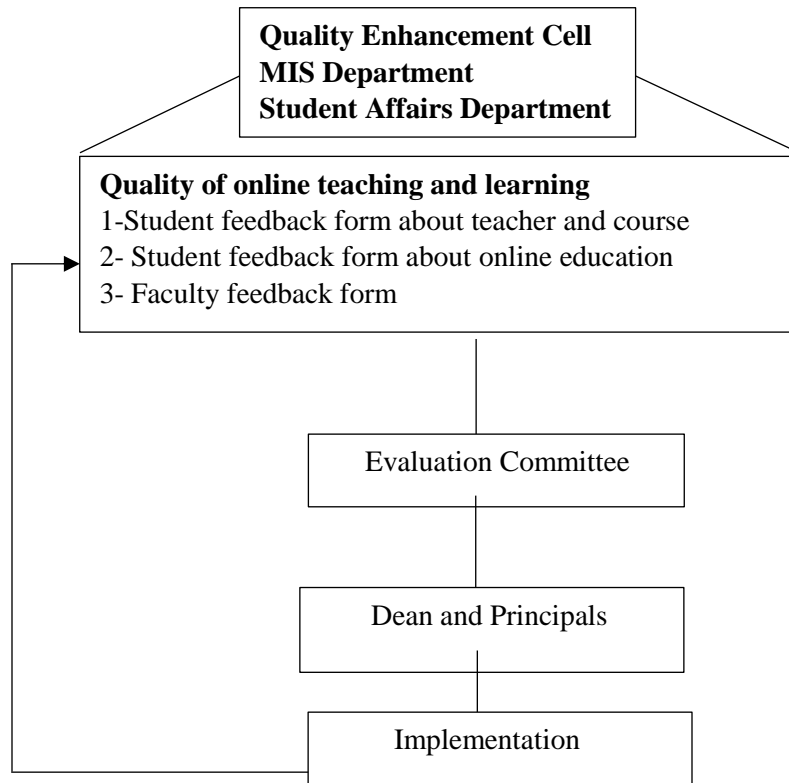
- Quality of online teaching and learning
- Online assessment system
- Online academic planners
- Online training of students and faculty
- Online student support services



The most important component of quality assurance of LMS is to check the quality of online teaching and learning. Quality Enhancement Cell is responsible for developing mechanism for this. Quality of online teaching and learning is checked through the feedback received from stakeholders i.e. students and teachers. Different survey forms have been developed for this purpose. Quality Enhancement Cell with the help of MIS department and Department of Student Affairs conducted these surveys. Results of these surveys are presented in Evaluation Committee. Evaluation Committee sent the final recommendations to Principals and Dean for implementation. These survey forms include:

- 1- Students feedback form about Teacher and Course
- 2- Student Feedback form about online education
- 3- Faculty feedback form

Process to Check the Quality of Online Teaching and Learning



8.1 Student Feedback about Teacher and Course

The purpose of this survey is to assess student’s satisfaction level and the effectiveness of online teaching programs in place to help them progress and excel in their learning. We seek your help in completing this survey.

Name of Teacher:

Name of Subject:

Program (MBBS or BDS):

Academic Year:

Scale 1 Not satisfied 2 Partially satisfied 3 Satisfied 4 Extremely satisfied

Part-1 Feedback about Teacher

1. The teacher delivered online lectures without any interruptions.
 1 2 3 4
2. The teacher is well versed with online method of teaching.
 1 2 3 4
3. The teacher effectively used online tools.
 1 2 3 4
4. I received appropriate and timely feedback of any query asked during the lecture.

1 2 3 4
5. The teacher provided appropriate feedback on online class assessments.

1 2 3 4
6. The teacher shared relevant videos of practical/clinical work.

1 2 3 4

Part-2 Feedback about Course

1. The course was well designed.

1 2 3 4

2. The lectures presented on zoom were helpful on clarifying difficult concepts.

1 2 3 4

3. The PowerPoint presentations of lectures were supported by audio-recording/useful drawings/smart art.

1 2 3 4

4. MCQs/SEQs/Quizzes taken ensured that I am learning important concepts.

1 2 3 4

Describe your experience and give suggestions as to how the institute can improve online teaching.

Please suggest what aspects of online teaching program should be improved.

8.2 Student Feedback about Online Education

The purpose of this survey is to take the input of students about their internet facilities and quality of online education they are receiving. We seek your help in completing this form to improve the quality of online education. Your response will be kept confidential.

	Field	Response
1	Full Name of the Student	
2	Father's Name	
3	CNIC Number	
4	Full Residential Address	
5.	College (Name)	
6	Your Student Registration Number	
7	Degree Programme (MBBS or BDS)	
8	Year (of study)	
9	Email Address	
10	Mobile Number	
11	WhatsApp Number (if available)	
12	What is the best way of contacting you?	<input type="checkbox"/> Email <input type="checkbox"/> Mobile Phone <input type="checkbox"/> WhatsApp <input type="checkbox"/> Landline

		<input type="checkbox"/> Snail Mail (i.e., ordinary post)
13	How do you usually access the Internet?	<input type="checkbox"/> Broadband Connection (at home) <input type="checkbox"/> Mobile package (on phone) <input type="checkbox"/> I go to an Internet Cafe <input type="checkbox"/> I go to a friend's house <input type="checkbox"/> I do not have access to the Internet
14	If you use a Mobile package, please check relevant box	<input type="checkbox"/> 3G or 4G <input type="checkbox"/> 2G or less
15	If you have Mobile Access, what is the name of the Service Provider (e.g., PTCL, Jazz, Zong, Telenor, Ufone)	
16	Do you have a TV at home? If yes, please specify	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Antenna <input type="checkbox"/> Cable <input type="checkbox"/> Dish
17	How much load-shedding is there in your area/place of residence?	<input type="checkbox"/> None <input type="checkbox"/> 0-6 hours <input type="checkbox"/> 6-12 hours per day <input type="checkbox"/> More than 12 hours per day <input type="checkbox"/> There is no electricity in my area
18	Which software does your college use for delivery of online lectures?	<input type="checkbox"/> Microsoft Teams <input type="checkbox"/> Zoom <input type="checkbox"/> Google Classroom <input type="checkbox"/> Other
19	I am familiar with distance learning.	<input type="checkbox"/> Yes <input type="checkbox"/> No
20	I am informed about the schedule of online classes from college administration.	<input type="checkbox"/> Yes <input type="checkbox"/> No
21	My access to internet is regular and reliable.	<input type="checkbox"/> Extremely Satisfied <input type="checkbox"/> Satisfied <input type="checkbox"/> Partially satisfied <input type="checkbox"/> Not satisfied
22	I am satisfied with the quality of online teaching.	<input type="checkbox"/> Extremely Satisfied <input type="checkbox"/> Satisfied <input type="checkbox"/> Partially satisfied <input type="checkbox"/> Not satisfied
23	What can be done to improve the quality of online teaching? (You may check more than one box)	<input type="checkbox"/> Provide training to professors <input type="checkbox"/> Improve quality of courses <input type="checkbox"/> Improve the software and LMS <input type="checkbox"/> Provide backups on the website <input type="checkbox"/> Use WhatsApp to send lectures <input type="checkbox"/> Other (please specify briefly) _____ _____

8.3 Faculty Feedback Form

The purpose of this survey is to assess faculty member's satisfaction level and the effectiveness of the in place online teaching for further improvements. Kindly spare some of your time to complete this survey.

Name of Teacher:

Name of Subject:

Program (MBBS or BDS):

Year:

Scale

- 1 Not satisfied
- 2 Partially satisfied
- 3 Satisfied
- 4 Extremely satisfied

What percentage of class was usually present in your lectures?

1. 50% 2. 60% 3. 70% 4. 80% 5. > 80%

1. My access to internet is regular and reliable.
1 2 3 4
2. Adequate technical support from institution was provided to me for online teaching.
1 2 3 4
3. The concept of online teaching is good and acceptable to me.
1 2 3 4
4. Appropriate training was provided to me from the institution for online teaching.
1 2 3 4
5. Online teaching materials and sessions are logically managed.
1 2 3 4
6. Online teaching takes more time than classroom teaching.
1 2 3 4
7. Students have adequate access to participate effectively in my lectures.
1 2 3 4
8. I am well versed with effective teaching techniques for online education.
1 2 3 4
9. The absence of face to face interaction with students can be compensated with quizzes.
1 2 3 4
10. I am confident that students are achieving the intended learning outcomes.
1 2 3 4
11. I feel students are satisfied studying throughout the week without any break.
1 2 3 4
12. I am using zoom to only clarify difficulty concepts.
1 2 3 4
13. Face-to-face sessions are meant to complement PowerPoint presentations uploaded on the Moodle.
1 2 3 4

14. I am comfortable using smart art/audio recording/drawing/animation/transition in PowerPoint presentation to make it more interactive and interesting.
- 1 2 3 4
15. I am adding interesting YouTube videos to complement my PowerPoint presentation.
- 1 2 3 4
16. MCQs/SEQs/Quizzes are meant to improve students' engagement.
- 1 2 3 4
17. MCQs/SEQs/Quizzes are meant to ensure that learning has taken place.
- 1 2 3 4

Please suggest areas that need future improvements regarding online teaching.

Please enlist the areas where you feel that additional technical support is needed from the College to improve your online teaching.

9. POLICY REVIEW

The college may make changes to this policy from time to time to improve the effectiveness of Online learning management system. In this regard, any staff member who wishes to make any comments about this policy may forward their suggestions to the Principal.