GUIDELINES

ON

ACADEMIC ASSESSMENT AND EVALUATION

UNIVERSITI MALAYSIA SABAH

[AMENDMENT 2019]

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CONTENTS

SECTION I

INTRODUCTION

1.1 ACADEMIC ASSESSMENT AND EVALUATION

Academic Assessment and Evaluation is an important element in teaching and learning. This UMS Guidelines for Academic Assessment and Evaluation is therefore produced to provide general guidelines and standards on the administration and management of academic testing, assessment and evaluation in UMS.

This Guidelines is the updated edition of the UMS Guidelines for Academic Assessment and Evaluation (2014). This is to ensure the UMS academic quality assurance adheres to the HEI Quality Assurance Practices and also the requirements set by the Malaysian Qualifications Agency (MQA).

This document is to be read together with the *Kaedah Pengajian Prasiswazah UMS pindaan 2018*, *Manual Peperiksaan UMS* and *Garis Panduan Amalan Terbaik Pentaksiran Pelajar, MQA.* For professional programmes such as Medicine, Engineering, Nursing, Accountancy and Counselling, the policy and practice on assessment and evaluation is to be based on the manual and accreditation requirements of the respective professional bodies.

1.2 SCOPE

This Guidelines serves as guide for Universiti Malaysia Sabah (UMS) academic staff. The Guidelines could also be referred to by UMS undergraduate students. It encompasses the management of planning and implementation in the following aspects:

i.   distribution of evaluation components

ii. construction of test and examination questions

iii. construction of course work tasks

iv. examinations and marking

1.3 DEFINITIONS

1.3.1 Learning Outcome
Expectation of what students would know and are able to do upon completion of their course of study.

1.3.2 Test Specifications Table (TST)
Document outlining assessment planning according to topics and levels of difficulty.

1.3.3 Halo Effect
Positive effect on score due to positive impression of candidate.

1.3.4 Horn Effect
Negative effect on score due to negative impression of candidate.

1.3.5 Quiz
Limited response questions used to test achievement and mastery of parts of course.

1.3.6 Academic Training
Academic writing training based on theory or product output.

1.3.7 Industry Training
Practical training in industry within a stipulated time frame.

1.3.8 Clinical Training
Practical training for Psychology Programmes.

1.3.9 Teaching Practicum
Teaching Practicum in schools where the training is conducted for Education Programmes.

1.3:10 Open-book Examination
Examination which allows students to use specific reference materials in the examination hall.

1.3.11 Marking
Scoring process for answers or course work products.

1.3.12 Testing
Data collection process using tests as instruments.

1.3.13 Evaluation
Decision-making process or problem-solving based on outcome of assessment.

1.3.14 Formative Evaluation
Continuous evaluation for the duration of the course.

1.3.15 Summative Evaluation
Evaluation conducted at the end of semester or learning unit.

1.3.16 Assessment
Systematic data collection to ascertain position, level or status of student achievement for the purpose of producing improvement in learning.

1.3.17 Final Examination
Formal examination conducted within the stipulated time frame at the end of each semester.

1.3.18 **Non-formal Examination**
Final examination conducted outside of the stipulated time frame subject to approval from University authorities.

1.3.19 **Answer/Marking Scheme**
Answer script marking guideline for examiners.

1.3.20 **Multiple-choice Questions (MCQ)**
Objective questions that involve items with multiple-choice answers consisting correct answer and distractors.

1.3.21 **Structured Questions**
Subjective questions which require descriptive short answers.

1.3.22 **Essay Questions**
Subjective questions which require detailed answers.

1.3.23 **Bloom's Objective Cognitive Taxonomy**
Taxonomy which outlines six (6) levels of difficulty in cognitive work according to Bloom.

1.3.24 **Task**
A form of academic writing or activity which involves assessment based on course undertaken by students.

1.3.25 **Portfolio-based Assessment**
Assessment which consists the compilation of students' writing or task products.

1.3.26 **Test**
A measurement instrument to determine achievement and mastery of parts of course.

1.3.27 **Arts Presentation Test**
Test in the form of presentation to assess the level of mastery/proficiency in Arts.

1.3.28 **Mid-semester Test**
Formative and/or summative assessment conducted between week six (6) until week seven (7) of each semester.

2.1 **INTRODUCTION**

Academic assessment and evaluation must be based on course learning outcomes, and for professional programmes, should be based on the requirements of the relevant accreditation bodies.

Academic assessment and evaluation may be conducted through various methods and must be continuous. This Section outlines the assessment and evaluation components.

Assessment activities and instruments must be aligned with learning outcomes and learning and teaching activities.

2.2 **EVALUATION COMPONENTS**

The Evaluation components encompass formative and summative evaluations (not including 3u1i/2u2i programmes) as follows:

2.2.1 **Formative Evaluation**

Formative evaluation involves continuous or progressive assessment to identify strengths and weaknesses in students' mastery in the cognitive, psychomotor and affective aspects based on the learning outcomes of each course. This may be conducted throughout the semester before the final examinations. Among the activities for formative evaluation are:

(a) Test/Quiz

This evaluation involves assessment and the provision of feedback to students within an acceptable time period after assessment has been conducted. Assessments are in the form of multiple-choice questions, objective questions, structured questions, essays, pop quizzes and others which may be conducted in written form or online.

(b) Field Work

This evaluation involves the assessment of students' activities and achievement outside of the classroom/lecture hall. Process and work output are assessed based on written reports, log books, student presentations and others.

(c) Practical/Clinical Report

This evaluation involves the assessment of activities and student achievement in the laboratory or hospital. Work process and product are assessed based on practical/ clinical reports within a reasonsble tine frame after the completion of each activity.

(d) Oral Presentation

This evaluation involves the assessment of activities and student achievement in the course based on oral presentation.

(e) Oral Test

This evaluation involves the assessment of activities and student achievement in language mastery.

(f) Evaluation of Artistic Competency

This evaluation involves the assessment of performance and artistic presentation in shows, recitals or creative work. The allocated time for evaluation based on atistic performance is 10 to 20 minutes depending on the level of difficulty.

(g) Task

This evaluation involves the assessment of activities and student achievement in a course through task product. The process and product are assessed individually or by group. Evaluation is conducted by lecturers, peers and industry.

(h) Portfolio-based Assessment

Portfolio-based assessment involves interviews or presentation on the product. Interview or presentation is conducted for 20 to 30 minutes.

(i) Assessment of Service Learning

Assessment that involves service to the community, for example e-community.

2.2.2 Summative Evaluation

This evaluation involves the assessment of several learning units taught over one semester. Among the summative evaluation activities used are:

(a) Final Examination

The final examination must be aligned with learning outcomes dan taxonomy levels of the particular course. The structured final examination is in the form of multiple-choice questions, short essays, and long essays.

2.2.3 Combination of Formative and Summative Evaluations

This evaluation involves continuous assessment conducted for the purpose of improvement and evaluation at the final stage. Among the evaluation activities are:

(a) Mid-semester Test

This evaluation involves the assessment of students' course achievement in the middle of the semester. Among the forms of evaluation are summative tests, summative quizzes, and others. This evaluation is to be conducted in week 6 to week 8 to ensure it is formative and able to provide feedback to students.

(b) Industry Training

This evaluation involves the assessment of process and course achievement of students. Among the forms of evaluation are:

  i. Log book and Industry Training Report prepared by students and assessed by Academic Supervisor and/or another lecturer appointed by the Dean.

  ii. Observation and/or assessment by Academic Supervisor and/or appointed lecturer.

  iii. Observation and Student Achievement Report by Industry/Organisation Supervisor.

  iv. Presentation by student (if required).

(c) Teaching Practicum

This evaluation involves the assessment of process and course achievement of students. Among the forms of evaluation are:

  i. School Orientation Programme Report (ROS) prepared by students and assessed by Academic Supervisor and/or another lecturer appointed by the Dean.

  ii. Observation and assessment by Supervisor appointed by the Dean.

  iii. Observation and Student Practicum Assessment Report by Teacher Supervisor.

  iv. Assessment of professionalism by School Principal.

(d) Academic Training (Theoretical)

This evaluation involves the assessment of process and achievement of students based on set learning outcomes. Among the forms of evaluation are:

i.   Proposal Paper

ii.   Academic Training Report

iii.   Proposal Presentation and Dissertation Report

iv.   Other evaluation required and set by Faculty

The evaluation of this course is also subject to rubrics used by Faculty.

(e) Academic Training (With Laboratory activity)

This evaluation involves the assessment of process and achievement of students based on set learning outcomes. Among the forms of evaluation are:

Phase I

i.   Presentation of final year project proposal

ii.   Proposal Report

Phase II

i.   Dissertation

ii.   Final presentation of project (viva voce/poster exhibition/hands-on)

Course evaluation is subject to rubrics used by Faculty.

2.3   **MARK WEIGHTING DISTRIBUTION**

Mark weighting distribution is dependent on the assessment activities conducted and also relevance to features of course learning and teaching either theoretical or practical. The following tables for weighting distribution are subject to programme standards:

Table 1: Overall Weighting

Course Work Testing Activity	Maximum Mark Weighting
Task	30%
Progressive Evaluation (Skills)	10%
Quiz	10%
Presentation	20 %
Mid-semester Test	30%
Practical Report	30%
Field Work	30%
Final Examination	40%
Peer Assessment	10%

Table 2: Industry Training

Component	Mark Weighting
Assessment by Industry Supervisor	20% to 30%
Assessment by Academic Supervisor	20% to 40%
Report on Students' Industry Training	30% to 40%
Task and/or Presentation during/after Industry Training	0% to 20%

Table 3: Teaching Practicum

Component	Mark Weighting
Assessment of Report on School Orientation Programme (ROS)	10% to 20%
Assessment by Teaching Practicum Supervisor	30% to 50%
Assesssment at Teaching Practicum School	30% to 40%

Table 4: Academic Training

Component	Mark Weighting
Proposal	20% to 30%
Academic Training Report/ Dissertation	30% to 70%
Proposal Presentation	10% to 20%
Dissertation Presentation (Viva voce/ Exhibition/ Hands-on)	10% to 50%
Other evaluation by Faculty	10% to 50%

Table 5: Community-based Assessment

Component	Mark Weighting
Proposal	10% to 20%
Activity Implementation	30% to 50%
Final Report	20% to 30%
Community Supervisor	10% to 20%
Academic Supervisor	10% to 20%

2.4 OTHER RELEVANT DOCUMENTS

Assessment and evaluation guidelines are also specified in the following documents:

- Universiti Malaysia Sabah Undergraduate Study Procedures amendment 2018

- UMS Examinations Manual

- MS-ISO Quality Manual

- Guidelines on Good Practices for Student Assessment, MQA 2013

SECTION III

QUESTION CONSTRUCTION GUIDELINES

3.1 QUESTION DISTRIBUTION ACCORDING TO DIFFICULTY

Every curriculum is developed to allow for the assessment and evaluation of academic achievement based on level of difficulty. For this purpose, the use of Bloom's Taxonomy is suggested. For Core University, Core Discipline, Specialisation, Elective and Minor courses, the suggested level of difficulty is as specified below:

Table 5: Guidelines for Question Distribution based on Percentage of Level of Cognitive Difficulty according to Year of Study

Year	Low Level of Difficulty (I-II) Knowledge & Comprehension	Average Level of Difficulty (III-IV) Application & Analysis	High Level of Difficulty (V-VI) Evaluation & Synthesis
1	50% - 70%	30% - 50%	0% - 30%
2	10% - 40%	30% - 50%	10% - 30%
3	0% - 20%	30% - 60%	20% - 50%
4	0% - 10%	40% - 60%	30% - 60%

3.2 EXAMINATION PLANNING

a) Mid-semester Test

Mid-semester Tests are to be conducted at a suitable time to enable results to be communicated to students **at least on or before week Nine (9) of the semester**.

Mid-semester tests are to be for a maximum of three (3) hours.

b) Final Examinations

Time allocated for this examination is a maximum three (3) hours.

3.3   **QUESTION FORMAT**

Question format must be able to assess the stated learning outcomes for the course. Guidelines for question construction are as follows:

a)   Subjective questions may be in structure form, essay and/or case study.

b)   Objective questions may be in the form of Multiple-choice Questions (MCQ), True/False, or filling in blanks.

c)   For subjective questions with choices (e.g. Choose two out of four questions), each question must have the same level of difficulty.

d)   Examination question planning must be based on Test Specifications Table (TST) (test blueprint) (example: Section I in Appendix A) with the content title and level of difficulty stated.

3.4   **QUESTION CONSTRUCTION GUIDELINES**

a)   Multiple-choice Questions (MCQ)

   i.   Multiple-choice Questions (MCQ) may be used for Mid-semester tests and final examinations. The level of difficulty and scope of question must be aligned with the Test Specifications Table (TST) based on Bloom's Taxonomy.

   ii.   University and Faculty core courses with level of difficulty one (1) to four (4) on Bloom's Taxonomy are allowed to fully use the MCQ format.

   iii. For 2nd to 4th Year courses, the mark allocated for MCQ must not exceed one third (1/3) of the overall examination paper marks.

   iv.   MCQ answer choices must be consistent. For example, the number of choices (whether four or five) must be consistent for all items.

   v.   Features of this type of question is shown in Appendix B.

b)   Subjective Questions

   i.   All questions in the same grouping must have similar levels of difficulty based on Bloom's Taxonomy.

   ii.   For oral questions, each candidate is allocated between 10 to 20 minutes.

   iii. Level of difficulty for each subjective question must be based on the set TST.

   iv.   Features of this type of question are shown in Appendix B.

3.5 ADMINISTRATION OF FINAL EXAMINATION QUESTION PAPER

i. Questions are to be constructed by lecturers managing the course. Marking scheme is to be prepared together with question papers.

ii. Review of questions must be conducted initially at programme level. This review should involve a panel of three (3) members. Review must consider content and level of difficulty.

iii. If questions are chosen from question banks, the selected questions used to construct the new examination question paper must not exceed 30% of the total from the previous examination question paper.

iv. Questions related to labotatory work must be based on laboratory work conducted by students themselves.

v. Mark allocation for each question must be stated after each question sub-item.

SECTION IV

MARKING

4.1 MARKING FOR EVALUATION COMPONENTS

i. Students must be briefed on all mark distribution weighting as outlined in the Course Description Table (Table 4).

ii. All marking must be implemented/exercised in a valid, reliable and transparent manner.

iii. Lecturers must provide students with clear written instructions on the requirements of the specific tasks.

iv. Lecturers must exercise integrity and ethics in marking students' answer scripts. The halo effect and horn effect must be avoided.

v. Lecturers must provide feedback to students regarding tasks that have been examined and graded.

vi. Marks for every formative evaluation must be communicated to students before week fourteen (14).

4.2 ANSWER SCRIPTS FOR EXAMINATION AND TEST

i. Final examination answer scripts which have been graded must be returned to the Dean's Office as stipulated under MS ISO (UMS/PK/9) procedures.

ii. Marking process is to be moderated especially where scripts are marked by more than one examiner.

iii. A second examiner from among lecturers in the same field/specialisation is to be appointed to read student answer scripts by random sampling method should the need arise for re-examination.

4.3 MARKING FOR SOFTSKILLS

i. Softskills evaluation is to use rubrics based on assessment taxonomies such as Bloom's Cognitive Taxonomy, Simpson's Psychomotor Taxonomy and Krathwohl's Affective Taxonomy. Examples of rubrics as suggested by the Ministry of Higher Education (MOHE, 2016) may be modified as guideline for the construction of measurement rubrics.

ii. Marking criteria must be provided together with the tasks assigned to students.

4.4 **STANDARD SCORE CALCULATION**

i. In the event that the score distribution for a particular course raises issues such as very high failure or excellent percentages, the Academic Committee at the respective Faculty or Centre is empowered to decide for marks to be recalculated using standard scores.

ii. Standard score (T) should be calculated using the following formula: y or c

whereby:

$$T = 65 + \frac{10(x - y)}{s}$$

$x =$ raw score

$y =$ min mark for course

$s =$ standard deviation

In this case, the standard score min is 65 and standard deviation 10. This value may be modified according to course or Faculty requirements.

4.5 **REFERENCE MATERIALS**

Manual Sistem Pengurusan Kualiti MS ISO 9001: 2015 (UMS/PK/08 dan UMS/PK/09).

Penilaian dan Pentaksiran Peperiksaan Program Perubatan, Fakulti Perubatan UMS.

Guidelines to Good Practices: Assessment of Students, Malaysia Qualifications Agency (MQA) (2013).

Program Standards for Medical and Health Sciences by Malaysian Qualification Agency Engineering Program Accreditation Manual (2012), Board of Engineers (BEM).

Guidelines on Standards and Criteria by Nursing Board Malaysia.

Standard Programmes:

i.   Accounting

ii.   Arts & Design

iii. Biotechnology

iv.   Business Studies

v.   Computing

vi.   Creative Multimedia

vii. Early Childhood Education

viii. Education

ix. Engineering and Engineering Technology

x. Finance

xi. Hospitality & Tourism

xii. Information Science

xiii. Islamic Studies

xiv. Media & Communication Studies

xv. Medical and Health Sciences

xvi. Muamalat and Islamic Finance

xvii. Performing Arts

xviii. Psychology

xix. Language

EXAMINATION QUESTION PAPER MODERATION FORM   **SEM** _____ **SESSION** _____   **DATE:** _____

Course: Code/Name		Moderator 1	
Name of Lecturer		Moderator 2	

Checklist for Question Paper

Inner Pages	Yes	No	Cover Page	Yes	No
Course code is printed on right hand side on page (font type 'Bold Tahoma' size 11)			Front page is according to UMS format		
Page number is printed in the middle at bottom of page (font type 'Bold Tahoma' size 11)			Date, Duration, Course Name and Course Code are correct		
Figures and tables are correctly labelled and numbered (Bold)			Page total and instructions on front page are correct		
Mark weighting for each question is shown and acceptable					
Mark total (each question) and overall marks are correct			**Checklist for Answer Script**	Yes	No
No typing error is detected			Answer scheme provides full answers for each question		
Each Appendix (if any) is referred to accordingly			Answer scheme shows mark distribution		

No.	Course Learning Outcome (CLO)
1	
2	
3	

SECTION 1:

Teaching and Learning Taxonomy: For Moderator, please use/ensure 1) suitable Learning Domains are accurately mapped; 2) marks are appropriate for intended domain level; and 3) topics included are accurately mapped to course outcome.

TOPIC/ CHAPTER COVERED	MAPPING OF COURSE LEARNING OUTCOME	LEARNING DOMAIN LEVEL (BLOOM'S TAXONOMY)						Moderator 1 Mark (√) | (X)			Moderator 2 Mark (√) | (X)		
		1	2	3	4	5	6	1	2	3	1	2	3
Financial Assets				1(a,b,c,d)(25)									
Financial Liabilities			2(a)(i,ii)(5)	2(a)(iii,iv)(5) 2(b)(15)									
Investment Property		3(a)(5)		3(b)(14)									
Deferred Tax			3(c)(8)										
Leases		4(a)(i)(2)		4(a)(ii)(5) 4(a)(iii)(5)									
Intangible Assets			4(b)(i)(6)	4(b)(ii)(5)									
TOTAL MARKS		7	19	74									

Note:_____

_____

Teaching and Learning Taxonomy Guidelines
Cognitive Domain (C) involves knowledge and expansion of intellectual skills.

Level	Ability
C1	**Remembering:** Recalling data or information. **Possible key words:** Specify, Explain, Identify, List, Find, Label, Record, Choose
C2	**Understanding:** Understanding meaning, translation, interpolation, and interpretation of instruction and problem. State problem in own words. **Possible key words:** Clarify, Summarise, Compare, Relate, Predict, Differentiate, Generalise, Illustrate, Match, Change, Transform
C3	**Applying:** Using concept in new situation or usage of abstract that cannot be explained. Applying what is learnt in the classroom into new situations at the work place. **Possible key words:** Solve, Apply, Select, Modify, Classify, Show, Construct, Demonstrate, Illustrate, Change
C4	**Analysing:** Separating material or concept into several components to ensure organisational structure is understood. Able to differentiate between fact and conclusion. **Possible key words:** Analyse, Measure, Classify, Compare, Contra, Categorise, Contrast
C5	**Evaluating**: Considering value of an idea or resource. **Possible key words**: Deduce, Suggest, Conclude, Critique, Judge, Support, Value, Decide, Gauge, Simplify, Select
C6	**Creating:** Constructing structure or design from various elements. Putting several parts together to form a whole, with emphasis towards creating new meaning or structure. **Possible key words:** Invent, Compose, Structure, Produce, Formulate, Originate, Review, Predict, Organise, Arrange, Create, Combine

SECTION 2 (A):

NO.	MODERATOR 1	
1.	Comment:	Correction / Amendment if any:

_____

Signature of Moderator (1)

Date:

SECTION 2(B)

NO.	MODERATOR 2	
1.	**Comment:**	**Correction / Amendment if any:**

_____

Signature of Moderator (2)

Date:

SECTION 2 (C)

NO.	LECTURER
1.	Amendments made (State corrections or amendments made by Lecturer based on suggestions from Moderator)

_____

Signature of Lecturer

Date:

SECTION 3

NO.	HEAD OF PROGRAMME
1.	Verification (Verifying whether correction or amendment has been done by Lecturer)

Verified by:

_____

Head of Programme

Date:

FEATURES OF EXAMINATION QUESTIONS

Mid-semester Test	Final Examination
Multiple-choice Questions (MCQ) c) Suggested number of questions: 10-30 d) Duration for answering: For questions requiring lower order thinking skills, a question will take 1-2 minutes. For questions requiring higher order thinking skills, a question will require 2-4 minutes. e) Maximum time allocated for examination: 1 hour	**Multiple-choice Questions (MCQ)** a) Suggested number of questions: 60-120 b) Duration for answering: For questions requiring lower order thinking skills, a question will take 1-2 minutes. For questions requiring higher order thinking skills, a question will take 2-4 minutes. c) Time allocated for examination: 2-3 hours
Structured Questions a) Suggested number of questions: 2-4 questions for example 1 question has 4 items. b) Duration for answering: 2-5 minutes for each item. c) Time allocated for examination: 1 hour	**Structured Questions** a) Suggested number of questions: 3-5 questions for example 1 question has 4 items. b) Duration for answering: 2-5 minutes for each item. c) Time allocated for examination: 2-3 hours
Essay Questions a) Suggested number of questions: 1-2 b) Duration for answering: 15-60 minutes for each question. c) Time allocated for examination: 1-2 hours	**Essay Questions** a) Number of questions to be answered: 2-4 questions b) Duration for answering: 30-45 minutes for each question. c) Time allocated for examination: 2-3 hours