Lampiran 4: Garis Panduan Pembelajaran Dalam Talian semasa Pandemik COVID-19.

Online Learning Guidelines during COVID-19 Pandemic

Purpose:

The purpose of the Online Learning Guidelines is to assist UTM academic staff and all related stakeholders in implementing online teaching and learning during the COVID-19 Pandemic.

About the Guidelines:

The guideline has four (4) main sections:

1. Online Learning Design
2. Online Learning Delivery
3. Online Learning Assessment
4. Online Learning Tools

The guidelines should be read in conjunction with University/Faculty/School policies and procedures as well as relevant circulars issued during the COVID-19 pandemic by UTM management as well as the Government of Malaysia.

UTMLead is the owner of the Guidelines and is responsible for changes and approval from Senate University.

Guidelines:

Section 1: Online Learning Design

The online learning design should include the elements of student-centered learning which will allow students to actively participate in the learning activity. These activities must be accounted for in the calculation of the total student learning time. The inculcation of generic skills and specific activities carried out in the course must be identified, assessed and analysed. The followings are recommended:

1. Lecturers must ensure that students have access to the internet at home or at the hostel before conducting online teaching and learning. To abide by the Restricted Movement Order, **online teaching and learning is not allowed** if students have **limited access** to internet connection from the locations they are residing for any reasons.

2. All online learning implementations have to be compiled and documented for audit purposes by the lecturers.

3. Schools/Faculties are to devise strategies to monitor, collect and keep all documentations of online learning implementation from lecturers during the COVID-19 outbreak.

4. All online learning implementation has to be aligned with Course Learning Outcome.

5. Course Learning Outcome need to be clearly conveyed for online learning.

6. Schools/Faculties are to propose suitable measures as alternatives to replace face-to-face sessions for classes involving laboratory works, studio, practical or hands-on activities.

7. Lecturers must plan for the online component to fulfil the hours necessary for the credit requirements of the course. Calculation of hours should be based on the following:

    a. **The time spent in synchronous live interaction** (for example using Big Blue Button, Webex, Zoom or Google Meet). This is calculated equivalent to face-to-face meeting.

        For example, 60 minutes synchronous live interaction = 60 minutes face-to-face meeting = 60 minutes.

    b. **The average time on 'screen' and the number of screens viewed**. Average time spent on 'screen' is generally calculated as being between 3-5 minutes per screen.

        For example, students have to view 30 lecture slides online. One slide is considered as one screen = 30 slide / screens x 5 mins (average) = 150 minutes.

    c. **The run-time for required media-based assignments**. This run-time is for activities such as viewing pre-recorded videos, audio, simulation or animation. Refer to the actual length and estimate the expected multiple viewings of media.

        For example: Students have to view an 8 mins video 2 times = 16 minutes.

    d. **The time required to consume content**. This includes online activities where students read articles, watch a video. Lecturer has to make a reasonable estimation. On the average, university students spent 2 minutes to consume an A4 length article.

        For example: Students have to read a 10-page article (Assuming that one page has around 500 words) = 2 mins x 10 pages = 20 minutes.

    e. **Time spent for instructional activities**. This covers activities such as interacting in group discussions, online collaborative activities, interactions among students online. Lecturer has to make a reasonable time estimation for the number of hours calculation. Time estimated for online interaction is similar to face-to-face interaction (Brown & Green 2009).

        For example: Students have to debate during online discussion for 1 task = 40 minutes face-to-face interaction = 40 minutes.

8. During this COVID-19 pandemic period, planning of activities online should make full use of the contact hours dedicated for students' learning. Example of the time spent calculation for online learning is given in **Appendix 1**.

9. All lecturers are to document their online learning plans using the template shown in **Appendix 2**.

10. Online learning design has to consider design of online interaction and design of online teaching and learning strategies.

11. For designing online interaction, lecturers can refer to the guidelines of designing online experience using the Community of Inquiry: focussing on social presence, cognitive presence and teaching presence. Refer to **Appendix 3**.

12. Online learning design should consider suitable teaching and learning strategies such as collaborative learning, problem-based learning, and other suitable teaching and learning strategies.

13. Whenever possible, the online learning plan should have a mix of online active learning activities leveraging different types of interaction to enhance the online learning experience.

14. When a suitable teaching and learning strategy has been identified, online learning design has to take into consideration how it is going to be delivered as in Section 2.

15. To carry out online learning from 18th March - 31st March 2020, lecturers have to send a formal notification to inform UTMLead by email to olc@utm.my.

Section 2: Online Learning Delivery

1. During the COVID-19 pandemic period, three main alternatives for online learning delivery are recommended: asynchronous, synchronous or task-based online learning. Refer to https://olc.utm.my, for detailed explanation and suitable tools.

2. Among the three main alternatives, **asynchronous online learning is encouraged for online learning implementation** because it allows students to learn at their own pace and time.

3. Online learning delivery has to be interactive and engaging while emphasizing on cognitive presence, teaching presence and social presence. Refer to **Appendix 3** for detailed guides on conducting engaging online delivery.

Section 3: Online Learning Assessment

1. From 1st April-19th April 2020, all assessments will be carried out online. These assessments include: oral assessment (viva), formative assessment, and summative assessment.

2. For online assessment, lecturers are encouraged to use the UTM e-Learning platform. All online assessment that lecturers want to carry out has to be requested

by email through olc@utm.my. The request has to be made 3 working days before the online assessment is to be conducted.

3. Online assessment can vary in types. Types of online assessment can be found at https://olc.utm.my.

4. Lecturers are encouraged to carry out alternative assessment as a form of summative assessment.

5. All the procedures in preparing online assessments must follow the standard procedures as described in the MQA standard and other relevant requirements.

6. Implementation of online final examination will depend on the decisions by UTM management and circulars by the Government of Malaysia with regards to COVID-19.

7. Lecturers are to analyze the risks for conducting online assessment as described in **Appendix 4**.

8. Lecturers are to make the necessary preparation before, during and after online assessment as described in **Appendix 4**.

9. Oral assessment has to be carried out based on the procedures shown in **Appendix 5** for Undergraduate Programs and **Appendix 6** for School of Graduate Studies for Postgraduate Program.

Section 4: Online Learning Tools

1. Lecturers are to ensure that suitable online learning tools are selected in measuring the observed learning outcomes.

2. Online learning tools can be chosen between tools for online teaching delivery, active learning activities and online assessment. List of examples of tools can be found at https://olc.utm.my.

3. Lecturers are encouraged to fully utilize online learning tools available at UTM e-Learning.

4. Lecturers need to make sure that they are familiar with the technical aspects of the tools before using them.

5. Lecturers need to make sure that students have sufficient knowledge about using the online learning tools for teaching and learning.

Appendix 1: Example of Time Spent Calculation for an Online Learning Session
For 3 credit-hour course: Weekly meeting = 3 hours
Mode of delivery: Asynchronous Online Learning

Table 1. Example of Time Spent Calculation for an Online Learning Session

Activities	Type of time spent	Estimated Time	Total Time
Live Interaction with students	The time spent in synchronous live interaction	15 minutes	15 minutes
Students read a 5-page article online	The time required to consume content	2 mins x 5 pages	10 minutes
Students carry out 1 collaborative learning task in online discussion board for separate groups based on article reading	Time spent for instructional activities	40 minutes	40 minutes
Students write group findings on Padlet	Time spent for instructional activities	15 minutes	15 minutes
Students spent time on average 10 screens for all the activities	The average time on 'screen' and the number of screens viewed.	5 mins x 10 screens	50 minutes
Live interaction with students to discuss students' work	The time spent in synchronous live interaction	20 minutes	20 minutes
Students answer short online quiz	Time spent for instructional activities	30 minutes	30 minutes
		Total SLT	**180 minutes**

Appendix 2: Appendix 2: Online Learning Plan Template (Supplement to the Course Information (CI))

Example as follows for CLO1:

Course learning outcome	Guided Learning FTF hours (from CI)	Guided Learning FTF hours completed	Online Learning hours Mode of delivery: *Asynchronous/Synchronous/Task-based			
			Activities	**Type of time spent**	**Estimated time (mins)**	**Total time (mins)**
CLO1 *(Insert your statements here)*	*30*	*27*	*3*			
			Live Interaction with students	*The time spent in synchronous live interaction*	*15 minutes*	*15 minutes*
			Students read a 5-page article online	*The time required to consume content*	*2 mins x 5 pages*	*10 minutes*
			Students carry out 1 collaborative learning task in online discussion board for separate groups based on article reading	*Time spent for instructional activities*	*40 minutes*	*40 minutes*
			Students write group findings on Padlet	*Time spent for instructional activities*	*15 minutes*	*15 minutes*
			Students spent time on averagely 10 screens for all the activities	*The average time on 'screen' and the number of screens viewed.*	*5 mins x 10 screens*	*50 minutes*
			Live Interaction with students to discuss students' work	*The time spent in synchronous live interaction*	*20 minutes*	*20 minutes*
			Students answer short online quiz	*Time spent for instructional activities*	*30 minutes*	*30 minutes*
CLO2						

CLO3			

ONLINE ASSESSMENT PLAN				
Before (from CI)		**Revised***		
Continuous Assessment			Percentage	Total SLT
1	Quiz 1	*Completed*	2.5	**15m**
2	Quiz 2	*Completed*	2.5	**15m**
3	Quiz 3	*Online Quiz*	2.5	**15m**
4	Quiz 4	*Online Quiz*	2.5	**15m**
5	Test 1	*Online Test*	15	**1h15m**
6	Test 2	*Online Test*	15	**1h15m**
7	Design Project 1	*Online project report submission*	5	As in CLO 2 (7h30m)
8	Design Project 2	*Online project report submission*	5	As in CLO2 (7h30m)
Summative Assessment			Percentage	
1	Final Examination	*Take home examination to be submitted within the specified time*	50	**2h 30m**

*Changes can be made on the type of assessment but maintaining the percentage and SLT is recommended.

Appendix 3: Online Learning Delivery using Community of Inquiry

UTM proposed three main online learning deliveries; asynchronous online learning, synchronous online learning and task-based online learning. The followings are the details for asynchronous, synchronous and task-based online learning:

1. Alternative #1: Asynchronous Online Learning

Asynchronous online learning means online learning did not occur real-time, where you:
- Do not have to carry out live session with your students
- Cannot communicate with your students interactively (one-way communication)
- Can have a pre-recorded video to support your online learning plans
- Can plan online learning activities using online learning tools such as online discussions, collaborative writing and etc
- Can carry out assessment asynchronously (not real time) once you set up a date and time for their online assessment

2. Alternative #2: Synchronous Online Learning

Synchronous online learning means online learning occurs real-time, where you:

- Carry out live learning sessions with your students.
- Can communicate interactively with your students (two-way communication).
- Conduct online learning activities and interaction occurs in real-time even at different geographical locations.
- Can conduct real time assessment with students using UTM e-Learning Kahoot!, Quizizz , Socrative or other online assessment tools.

3. Alternative #3: Task-based Online Learning

Task-based online learning means you use online learning to monitor students' progress based on the task that you gave your students, where you:

- Plan your lesson and uploaded these plans in the form of instructions/tasks in UTM e-Learning
- Require your students to access UTM e-Learning and upload/submit the outputs from the given instructions/tasks
- Use UTM e-Learning to monitor your students' learning
- Adopt blended learning through UTM e-Learning namely Information, Resources, Activities, Assessment and Active Index as recommended by UTM New Academia Learning Innovation (NALI).

Delivery in an online learning should refer to the Community of Inquiry (CoI) framework that highlights social presence, teaching presence, and cognitive presence. These 3 elements are essential to facilitate successful educational experiences in online distance learning environments.

1. **Social Presence**

In order to increase social presence in an online learning setting, instructor should encourage communication between students and lecturers, students with students as well as students with learning content using asynchronous communication tools such as UTM e-Learning forum or message.

Indicator	Explanation
Continuing a Thread	Using reply features to quote others entire message or cutting and pasting selection of others' messages
Quoting from others' messages	Quote others entire message using cutting and pasting selection in the forum discussion
Referring Explicitly to othe Messages Asking question	Direct references to contents of others' posts Students ask questions of other students or the moderator
Complementing expressing appreciation	Complimenting others or contents of others' messages
Expressing agreement	Expressing agreement with others or content of others' messages.

2. **Teaching Presence**

There are many ways that the instructor can add teaching presence in an online learning setting.

In a discussion setting whether with the entire class, in small groups or teams or one-on-one with peers can be done using forum or live video conferencing setting, instructor should be able to
   1. *Defining and initiating discussion topic* : Identifying areas of agreement and disagreement between students during the discussion or brainstorming session
   2. *Encouraging, acknowledging and reinforcing student contribution*: The instructor helped to keep course participants engaged and participating in productive dialogue.
   3. *Guiding the discussion* : Instructor should be able to draw in participants / prompting question towards the focus of the discussion
   4. *Seeking to reach consensus and understanding:* The instructor encouraged course participants to explore new concepts in this course.
   5. *Summarize the discussion*

In a direct lecture setting that can be done using live video conferencing setting or pre-recorded lecture video, instructor should be able to:

1. Present content, provide example and explain in details
2. Confirming understanding by asking a question
3. Diagnosing misperceptions (eg. using Polling in the video conferencing apps or option in elearning UTM)
4. Injecting knowledge from diverse sources (eg. website,ebook, article and etc)
5. Responding to technical concerns

3. **Cognitive Presence**

Cognitive presence is to the extent to which the instructor and the students are able to construct and confirm meaning through sustained discourse (discussion) in a community of inquiry.

1. Cognitive presence can be demonstrated by introducing factual, conceptual, and theoretical knowledge into the learning activities and discussion.
2. The value of such a response will depend upon the source, clarity, accuracy and comprehensiveness of the knowledge.

Refer to Designing a Community of Inquiry in Online Courses by Holly S. Fiock for more tips on online learning delivery based on Community of Inquiry.
(http://www.irrodl.org/index.php/irrodl/article/view/3985/5296)

Appendix 4: Online Learning Assessment Recommendations

Assessment of student learning is a key aspect of quality assurance and it is one of the most important measures to show the achievement of learning outcomes. Hence, it is crucial that appropriate assessment methods and mechanisms are in place. Assessment must ensure sufficient interactions and engagement for group dynamics while supporting a holistic online ecosystem. Assessment activities should leverage on the functionality and availability of learning technologies. The methods of student assessment must be clear, consistent, effective, reliable and in line with current practices. They must clearly measure the achievement of the intended learning outcomes. Qualifications are awarded based on the achievement of learning outcomes which are measured through well designed assessment instruments (COPPA ODL, 2019).

Online assessments can be implemented based on either real-time online interaction between the instructor and learners (online synchronous assessments) or one that does not involve live session (online asynchronous assessments). Online assessment can be used to assess learning for either formative or summative assessment. There are various online assessment methods available and these include research papers, team project, self and peer assessment, learning portfolio, student journals, blogs, wiki building, demonstration, hands-on project, online games, oral presentation, and achievement tests (multiple-choice test, short answer test, essay). All of these assessment methods could be conducted as both synchronous assessments and asynchronous assessments. An advantage of online assessment is the opportunity for using multiple content formats such as video, audio, animation and other alternative formats.

1. Designing Online Assessment

 Best practices in designing traditional assessment methods can also be applied to online assessments. The following lists ten principles for good online assessment design (Walker, 2007).
- Online assessments should be aligned with the curriculum and relevant to the course learning outcomes.
- Online assessment instructions and question wording should be clear, concise and free from ambiguity.
- Timely and meaningful feedback should be provided.
- Marking schemes should be fair, transparent, weighted appropriately and clearly communicated to students.
- Online assessment tasks should be designed with accessibility in mind. Provision for 'reasonable adjustments' to accommodate students with special needs should be considered as should appropriate alternatives should potential adjustments prove inadequate.
- Where appropriate, online assessment tasks should incorporate a range of question types in order to assess the breadth and depth of student knowledge.
- Online assessments incorporating objective questions should include suitable and relevant distractors to minimise the potential for guessing.
- Online assessment approaches should be guided by the level at which the student is studying.

- Careful consideration should be made in relation to the time (stage) at which online assessment tasks are employed during a student's course of study and also to the realistic time frame in which students could be expected to complete the task.
- Online assessments should not test a student's information technology skills or their adeptness at using a specific online assessment tool unless that is the explicit purpose of the assessment.

3. Preparation Before Conducting Online Assessment

Constructing online assessment is a challenging process in ensuring academic quality is not sacrificed and security is not compromised. Care must also be taken to deal with students who fear poor performance in the online assessment environment. Alternative assessments are encouraged where students must be tested on the concepts rather than regurgitating materials making it easy to copy from textbooks. The underpinning principles of online assessment or traditional assessment are the same. The difference is in the mode of implementation where online assessment is conducted via online. Either formative or summative assessment can be conducted through online assessment as long as the objectivity, validity and reliability of the assessment are guaranteed. A crucial part in preparing the online assessment is the assessment method must be aligned with the learning outcomes. Below are some guidelines in conducting online assessment.

2.1 Selection of Assessment Method

Instructor needs to identify suitable assessment strategies which are easier to monitor online than it is in a classroom. Strategies for the selection of assessment for online delivery include:

 o Timed/open-book tests.

To minimize read-as-you-go test-taking, reduce the amount of time students have to take the test so that only those students familiar with the material can answer the questions in the time allotted. Alternatively, replace selected response tests (such as multiple choice and true/false items) with short-answer or essay questions that require students to apply textbook facts to novel scenarios or the use of multiple content formats such as the use of video or audio.

 o Timed/closed-book test with shuffled/randomized test questions.

Instructor must prepare a large test bank and shuffle the questions providing each student with a similar (but not identical) assessment. UTM eLearning has both shuffling and randomization capabilities.

 o Frequent low-stakes tests.

This include short quizzes or self-check activities using multiple choice questions or true/false questions. With an online assessment, guessing can be reduced by requiring an explanation. A quiz can be just 10-15 questions long to provide sufficient information for feedback.

 o Oral presentation assessment.

Assignments that require students to speak, or present are harder to fake. Student can present by uploading self-recorded video or using video conferencing.

o Performance assessment.

Assignment that students need to write a report such as a case study, project report and article review can be checked by the lecturer using plagiarism software such as Turnitin.

o Peer-review.

Asking students to review their classmates' work (and grading them on their reviews) can help motivate best efforts as well as help students learn from each other. It encourages a deeper approach to learning involving critical reflections. UTM eLearning provides peer assessment capability in the workshop tool.

o Group projects.

Well-designed group projects help students master both course content and team working skills.

It is important to ensure that all the assessment methods have valid assessment tools. For performance-based, rubric, checklist or rating scales are more appropriate while for test, quiz and exam, answer schemes are required.

2.2 Selection of Online Assessment Tools

There are various types of online assessment tools available such as the assessment tools in the UTM eLearning as well as other online tools such as Quizlet, Quizizz, Kahoot, Edpuzzle, Ted-Ed Lesson, Goformative and Socrative. The tools can be further classified into gamification tools (Quizlet, Quizizz, Kahoot), video-based (Edpuzzle and Ted-Ed Lesson) and real-time (Goformative and Socrative). The selection of online tools for assessment should be suitable with the assessment methods for a particular course. Table 2.1 below lists the assessment methods and available online tools.

Table 2.1 Assessment methods and available online tools

No.	Assessment Method	Online Tools
1	Online Test, Online Quiz	· UTM eLearning Quiz · Quizziz · Socrative
2	Online Presentation	· UTM eLearning BigBlueButton · ZOOM · Webex · Google Meet
3	Project Report, Case Study report, Article Review	· UTM eLearning Assignment

4	Online Discussion, Demonstration	· UTM eLearning Forum · UTM eLearning BigBlueButton · ZOOM, Webex
5	Learning Portfolio	· UTM eLearning blog · Wordpress · Blogger
6	Peer assessment	· Flipgrid · Padlet · UTM eLearning Forum

2.3 Consideration of Risk in Conducting Online Assessment

To ensure academic quality is maintained, proper planning of online assessment is required with due consideration of the risk factors. Table 2.3 shows the classification of assessment task as low, medium or high stakes assessment to assist in online assessment planning (*Adapted from The University of Adelaide's Assessment Guidelines).

Table 2.3 Risk Levels of Online Assessment*

Low Stake	Medium Stake	High Stake
Diagnostic & Formative	Diagnostic, Formative & Minor Summative	Summative and/or relating to certification
Few Consequences if problem arise	Some Consequences if problem arise	Major Consequences if problem arise
Does not require invigilation	May require invigilation	Requires invigilation

Online assessment strategies and tools could be selected by considering the risks associated with the types of assessment. Some examples are as shown in Table 2.4 below.

Table 2.4 Example of risks involved with types of online assessment

Subject Domain	Types of Assessment	Low Risk	Medium Risk	High Risk
Science and Technology	Multiple Choice Questions (random questions, random answers)	X		

Social Science	Open Ended Assignments			
	Small Cohort	X		
	Large Cohort Open Availability		X	
	Large Cohort Fixed Availability			X

3. Preparation during Online Assessment

The following recommendations apply to online synchronous assessment

3.1 For students:

o Aware of the scheduled time for the online assessment to be conducted
o Ensure stable connectivity (preferably wired connection)
o Use the following link (http://www.speedtest.net/) to test that the internet speed is suitable. Minimum requirement is 2 mbps.
o In case of being disconnected: Capture screen the problems that was encountered immediately, before the online assessment ends.
o If the assessment is carried out at home, ensure a quiet, closed space and prevent any form of distractions.

3.2 For lecturers:

o Be online at least 10 minutes before the assessment starts.
o Be on standby so that students can reach you in case of any problems.
o Take students' attendance
o Monitor students' online assessment process.

4. Preparation After Online Assessment

The following recommendations apply to online synchronous assessment.

4.1 For students:

o Ensure all answers have been submitted
o Ensure all evidences of your work are safely kept (save at external drive / screenshot)

4.2 For lecturers:

- o Ensure all students have submitted their answers
- o Follow up on students' who have problems during online assessment.
- o Marks and feedback must be done in appropriate time.
- o Evidence of assessment implementations are to be documented (for auditing purposes)
- o Duration of online assessment. A rule of thumb for the allocation of time for online assessment is as follows:
  - ▪ 2 minutes for each multiple choice question (MCQ)
  - ▪ 2 minutes for every 1 mark given for structured question

It is important to note that all online assessments must comply with the University's Academic Regulations and other related assessment policies

5. Oral Assessment

Oral assessment deals with any assessment based on the spoken word, including vivas, oral presentations, and a host of other forms of assessment.

Oral assessments offer instructors the opportunity to assess the structure and content of a presentation as well as students' capacity to answer any subsequent probing questions.

Oral presentations are often used in a formative capacity but they can also be used as summative assessments such as PhD Defense, Final Year Project for Undergraduate Program and Master Project Presentation for Master taught course program.

Assessment can be exclusively oral, or, as is frequently the case, can be combined with other modes of communication, depending on the nature of the assessment task. What makes the assessment 'oral' is that at least part of the assessment, and part of what counts towards a student's mark or grade, depends on what the student communicates by word of mouth.

Appendix 5: Suggestion for Procedures for Undergraduate Oral Assessments

In implementing oral assessment, these six dimensions must be considered:
1. Knowing what to assess
2. Means of interactions
3. Structure of the session
4. validity and reliability of instrument and session
5. Fairness
6. Grading

For oral assessment such as Final Year Project Presentation, the following procedures are suggested:

1. Students have to prepare a pre-recorded video. Upload to Google Drive or UTM e-Learning (or as recommended by School/Faculty).

2. Students share the video link with a panel of evaluators.

3. Students have to share the presentation slides with the panel of evaluators (through email).

4. Panel of evaluators will evaluate the submitted videos offline.

5. Faculty/School has to arrange a session for a live online session. This session is only for Question and Answer between the panel of evaluators and the student.

Appendix 6: Procedures for Oral Assessment for Postgraduate Studies

Procedures to Implemnet Oral Examination for Doctor of Philosophy Program, Master of Philosophy Program and Master Project Presentation during COVID-19 Pandemic

a. Video conferencing/Online platforms may be used in viva voce examinations where the candidate/examiners face travel restrictions during Covid-19. Candidate here refers to local and international students.

b. Faculties/School must ensure that videoconferencing/online platform is the most appropriate course of action, and that the interests of all parties are fully considered. Parties here refers to Chairman, examiners and students. If any of the parties involved disagree with the use of video conferencing/online platforms for their oral examination arrangement, the oral examination shall be postponed.

c. A consent form must be filled up as evidence of agreement.

d. The session may only take place with the presence of **at least two parties** in the same location. The Chairman should be one of the two parties (i.e Chairman and the candidate; OR the Chairman and internal examiner; OR Chairman and external examiner). In the case of travel restriction, it is permissible to have the student alone at one location.

e. The decision to conduct online viva voce should be considered as the last resort. It should therefore be carefully and selectively implemented. The decision to conduct online viva should take into account the infrastructure and Internet facilities available at the faculty/school, and priority should be given to sponsored students and international students who need to return to their home countries.

f. It is important that appropriate arrangements should be made to maintain the integrity, confidentiality and credibility of the examination process.

d. The School of Graduate Studies does not permit the viva to be conducted by means of telephone conference.

g. The School of Graduate Studies should be notified by the faculties/schools and reserves the right to cancel/recommend any viva session.

2. Preparation before the viva

a. The faculty/school should provide suitable room for the viva to be conducted. It is the faculty's/school's responsibility to ensure IT equipment functions well and the session be made accessible to technical support.

b. The faculty/school should check the video link to the remote person within half an hour of the start of the viva. If any problems are experienced, contact with the appropriate technical support should be made to enable the viva to start on time. The faculty/school

should ask for a telephone number and the e-mail address where the remote person could be contacted in the case of a problem with the video link.

c. Any time differences between the locations involved must be taken into account to ensure that the candidate is not at disadvantaged by an examination taking place at an inappropriate time, and bearing in mind the availability of the videoconferencing facilities at each end.

d. A thorough testing of the connection for sound and vision must be conducted at least 3 days prior to the viva. If there are any doubts about the connection and whether it will last the duration of the viva the viva should not proceed, and a face-to-face viva must be scheduled.

e. It is the responsibility of the candidate, where they have been given permission for an online oral examination to secure appropriate premises with proper videoconferencing facilities.

3. During the viva

a. All parties must be visible during the examination, and the candidate must be visible at all times during the examination.

b. At the start of the viva, the remote person and those in the room should introduce themselves. It is the Chair's responsibility to ensure that, at the start of the viva, all are comfortable with the arrangements and that the student and the examiners can see and hear each other clearly.

c. Where the candidate is the remote party, the candidate should be alone during the examination, apart from any technical staff involved in the use of video-conferencing facilities. The video of the candidate should be such that the examiners/chairman are satisfied the candidate is alone and will not be disturbed.

d. The candidate should be warned that, should the Examiners have reason to suspect that they are in breach of any of the rules as agreed in the agreement, they would be subject to disciplinary action for examination misconduct, and the viva voce session shall be terminated.

e. The Chairman is responsible to make sure no other unauthorised persons present in the remote locations and ascertain that the candidate and examiners has provided appropriate evidence of their true identity prior starting the session.

f. It is expected that all parties would have with them, their own copy of the submitted thesis or proposal.

g. An IT technician is to be arranged for and present at the Universiti Teknologi Malaysia site at all times during the remote oral examination.

h. The videoconference facility must be arranged such that each end of the link should be able to see the other party/parties present at all times. The Chairman will need to be present throughout the viva, and should ensure that the candidate is not disadvantaged in any way compared to the standard face-to-face oral examination. Examinations will be recorded by the Universiti Teknologi Malaysia only for the purpose of **quality assurance purposes.**

i. In the event of any failure with the technology before or during the viva, or other concerns regarding the conduct of the viva by videoconference, it is the responsibility of the Chairman to suspend the examination and to decide whether it is possible for the examination to continue or whether the viva should be rescheduled.

j. The Examiners should normally have the opportunity to convene for an appropriate period prior to the student being invited to the examination. Similarly, when the viva examination has been completed, the candidate should be removed from the videoconference whilst the Examiners deliberate on their decisions. The candidate should be re-admitted to the session to be informed of the outcome of the examination.

k. If communication is broken during the examination and a connection cannot be re-established, examination must be terminated and rescheduled.

l. If communication is broken during the examination and a connection cannot be re-established, the Chairman with consultation with the examiners must decide how much of the viva voce examination was completed at the point the connection was lost and what, therefore, should be covered in the re-scheduled viva examination.

m. If communication is broken towards the end of an examination, and examiners can jointly agree that further examination would not change their decision, the viva may be concluded and the candidate notified of the examiners' joint recommendation. This should be detailed in the Chairman's report and account should be made of any content that was potentially missed after the break in communication.

4. After the viva

a. All participants should be asked to confirm at the conclusion of the viva that the holding of the examination by videoconference has had no substantive bearing on the examination process. This confirmation should be stated in the Chairman's report.

b. Examiners will be invited to comment on the conduct of the viva voce examination using the standard Chairman Final Report form and should refer explicitly to the use of videoconferencing.

c. A post-viva report should be made by the Chairman at the end of the examination, and should comment on the technical performance of the facilities used in both locations.

d. Having agreed to a viva voce examination involving videoconferencing the candidate will not be permitted to use this as grounds for appeal, unless the circumstances of technical failure or other unforeseen eventualities beyond the control of the examiners were deemed to have adversely affected the candidate's performance.

School of Graduate Studies
16 March 2020
Declaration by the Candidate

I confirm that I have read and understood the Procedures for Conducting Remote Online Examinations, and agree to abide by these Terms and Conditions. I also agree that I will not use the remote online examination involving video conferencing as grounds for appeal.

* Signature of candidate (ID)

Name:
Matric No.
Date:

* By signing this declaration, candidates confirm that they have read the Policy and understood the terms contained within it, and accept the responsibilities placed on them in relation to the conduct of a remote *online examination*.