MALAYSIAN MEDICAL COUNCIL

GUIDELINE FOR CONDUCT OF ONLINE EXAMINATION FOR UNDERGRADUATE MEDICAL PROGRAMME DURING AND AFTER MOVEMENT CONTROL ORDER DUE TO COVID-19 PANDEMIC

Introduction

This guideline is aimed to supplement the previous guidelines by Malaysian Medical Council (MMC) and Malaysian Qualification Agency (MQA) due to the enforcement of MCO caused by COVID-19 pandemic. This guideline is also subjected to the orders or circulars released from time to time by Majlis Keselamatan Negara (MKN), Ministry of Health, Jabatan Pendidikan Tinggi, Kementerian Pengajian Tinggi (JPT, KPT) and Malaysian Qualification Agency (MQA).

Any actions and temporary measures taken by HEP during the crisis are under the responsibilities and autonomy of the Senate of the university depending on the resources and the ability of each HEP. Each HEP also needs to take current and future welfare of students into account when making decisions.

Each HEP is also required to record all the actions and temporary measures implemented during the crisis according to procedures set by each HEP after obtaining approval from the Senate/Vice Chancellor. The HEP Internal Quality (Unit) Board will be required to observe and coordinate all the actions and measures during the crisis. These actions and measures may be in term of remedial, corrective and improvement works depending on individual HEP needs. These can be implemented gradually based on its priority, especially for students that will graduate soon.

All records and documents related to the actions and temporary measures including quality assurance activities will be assessed by the panel of accreditors during accreditation or monitoring visits.

Conduct of Online Examination

For a medical school to conduct online examination, below are the conditions that each HEP should adhere to.

1. Pedagogy

Each HEP need to identify suitable pedagogical methods to implement the online examination during and after the MCO. These include types of assessment that need to be

tested for the students, number of questions and the timing of examination. With all these, the HEP need to ascertain that the questions used in the online examination have adequate degree to **validity**, **reliability**, **feasibility**. The HEP also need to maintain **fairness** to the students in terms of their circumstances i.e. environment and internet connectivity.

2. Security

Each HEP need to maintain adequate security when conducting online examination and able to **track and trace** all access to the examination system. Each HEP need to identify **authorised staff** and **examiners** to access the examination. These authorised personnel will have own level of access to the examination questions. Each student must be identified by at least **two proofs of identity** before each examination. The HEP need to make sure that the software used for the examination is up to date with security patches to prevent any security breech.

3. Audit

All actions and temporary measures taken during and after MCO need to be recorded for the purpose of internal and external audit of future changes and improvement. Changes to the questions should be able to be tracked with ability to adjust or remark if there is any error or review and ability for auditors to view the students' answers.

4. Operational

Each HEP must have a **reliable** and **stable system** that can operate the online examination securely either using Learning Management System (LMS) or Virtual Learning Environment (VLE) or other systems which can be supported by numerous type of hardware (Windows, Apple [iOS, MacOS, iPadOS], Linux, Android) and software (e.g. Chrome, Safari, Internet Explorer, Edge Browser, Fox, Opera). The HEP also need to make sure that the institution and students fulfil the **internet requirement** and **stability** for the examination to be conducted. All documents and files must have adequate **backup** at all stages and locations for preparation of any contingency plan in case of system failure. All examination schedules need to be informed to the authorised staff, examiners and student with adequate amount of time prior to the examination including rescheduling and cancellation of examination.

5. Others

a) Cost to students
Each HEP need to make sure that the additional cost incurred by the students are acceptable and fair.

b) Fraud
Each HEP must have guideline or policy to prevent fraud that can affect the online examination system.

c) Cheating
Cheating is an important issue in any online assessment. There are two ways how to minimise the ability for cheating by students.

i. **Non-proctored session**
Non-proctored examination is where there is no supervision by the faculty. A few suggestions to reduce opportunity to cheat such as the HEP can implement randomised questions or options for each student, pre-set time for each question and the questions asked are at higher level (Higher-Order Thinking Skills). The answers submitted by the students should not be viewed by other students.

ii. **Proctored session**
Proctored session is where the examination is being supervised by an exam invigilator. Cheating can be minimized by conducting the examination in the examination hall or computer lab. If the examination is conducted remotely, intermittent observation can be adopted such as switching the camera on, sending email or using other technology devices or applications (e.g. Zoom).

References:
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