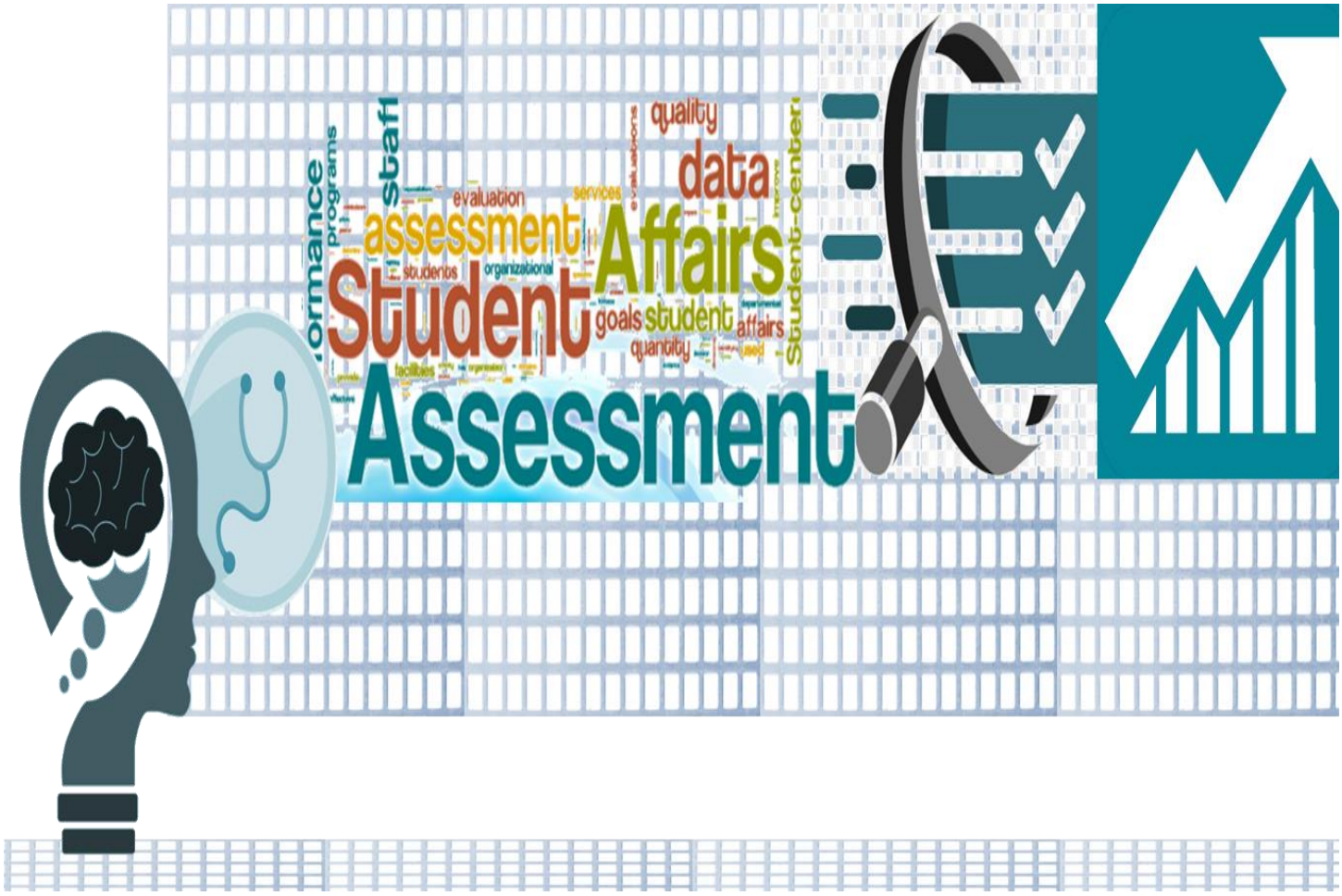
Assessment & Evaluation unit

وحدة القياس والتقييم كلية الطب - جامعة الإسكندرية

TEACHER ASSESMENT GUIDE

ALEXANDRIA FACULTY OF Medicine (AFM)



APPENDIX

Assessment *is an integral component of the learning process and is the engine that drive students' learning. It is also recognized as one of the key players that can provoke curricular development.*

Beyond the full responsibility of faculty staff members in constructing the varied ongoing faculty assessment,, an operational centralized Assessment Unit [AU] has currently become mandated to share in assessment organization. This is in adjustment to the recommendations of NARS 2017 and in the context of the on-going reform of Medical Faculties. This unit is meant to provide support and share in implementation of the faculty policy in conducting integrated, valid and reliable students' evaluation, in the varied learning domains.

THE ALGORITHM OF INTERACTION BETWEEN AU and DIFFERENT FACULTY DEPARTMENTS in CONDUCTING EXAMS of CORE MEDICAL COURSES

I. PROCESSING A COURSE EXAM

A. Pre-Exam Preparation

At the start the AU + General Curriculum Coordinators Construct the Exam BLUE PRINT regarding the End of Block MCQ Exam (EB) (whether Part 1 or Part 2) and the End of Semester Block (ES) (whether the MCQ or written Exam) *following the allocated degree & teaching load of each discipline in the block*

Then all Departments are notified by the demanded number and quality of questions needed from each discipline sharing in the block**.**

All Department are also notified by the Number of Assessment Versions needed for different years of that phase whether for **END OF BLOCK (EB) or END OF SEMESTER (ES)** exams of the specified courses allocated in a year

Currently For 1st Year; Questions are needed to cover: 1 Mock for EB + 7 Versions for EB National + 1Version EB International + 1 Mock for ES + I Versions for ES National + 1Version for ES International + 1 for Excuses + 1 for rest + (one for delays only in foundation and blood) TOTAL IS: 14-15 Versions

Currently For 2nd Year; Questions are needed to cover: 1 Mock for EB + 6 Versions for EB National + 1Version EB International + 1 Mock for ES + I Versions for ES National + 1Version for ES International + 1 for Excuses + 1 for rest + TOTAL IS: 13 Versions

1. **DAY ONE, starting 1-2 weeks BEFORE START OF A COURSE** [Once the ILOs & a soft copy of content is available],
   ALL INVOLVED STAFF assigned to a course or specified by the department will begin to construct questions fitting to guide lines provided by the assessment unit..
   Supplied MCQs, should be sorted into

   Low: (Testing recall & understanding) or **High** (Testing application, & problem solving)
   Laying some scenarios or EMQs is welcomed

*The **DISCIPLINARY CURRICULUM REPRESENTATIVE** of a course must interact with his/her counter **Disciplinary Phase Assessment Coordinator t**o suggest areas of integrative overlap for construction of integrative questions. Secondary to that **ALL Disciplinary Phase Assessment Coordinators Together***

construct: the integrated questions, more scenarios, more EMQs that is enough to cover the notified versions)

2. **On 1st day of 2nd week of a course** the **Head of Departments &/or Departmental Assessment Year Coordinators** will have recruited the ***NUMBER & QUALITY of questions demanded***. They would have CHECKED them regarding:
   - Alignment to ILOs
   - Genunity
   - Leveling into: as **LOW** (recall & understanding) or **HIGH** (evaluation & problem solving)

   The same applies to the four **Disciplinary Phase Assessment Representatives** in relevance to their ***collective constructed block questions***

3. **Throughout the 2nd week**

   Meetings for further verification and refinement of questions by AU members, to set decisions concerning

   Those that are accepted. They are uploaded by ass. Coordinators

   or Those that need readjustment and approval. Once adjusted then become uploaded.

   or Those that are rejected as such and need reformulation. Once approved they are uploaded They can be discarded if non-amenable to reformulation

N.B. ALL UPLOADED QUESTIONS ARE FILED IN THE BANK POOL AS LOW OR HIGH FOR EACH LECTURE IN THE COURSE

4. **At the end of 2nd week and beginning of 3rd week**

   The Phase Coordinators are assigned to

   a. Distribute the Collective questions along the different versions
   b. Construct a **Complete Matrix of CONTENT** to all uploaded questions available in pool of the bank
   c. Extract and delineate the **Complementary MCQs Matrix** needed to complete the versions

B. Pre-Exam Finalization

During the 3rd week

a. The formulated **MOCK EXAM** is released for ***student's formative assessment*** and mounted on the **STUDENT PORTAL** following the same blue print as the summative exam versions

b. The **HEAD OF DEPARTMENT** responsible for conducting the concerned block exams will come to **Computer Extract the MCQs** of different demanded versions needed for ***student's summative assessment.*** *This is conducted* ***in light of*** the **Complementry MCQs Matrix** allocated to each version that is supplied by the AU

c. The **last 2 days** are left for **Technical Finalization** of E-Exam setting and **Mounting On Servers** according to a justified time table by the E-Learning Center

II. POST EXAM

A. ANALYSIS

1. **Analysis of each exam item;** the difficulty index, the discrimination index and the distractor analysis is identified. According to the cut off points specified in the following table.

Cut-Off points for Multiple Choice Questions		
Facility q Index	Discrimination Index	Action
➢ **90%**	Any percentage	Discard from bank and send for revision
70-90%	< 30%	Discard from the bank & send for revision
	➢ 30%	Included in the bank
20-70%	➢ 20%	Included in the bank
	<. 20%	Included & send for revision
< 20%	➢ 30%	Included in the bank
	< 30%	Discard from the bank and send for revision

All Discarded Questions will be analyzed regarding the distractor efficiency and any distractor with a percentage less than 5% must be removed or modified.

Applying that;

Only **optimum questions are uploaded** in the **Final Central Assessment Bank**.

The **too easy** and **too difficult** and **questions with negative discrimination** are **discarded**

The **remaining non-optimal questions** are otherwise sent back to departments for readjustment and loading them back to bank pool for re-use.

2. **Analysis of each version**, as to highest, lowest mean and median marks, is recorded and reported. Presence or absence of skewing , and exam internal consistency are also checked.

Moderation of marks for the atypical version relays on calculating the mean of medians of all other versions and justifying its degrees accordingly. Adding five fixed undefined questions without marks for students to answer is currently adopted for internal calibration.

B. HANDELING

1. **VD-Students Affairs** will accept **Student's Appeals** regarding examination questions if they fulfill the regulations set for acceptance of these appeals.

2. **AU** will submit the relevant **Results of Item Analysis and Analysis of Individual Versions** to the administration or to the questioned department when feedback to students appeals are required.
3. **Departments** will review the raised appeals and will consider the results of item analysis**. They will respond by a written feedback report** to clarify all raised issues of concern whether being related to:

   a. The **answer key** notified that may happens to show

      ■ Wrongly marked correct answer ■ Double answer ■ ….etc.

4. **AU** will share in:

   a. Clarifying analytic data relevant to **students' appeal and sharing in** decision of Mark Moderation when-ever needed

   b. Adopting permissible ways to supply feed-back however and whenever possible without exposure of question and bank confidentiality

FORMATS (TEMPLATES) For DIFFERENT WRITTEN QUESTIONS TO BE SENT FROM DEPARTMENTS TO AU

Abbreviations of Commonly used Written Questions;

MCQs: Multiple choice questions
EMQs; Extended matching questions
SEQs; Short essay questions
MEQs; Modified essay questions
PSQs; Problem solving questions

General Guidelines

- Please send each group of questions in the following relevant provided formats; preserving the font, margin and spacing characters

- Per a Single Department; All staff involved in a course should donate questions from each lecture For each lecture by a department in the course;
  - The number of delivered formulated disciplinary questions should be;
    $\geq$ 6 MCQs &/or EMQs $\geq$ 4 SEQs &/or PSQs
    These questions should **cover the varied ILOs** of the specified lecture.
  - These questions should be **categorized** into two groups for assessing either;
    a. Recall & Understanding
    b. Analysis, Evaluation & Problem-Solving Skills

- All Departments involved in the course should share to formulate **Integrated Questions** by their Departments' curriculum representatives.
  - These questions too should be presented as
    MCQs &/or EMQs or as SEQs &/or PSQs
  - The number of sharing departments should be stated
  - Their intellectual rank should better be categorized

- All questions must be supplied with their relevant answer sheets as shown in the formats

A. DISCIPLINARY OBJECTIVE [MCQs &/or EMQs] FORM

Course…….. **Department of …….**

1st lecture ; State Title

Questions assessing Knowledge & Understanding

1. **……..**?

   a. ----------
   b. ----------
   c. ----------
   d. ----------

2. **……..**?

   a. ----------
   b. ----------
   c. ----------
   d. ----------

Questions assessing Application, Problem Solving Skills or any other higher Intellectual Skills

3. **……..**?

   a. ----------
   b. ----------
   c. ----------
   d. ----------

At least up to 6 questions / lecture

Answer Key: **The answer is better to be highlighted**

_____

2nd lecture: State Title

_____

3rd lecture: State Title

_____ etc.

Till the end of lectures enclosed within the specified course

B. DISCIPLINARY SHORT or MODIFIED ESSAY or IN CONTEXT OF CASE OR PROBLEM-SOLVING QUESTION FORM

Course…….. **Department of …….**

1st lecture; State Title

Questions assessing Knowledge & Understanding → using SHORT ESSAY QUESTIONS

Questions assessing Application, Problem Solving Skills or any other higher Intellectual Skills
→ using still a SHORT ESSAY question
or better

a CASE or PROBLEM BASED Vignettes with EMQs or modified essay questions …etc. being the related lead in question.

At least up to 4 questions / lecture

Model Answers;

All questions must be presented with its model answers
Specifying for each the **maximum score for the whole question and the different sub-scores to each of the written response element demanded in the question**

_____

2nd lecture: State Title

_____

3rd lecture: State Title

_____ etc.

Till the end of lectures enclosed within the specified course

C. INTEGRATED INTERDEPARTMENTAL COURSE QUESTIONS

Course……..

Type of Question; MCQ, EMQs….
Shared Departments Involved; …..

1**. ……..**?

a. ----------
b. ----------
c. ----------
d. ----------

2**. ……..**?

a. ----------
b. ----------
c. ----------
d. ----------

……..etc.

Answer Key: **The answer is better to be highlighted**

Type of Question; SEQs, MEQs, in context of Case Or Problem-Solving Vignettes
Shared Departments Involved; …..

1. **……**
2. **…….**
3. **…… etc.**

MODEL Answers must be sent with the relevant question

1. **……**
2. **…….**
3. **…… etc.**

GUIDELINES
FOR CONSTRUCTING
EFFECTIVE WRITTEN EXAMS

1. CONSTRUCTING EFFECTIVE MULTIPLE-CHOICE QUESTIONS (MCQS)

An MCQ; Is an objective question; whose correct answer is selected from predetermined alternatives. It can test Knowledge and Understanding > Higher-order intellectual skills (apply, interpret, justify, reason, ….) It is made of;

- **A stem;** a question or a problem with lead-in question (better used) / a statement (could be used)
- **Alternatives (Options);** is the list of suggested solutions; *one correct* **(answer) +** *rest are incorrect* **(distractors)**

General rules

- Base each question on a course learning outcome / avoid those to be answered from common knowledge
- Test application and critical thinking rather than just knowledge recalled.
- Use simple sentence structure / accurate precise wording /
- Do not trick. If questions or its options can be interpreted in two ways you must reformulate
- Don't allow an information in one question to be used to answer another question!!!
- Don't copy and paste from ready-made question.
- Grantee that each question is not "hinged" to the answer of another related item

What to do	What to avoid
In Writing the Stem	
-Should be clear enough (arrive to answer while options covered.) -Eliminate excessive wording / irrelevant information -Define abbreviations when used. -Use long stem and short options	-Single word as a stem -Negatively phrased as (what is incorrect /all are correct except….) -Use of multiple negatives -True or false
In Writing the Options	
-Keep their number similar (usually 4) -Keep them nearly the same length. -Put in meaningful order; numerical, chronological, alphabetical... - Keep them grammatically consistent with the stem. - Make them homogenous (along a theme) as diagnosis/ complication/ treatment/ description/ investigation…etc	-Overlapping choices (Make each mutually exclusive) -Using "All of the above", "None of the above" -Absolute terms: "always", "never", "all", "none". -Vague terms: "seldom", "rarely", "occasionally", "sometimes", "few", "many", "could" or "can". -Verbal clues that enable selection of correct answer or elimination of incorrect distractors i.e. as clues of single or plural / similarity of wordings
In Writing the Correct Answer	
Check the correct response is indeed correct.	Having two correct; one being more correct than the other
In Writing the Distractors	
- Make them: common mistakes, common misconceptions or statements appealingly accurate but do not meet full requirements of a correct answer - Make them different from one another with no overlap - Better if they are spread along a continuum from correct to incorrect - Must be grammatically similar to the correct answer & consistent with the stem	Don't use silly distractors (which could be chosen by 5% of students)

N.B. *Better use action verbs whenever it is feasible*

REVISED Bloom's Taxonomy Action Verbs

Definitions	I. Remembering	II. Understanding	III. Applying	IV. Analyzing	V. Evaluating	VI. Creating
Bloom's Definition	Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.	Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.
Verbs	• Choose • Define • Find • How • Label • List • Match • Name • Omit • Recall • Relate • Select • Show • Spell • Tell • What • When • Where • Which • Who • Why	• Classify • Compare • Contrast • Demonstrate • Explain • Extend • Illustrate • Infer • Interpret • Outline • Relate • Rephrase • Show • Summarize • Translate	• Apply • Build • Choose • Construct • Develop • Experiment with • Identify • Interview • Make use of • Model • Organize • Plan • Select • Solve • Utilize	• Analyze • Assume • Categorize • Classify • Compare • Conclusion • Contrast • Discover • Dissect • Distinguish • Divide • Examine • Function • Inference • Inspect • List • Motive • Relationships • Simplify • Survey • Take part in • Test for • Theme	• Agree • Appraise • Assess • Award • Choose • Compare • Conclude • Criteria • Criticize • Decide • Deduct • Defend • Determine • Disprove • Estimate • Evaluate • Explain • Importance • Influence • Interpret • Judge • Justify • Mark • Measure • Opinion • Perceive • Prioritize • Prove • Rate • Recommend • Rule on • Select • Support • Value	• Adapt • Build • Change • Choose • Combine • Compile • Compose • Construct • Create • Delete • Design • Develop • Discuss • Elaborate • Estimate • Formulate • Happen • Imagine • Improve • Invent • Make up • Maximize • Minimize • Modify • Original • Originate • Plan • Predict • Propose • Solution • Solve • Suppose • Test • Theory

2. CONSTRUCTING EFFECTIVE EXTENDED MATCHING QUESTIONS [EMQs]

An EMQ: Is a set of objective item questions, whose correct answers are selected from one pre-determined longer list of alternatives (options). It tests knowledge and understanding but can go to higher-order intellectual skills (apply, interpret, reason, ….) more than MCQs.
It requires the presence of four components;

- A **theme;** on which the set items is centered on; i.e viewed as a title for the set.
- **A list of (*lettered)* answer options (alternatives);** far exceeding the number of posed item stems.
- **A lead-in statement**; provides the direction of the set and clears the task demanded from students without even having to look at the answer options.
- **An item stems** [at least two *(numbered)*]**;** presents the questions to be asked by students to be written as a vignette (scenarios and problems) or non-vignette (items) form

General rules:

- This type of questions suits the e-exam format **not** the paper- based one.
- Using quite-long item stems and short answer options is more effective.

What to do	What to avoid
In Writing the Theme	
-Should be clear -Reflecting curricular objectives.	-long themes
In Writing the Answer Options	
- Short wordings, drawings, pictures…. - Never < five / Range up to 16 put in logical order - All are relevant to the task - Include a single best answer for each stem. - NO verbs in the options.	- Overlapping choices (Make each mutually exclusive) - Heterogeneous options
In Writing the Lead-In Statement	
- Establish a relationship between items and options - Should be one that fits all items within the set - It is to select one best answer	- Non-specific lead-ins, such as "Match each item with the best option"
In Writing the Stem	
- Stems should be similar in structure - Should be clear enough, containing all the needed relevant information to answer the question	- Tricking and misleading information - Stems cannot be answered without reading the options

Chest Pain

(A) Angina, stable
(B) Angina, unstable
(C) Aortic dissection
(D) Aortic stenosis
(E) Herpes zoster
(F) Lung cancer
(G) Pericarditis
(H) Pneumonia
(I) Pneumothorax
(J) Pulmonary embolus
(K) Rib fracture
(L) Tuberculosis

For each patient with chest pain, select the most likely diagnosis. Each option can be used once, more than once, or not at all.

1. *An 18-year-old athlete has sudden onset of right-sided pleuritic pain, shortness of breath, and decreased breath sounds on the right.*

2. *A 52-year-old man has recurrent, achy chest discomfort with exercise; symptoms are relieved by rest.*

3. CONSTRUCTING EFFECTIVE SHORT ESSAY QUESTIONS [SEQs]

An Essay Question; *is an opened ended question that is largely subjective.*

A SEQ; is a modified version; being focused and based on a specific objective to enhance its objectivity. It assesses students' mental process by permitting them to write down their own words in a focused response. That is why it can evaluate higher order intellectual skills (Application and Problem Solving). So please, try to invest it in high rank questions.

General rules

- Link it to a specific course learning objective.
- Use it to assess application and critical thinking and please limit its use in assessing knowledge.
- Better formulate using the proper action verb, better to test intellectual skills of students.
- Do not trick students by using vague, non-familiar wordings or those interpreted by different ways.
- Specify clearly the number of responses needed, when answering such questions.
- Develop a predetermined marking scheme by assigning a specific mark to each part of demanded response in the answer. This is meant to increase the objectivity.
- The answer of the question should not exceed 5 lines.
- Should be submitted with a model answer.

What to do	What to avoid
In Writing the Question	
- Formulate clearly - Reflect a curricular objective - Specify the different demanded response - Cautiously select, the proper action verb from the attached list. This is to determine the intellectual level that is demanded by the question which will specify its rank.	- use of vague or tricky wording - use of expanded responses that will needed to be answered in more than 5 lines

A Model answer;

Is a guideline for the assessor that will indicate which students' answers get which grade.

General rules during its Preparation:

- It is best prepared during the formulation of the exam questions
- It should include the relevant response elements that are demanded with referral to their weight and priority
- The maximum score for each question should be stated and the different sub-score to each response element should be assigned and demonstrated by short wordings, a drawing or picture, a chart or table……. etc
- Should specify the appropriate dealing and scoring if a partially correct answers or an answer that was not expected exist or if wrong answers are present along with the correct response, or if an earlier error has made the rest of answers wrong ……. etc.

Common Action Verbs Used in Essay Questions

Essay term	Definition
Name, List Enumerate	Convey the main points without explanation
Differentiate	Identify the differences between two or more phenomena. Say if any of the differences are more important than others.
Summarize	Give a shorter version including the main facts & general examples and omitting superfluous information.
Outline	Address the main points of the topic concentrating on the main structures and interrelationships rather than minute detail.
Justify	Make a case by providing a body of evidence to support your ideas and points of view. Consider opinions which may run contrary to your own before stating your conclusion.
Interpret	Comment on any significant patterns and causal relationships.
Identify	Determine the key points to be addressed its implications.
Explain	Clarify a topic by giving a detailed account as to how and why it occurs, or what is meant by the use of this term in a particular context.
Evaluate	Provide evidence taken from a wide range of sources which both agree with *and* contradict an argument. Come to a final conclusion, basing your decision on what you judge to be the most important factors and justify how you have made your choice.
Discuss	it is a form of a written debate including reasoning, backed up by carefully selected evidence to make a case for and against an argument, or point out the advantages and disadvantages of a given context end by a conclusion.
Describe	Provide a detailed explanation as to how and why something happens.
Demonstrate	Show how, with examples to illustrate.
Define	To give in precise terms the meaning of something.
Contrast	Similar to compare but concentrate on the **dissimilarities** between two or more phenomena, or what sets them apart. Point out any differences which are particularly significant.
Compare	Identify the **similarities** and **differences** between two or more phenomena. Say if any of the shared similarities or differences are more important than others.
Clarify	Explain a complex process in simpler terms.
Analyze	Break the topic into its constituent parts. Look in depth at each part using supporting arguments and evidence for and against as well as how these interrelate to one another.

4. CONSTRUCTING EFFECTIVE PROBLEM-SOLVING QUESTIONS[PSQs]

A PSQ; Is essentially a lead-in-question designed around a problem which could be a real situation, a clinical vignette, common statement …etc. The problem can allow integration of different medical knowledge together (from varied basic and/or clinical disciplines). This permit posing more than one integrative question centered around its theme.

It is specialized to evaluate higher order intellectual skills by assessing students' ability to accurately analysis and evaluate …etc. components of the situation and arrive to a positive applicable solution(s).

General rules:

- Better focus the theme of the problem on common health problems, critical situation, important task…..
- The problem should contain only the needed relevant information, to answer the lead-in question (s).
- It is better to incorporate the basic science within the clinical scenarios
- The content should be designed appropriate to the level of demanded difficulty
- The lead-in-question should reflect the level knowledge expected of the candidates
- The lead-in format can be in the form of an MCQs, EMQs, SEQs, MEQs [obeying the rules of each type of questions)

What to do	What to avoid
In Writing Lead-in Questions	
- It should pose a decision-making task that would be expected from undergraduates not specialists - Should be clearly formulated in direct link to and can only be answered from information within the problem.	-Formulation that can be answered without the need of the problem, otherwise a worthless pseudo-scenario is created.
In Writing the Problem	
Should include only relevant information so as to answer the demanded task It better not to exceed 4-5 lines	-Tricky and/or unnecessarily complicated vignettes or tasks - Excessive un-necessary irrelevant information - Clinical situations that would be handled by a (sub) specialist

N.B. Tips for Constructing a Clinical Vignettes:

- Describe the patient age, Gender….etc (e.g., A 45-year-old man)
- May include some or all of the following components: (according to the needed information)
  - Site of Care (e.g., comes to the emergency department)
  - Presenting Complaint (e.g., because of a headache)
  - Duration (e.g., that has continued for 2 days).
  - Patient History (with Family History?)
  - Physical Findings
  - +/- Results of Diagnostic Studies
  - +/- Initial Treatment, Subsequent Findings, etc.

N.B. Tips for its Relevant Lead-In-Questions:

- Focuses on; Etiology, Investigation, Prognosis, Epidemiology, Treatment, Prevention, Disease mechanism, Clinical findings, Ethical dilemma, relevant basic concepts, …etc
- **Examples;**
  - What is the most likely pathogen causing the current problem?
  - State the likely histopathological feature expected in this patient?
  - Clarify the cause of the problem as to whether it due to: a deficiency, an excess or an imbalance of a substrate?
  - Specify the most appropriate investigation or screening test that is essential for the diagnosis?
  - Mention three expected clinical features that could be additionally present in this patient?
  - Determine two possible complications that are likely to develop in this patient?
  - The condition could have been simply prevented by administration of which of the following agent(s)?

- Suggest the possible immunizations that must be given at this point of patient's condition?

N.B. Tips for Constructing an Integrated Problem Solving Question

- Other than the clinical vignettes, real life situations or common statement can be used so long that they could be designed and shared between different departments participating in the same unit.
- **Examples;**

In a cell therapy centers, stem cell culture was used to test the efficacy of 2 drugs. The first was protein-based drug and the second was fat soluble drug.

a. Describe the EM picture of the first structure that should be passed by both drugs.
b. Describe the mechanism of transport of each drug to the cytoplasm.
c. Analyze the mentioned mechanisms at the molecular level.

5. CONSTRUCTING EFFECTIVE MODIFIED ESSAY QUESTIONS [MEQs]

MEQs; are series of question posed in sequence based on a problem, case scenario, …etc. The format of each of such questions closely resembles short answer essay rather than a regular essay question.
It evaluates higher order intellectual skills (Analysis, Application, Evaluation, Reflection…etc.), thus help to test students' problem solving and decision-making abilities

General rules for Constructions

- It initiates by providing some short-limited information of certain situation, followed by one-several relevant short answer question.
- In response, it requires the application of what has been learnt, in the context of the given situation.
- This is further followed by building-up of more information that is revealed in steps and that is paralleled in a sequential-manner by a new relevant question.
- The posed questions are constructed around the specific theme of the escalated information
- The sequence of information presented resembles real-life, which will bring in realism and improve face validity.

N.B. Certain amount of skill is required in their construction. This is to avoid;

a. giving the answers to previous questions in the new information or question that follows

b. Repeatedly penalize or punish a student for making an early error

It is scored against a **Model Answer** that is constructed by the same rule specified for SEQs.

Example;

A 60 years old diabetic, hypertensive patient has been controlled on gliclazide and ramipril for the last few years. Five days ago, he began to develop mild restro-sternal chest pain and dyspnea on exertion. After examination, ECG tracing and biochemical testing he was prescribed isosorbide dinitrate twice daily to relieve his symptoms.

a. State the likely lipid profile that was found in that patient?
b. Describe the possible etiopathological causes that led to the development of such symptoms?
c. Specify the name of two drugs, that can help to halt progression of the case to an acute emergency insult?

After several days of pain relief, he happened to woke up early this morning on severe crushing retrosternal pains that were not relieved by nitrates. By the time he was rapidly transferred to the ER he seemed to be entering into a state of shock. Drug history revealed, that without medical consultation, he began the occasional intake of tadalafil a year ago, to improve his erectile dysfunction.

a. Explain the possible explanation of his current acute symptoms?
b. Which biochemical marker is routinely ordered, to help in the diagnosis of these findings?
c. State the possible ECG findings that might be observed in his condition?
d. After managing that patient, what should be the instructions given to him to avoid re-development of such hazardous acute insult?

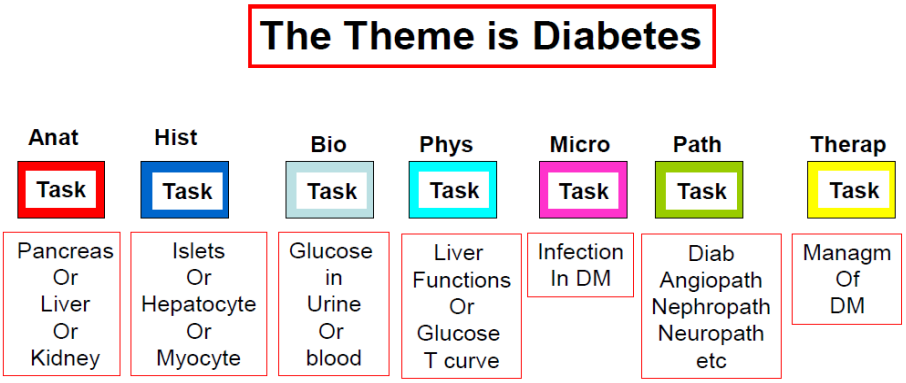
GUIDELINES
FOR CONSTRUCTING and CONDUCTING EFFECTIVE OSPE

CONSTRUCTING AND CONDUCTING EFFECTIVE OBJECTIVE STRUCTURED PRACTICLE EXAMS [OSPE]

OSPE: An assessment tool for testing practical competences in context of their related background concepts. It is composed of different stations that are uniform to all candidates without interaction with examiner **Stations** could be either;

- ***Static Stations;*** Are structured around data identification, interpretation or decision making...etc that is centered around a provided graph, diagram, chart, table, analytical sheet, specimen …etc.

NB: The stations can be
Integrated between a demanded psychomotor task and a relevant background information of that task.
Or Integrated around a theme as (diabetes or hypertension) and can start from normal to disease state and proceed to management.



- ***Dynamic Stations;*** Are structured around a psychomotor skill that is to be performed in sequential steps and evaluated by a **Check List**

NB: ***An evaluation checklist;*** Lists steps in exact sequence that are broken into sub-steps, each independent of previous steps and each given a mark depending on its technical importance

Example; Evaluation Check List for conducting detection of Glucose in urine: (to be used by the examiner)

For each step of student performance please score as follows:
2 = performed adequately 1= Performed but inadequate 0= not performed

Steps	2	1	0
1. **Took a urine sample to 2/3 level in the test tube**			
2. **Boiled upper 1/3 of the urine column**			
3. **Added 2% acetic acid drop by drop**			
4. **Interpreted the result and explained the change before and after acetic acid application**			
Total Marks			

Assessor Signature

Example; Evaluation Check List for examine the histological section provided Using Light Microscope **(to be used by the examiner)**

For each step of student performance please score as follows:
0: you did not do the act **1: you did it but not so accurate** **2: you did it well**

Steps	Scoring 0	1	2
1. Adjusts the light source of the microscope			
2. Places the slide on the stage of the microscope properly			
3. Uses the screening lens to localize the section			
4. Uses low magnification lens and adjust the focus properly			
5. Identifies the stained section			
6. Uses the high magnification lens if it is needed properly			
7. Points correctly to the needed structure			
8. Puts the slides back to their box			
9. Switches off the light			
10. Keeps the area neat			
Total marks			

Assessor Signature

N.B. Procedure stations ***can test a whole experiment or only steps from the experiment*** according to the time allocated for the station

N.B. <u>DEMANDED PRACTICAL AND PROCEDURAL COMPETENCIES IN NARS 2017</u> should be validated in a procedural station as follows;

Practical skills and Procedures demanded in Phase I
1. 1. Dissecting the different parts and organs of the human body
2. 2. Performing basic biochemical tests (e.g., Measuring blood glucose, Urine multi dipstick test)
3. 4. Performing Biochemical and microscopic urine analysis
4. Identification of different normal tissue sections under the microscope
Practical skills and Procedures demanded in Phase I & II
1. Identification of different pathological alterations in tissue sections under the microscope
2. Identification of different pathological alterations in tissue sections under the microscope
3. Identification of gross pathological alterations in different body organ specimens
4. Identification of gross pathological alterations in different body organ specimens
5. Determining blood group and performing cross matching and ABO compatibility testing
6. Preparing and examining blood films and assessing hemoglobin value in a blood sample
Practical skills and Procedures demanded in Phase II
1. Preparing urine specimen for microscopic examination
2. Preparing stools specimen for microscopic examination
3. Identification of parasites and parasitic ova in urine and stool specimens under the microscope
4. Obtaining and handling a blood sample for culture
5. Taking nose, throat and skin Swabs
6. 14. Advising patients on how to collect a mid-stream urine specimen
7. 15. Identifying different bacteria and fungi under the microscope
8. Differentiating different bacterial growth in culture

General rules while Constructing and Conducting an OSPE

- An OSPE will be held at end of the relevant courses in Phase I and II.
- Each exam will consist of number of spots according to the marks for each department
- The supervision of the exams will be divided on the sharing departments according to the prepared map from the start of the year.
- Each department assigns
  - A yearly department OSPE coordinator and officer.
  - Two staff members to assist in preparation and invigilation of OSPE of each course.
  - Other staff as examiners to share in marking OSPE answers or to evaluate by checklist students' performance (only if a relevant department's share by a dynamic station in the exam).

The <u>department OSPE coordinator</u>

A. Within their departments, they

- Act in collaboration with involved department's, in selecting and designing the stations to be shared by the department.
- Prepares the model answers or evaluation check lists.
- Hand in due time, all materials required for conductance of their shared selected stations to the coordinator and officer of the Department-In-Charge of conducting OSPE of a specific course.

B. *When their department becomes in-charge, for a specific course,* their responsibility expands to involve;

- A Preparation Phase → booking and organizing exam labs / demanding missing needed apparatuses and equipment / laying stations' final distribution and time allocation
- Exam Date Phase → Unifying instructions to laboratory staff, invigilators and examiners / Appoint a time keeper / Standardize clear instructions to student relevant to their rotation, time allocation / Collecting answer sheets and evaluation checklists ……etc
- Post Exam Phase → Organizing a setting for examiner to mark questions on a specified announced date and handing them to faculty administration
- Also, a feedback report on the phase of implementation of each exam will be submitted according to the attached sheet

- For fine tuning of OSPE stations during current Faculty Reform, site visits of faculty governing bodies will be randomly conducted with intention of providing updated support and bridging emerged implementation problems.

FEED BACK REPORT OF PRACTICAL EXAM

Name of block/module/course. . . . . Semester . . . . . .
The department responsible for the examination . . . .
Number of representative staffs . . . .
Sharing departments and number of their representatives: . . . .(.)
. . . . . .(.). . . . . (...). . . . . (.)

Each point is rated from 1-5 where 1 is the lowest and 5 represents efficient performance

1. Special pre- exam preparation:

a. Availability of laboratory booking for practical examinations. . . . . .
b. The communication with departments to determine the number of samples before the exam was easy (.....; if there is a problem writes it down)
c. The printing of practical answer sheets was easy (.....; if there is a problem writes it down) .....
d. The efficiency of microscopes and the availability of the exam's samples. . . . .

2. Exam day:

a. Regularity of daily students' attendance in the exam days . . . . . .
b. Students' commitment to the declared schedule. . . . . .
c. The commitment of the participating departments to:
   - Provide the model answers for each exam before students entry . . . . . .
   - The commitment of each department to be represented by 2 faculty members in each laboratory and their presence in the laboratory before the exam in sufficient time (mention the name of the department with clarification of any problem if present)
     . . . . . .
   - Competency of the candidate members from each department in the monitoring process in the practical exam and active participation in collecting the answer sheets
     department's name. . . . . .
     department's name. . . . . .
     department's name. . . . . .
   - Departmental compliance with the declared correction schedule for each module/block and monitoring the results in time . . . . .

3. Following the exam:

a. Monitoring was reviewed after the end of the departments' correction . . . . . .
b. Results were delivered electronically and hard copy to the control unit of the faculty after the exam . . . . . (Day & date)

4. Additional Notes:. . . . . . .
. . . . . .
. . . . . .

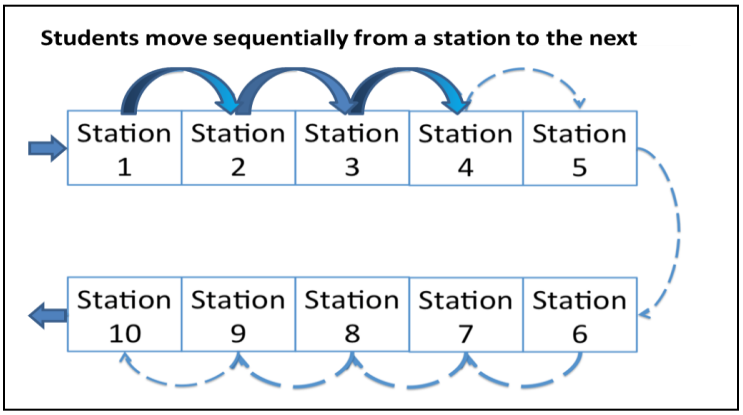
5. Improvement proposals:. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .

Signature of OSPE Coordinator of the Department in Charge

GUIDELINES
FOR CONSTRUCTING and CONDUCTING EFFECTIVE OSCE

CONSTRUCTING AND CONDUCTING OBJECTIVE STRUCTURED CLINICAL EXAM [OSCE]

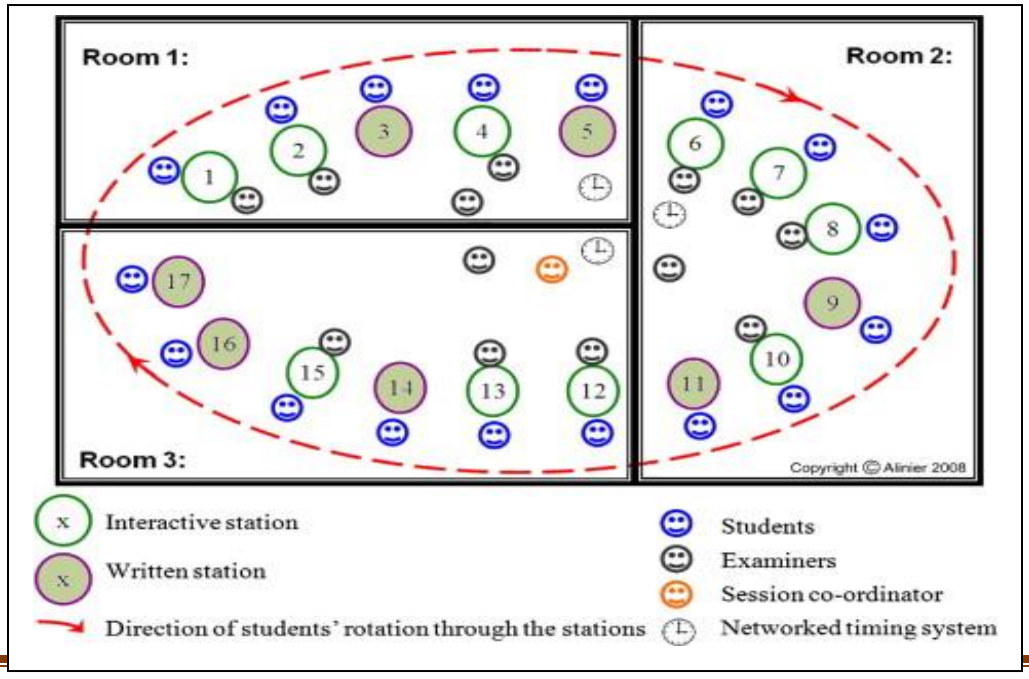
OSCE is a form of **performance-based testing** used to measure candidates' clinical competence.
Its Emphasis, is on ***What candidates can do rather than what they know.***
During an OSCE, **students are observed and evaluated** as they go through a series of timed stations.



OSCE STATIONS

Number: 10-25 stations.
Length of the OSCE station: is generally 5-20 minutes.
Types of stations

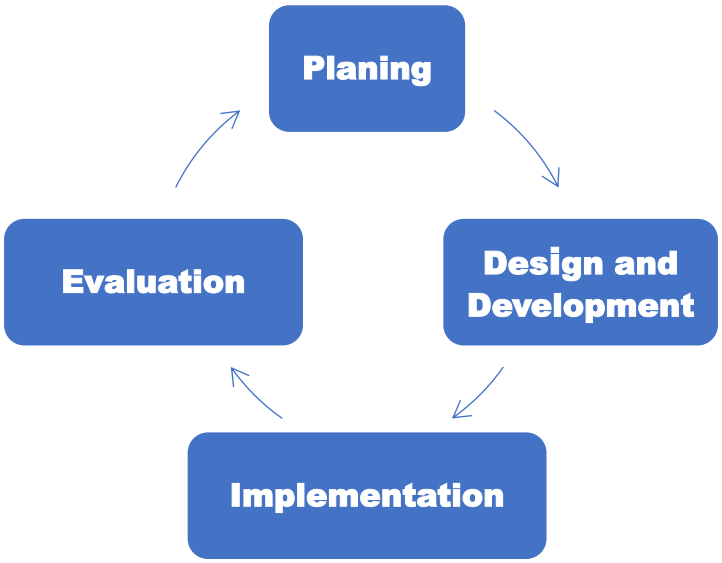
- ***Observational:*** Students perform a clinical task under observation of an examiner. A checklist is needed for such stations
- ***Written stations:*** need no examiner. students are asked to interpret lab results, radiological images, or outline a management plan. A model answer is needed for such stations



GENERAL FEATURES OF AN OSCE Exam

1. It is objective and Structured, as all students are exposed to the same tests.
2. Each station has a structured checklist and a standardized marking scheme
3. It has a blueprint that should be designed to ensure content and construct validity

STEPS FOR CONSTRUCTION AND IMPLEMENTATION



1. Step 1 planning:

- Reflect on the **Purpose** of the exam
- **Decide What You Want to Test** (Clinical and Procedural skills follow **(NARS)**

List of Clinical Examination Skills demanded according to NARS 2017
1. Measuring body temperature
2. Measuring pulse rate, respiratory rate and blood pressure
3. Anthropometric Measurements and assessment of nutritional status
4. Chest examination
5. Heart examination
6. Abdominal examination
7. Locomotor system examination
8. Nervous system examination.
9. Examination of the jugular veins
10. Ear examination
11. Throat examination
12. External Eye and fundus examination
13. Breast examination
14. Examination of the thyroid
15. Lymph nodes examination
16. PV examination
17. Assessment of uterine fundus level in pregnancy
18. 18. PR examination
19. 19. Examining lumps

List of procedural skills according to NARS 2017
1.Performing venipuncture and collect blood samples.
2. Inserting a cannula into peripheral veins.
3. Establishing peripheral intravenous access and setting up an infusion; use of infusion devices
4. Giving intramuscular, subcutaneous, intradermal and intravenous injections.
5. Suturing of superficial wounds.
6. Performing cardiopulmonary resuscitation and basic life-support
7. Performing and interpreting basic bedside laboratory tests
8. Performing and interpreting ECG
9. Managing an electrocardiograph (ECG) monitor
10. Taking swabs for different diagnostic purposes
11. Using a nebulizer for administration of inhalation therapy
12. Performing male and female bladder catheterization
13. Administering basic oxygen therapy
14. Wound care and basic wound dressing
15. Managing Blood transfusion
16. Inserting a nasogastric tube.
17. Administering local anesthetics
18. Performing the procedure of normal labor

- Develop an **OSCE BLUEPRINT**

Template for OSCE Blueprint

No. of station	Name	Competency or skills assessed	Marks (allocate according to assessment plan)
1.	**Obstructive Jaundice History**	History taking	
11.	**Neurological examination Parkinson's disease**	Clinical examination	
12.	**Differential diagnosis of Anemia Case**	Interpretation of a radiograph or lab results	
13.	**ECG for a case of chest pain**	Perform a procedure	
14.	**Breaking Bad news to a cancer patient**	Communication skills and counselling skills	
15.	**Case scenario of nephrotic syndrome**	Problem solving	

Step 2 Design and development of stations components

Each station should have the following components

1. **Title sheet** for each station with time allowed and construct assessed

2. **An instructions sheet for the examinee** Instructions defining the student task at each station (e.g. take history, examine, explain, interpret, perform a procedure, etc.), should be written in bold , clear position above the patients bed , concise and provide all relevant data in the form of **clinical vignette**

3. **A checklist for the assessment of the skill being examined at that station should be constructed as follows**

- Task-specific checklist
- List the specific items which are important in the performance of the task
- Each item on the checklist should be followed by a suggested score.
- The score given to each item should reflect its' relative importance.
- Each station have its own total score

4. A **patient profile** including the lab findings, radiological findings and other needed data.
N.B. DEMANDED Clinical COMPETENCIES IN NARS 2017 should be validated in a procedural station as follows;

Step 3: Implementation

- **Examination site**: OSCE should be held in a special teaching facility that does not interrupt patient care and avoid distraction. An outpatient facility may be used, and the least preferred is hospital ward.

- Stations may be open stations or closed but should be available in close proximity to each other. Spacing between stations desks placed should be at least 1 m in all directions.

- **Exam can be run in single circuit or number of circuits which may be** parallel in a second (or more) examination site with identical stations or Consecutive to be repeated with identical stations. Exam site should be **Equipped with the needed instruments that needed in each station**

- **Total number of stations** range from 10-25 stations with average 15 according to the marks for each department

- A Bell or buzzer should be used to indicate the time to switch stations, can be heard throughout the examination area.
  - An OSCE will be held at end of the relevant clinical rounds and/or at the end of the year
  - Each clinical department assigns
  - A yearly department OSPE coordinator and officer.
  - Two staff members to assist in preparation and invigilation of OSPE of each course.
  - Other staff as examiners to share in marking OSPE answers or to evaluate by checklist students' performance (only if a relevant department's share by a dynamic station in the exam).

The department OSCE coordination committee

Members include the head of the department with two other faculty members who are responsible for:

Before the exam

- Preparation of the OSCE Blueprint
- Select and design the station components
- Prepare and review checklists
- booking and organizing exam site / demanding missing needed apparatuses and equipment / laying stations' final distribution and time allocation

On the exam day

- Hand in due time, all materials required for conductance of their shared selected stations to the coordinator and officer of the Department-In-Charge of conducting OSPE of a specific course.
- Unifying instructions to laboratory staff, invigilators and examiners / Appoint a timekeeper / Standardize clear instructions to student relevant to their rotation, time allocation / Collecting answer sheets and evaluation checklists ……etc

After the exam

- Organizing a setting for examiner to mark questions on a specified announced date and handing them to faculty administration
- Also, a feedback report on the phase of implementation of each exam will be submitted according to the attached sheet

OSCE Officers And Organizers

Junior teaching staff and administration staff can participate in organization

Before the exam

Assist the coordination committee for exam preparations (print out checklists, schedule standardized patients for the exam , train standardized patients)

On the day of the exam

Distribute and collect checklists
Act as timekeepers for exam
Act as exam supervisors and help examiners and students to assure smooth flow of the exam

After the exam

Assist in organizing the checklists and collecting marks to be sent to faculty administration

OSCE Examiners (Faculty members)

On the day of the exam

Observe the students' performance
Use the checklists effectively to rate the students' performance.

Step 4: Evaluation

- Process Evaluation: Observing Implementation and taking notes to document areas for improvement for future exams
- Outcome Evaluation: analysis of students' exam results to check success rates.

FEED BACK REPORT OF OSCE

Name of course/subject. . . . . Semester . . . . . .Date……..
The department responsible for the examination . . . .
Number of representative staffs (examiners) . . . .
Number of stations …… number of observed stations……. Number of written stations……

Rate the following points, each point is rated from 1-5 where 1 is the lowest performance and 5 represents efficient performance

1. Special pre- exam preparation:

e. Availability of learning guides for clinical skills involved in exam. (1 2 3 4 5)
f. Availability of blueprint for OSCE. (1 2 3 4 5)
g. checklists sheets were revised by staff members (1 2 3 4 5 ; if there is a problem write it down)
.....……
h. checklists were printed easily on time. (1 2 3 4 5)
i. Instruction sheets for examinees were easily printed on time. (1 2 3 4 5)
j. The exam site was organized and equipped. (1 2 3 4 5)
k. Standardized patients were trained and given clear instructions about the exam.(1 2 3 4 5)

2. Exam day:

d. Regularity of daily students' attendance in the exam days (1 2 3 4 5)
e. Students' commitment to the declared schedule (1 2 3 4 5)
f. The commitment of the examiners to:
- Use the checklist during the observed stations (1 2 3 4 5)
- Provide model answers for written stations . (1 2 3 4 5)
- Examiners involved in organization facilitated the exam implementation, monitoring and actively participated in collecting the answer sheets (1 2 3 4 5)

- Departmental compliance with the declared correction schedule for each semester and monitoring the results in time (1 2 3 4 5)

3. Following the exam:

c. Monitoring was reviewed after the end of the departments' correction . . . . . .
d. Results were delivered electronically and hard copy to the control unit of the faculty after the exam . . . . . (Day & date)

4. Additional Notes:. . . . . . .

5. Improvement proposals:. . . . . .

GUIDELINES
FOR CONDUCTING
EFFECTIVE ASSIGNMENTS

CONSTRUCTING AND CONDUCTING EFFECTIVE ASSIGNMENTS

An assignment; is a task allocated to the student as part of their course of study, with the intent of training them to become life-long self-learners.

It is both a learning methodology and an assessment tool. It drives students' ability to search and sort out information from different scientific literatures, resources and media. It permits them to work together as a team during organizing and writing down the gathered information. It encourages them to practice their learned communication skills, when conveying such information, meanwhile utilizing the varied available audiovisual tools of presentation.

Along conducting steps of such task, they are ***being assessed for the following***:

- Working in a team
- Communicating with colleagues
- Searching in Literature & Internet
- Evaluating scientific medical knowledge derived from the Internet and recognizing its validity as to whether it is derived from professional health care providers or for public health education.
- Sorting out the collected information and organizing it together as a meaningful whole.
- Writing down the gathered information using students' own style/ words / logical order …..
- Using relevant illustrations and Images to clarify
- Preparing a presentation to medical professionals
- Using audiovisual aids appropriately
- Managing time
- Utilizing appropriately varied communication skills during delivery; as sound, movement, eye contact.
- Attracting attention and emphasize important points

General rules while Constructing and Conducting Assignments

- Assignments will be used as a learning and assessment tool only in Phase I of Faculty Medical Curriculum
  During 1st semester of Year 1; it will be presented by students only in written form will be only assessed.
  During 2nd semester of Year 1 and the two semesters of year 2; it will be presented both in written and oral form

- Each involved department will form an **Assignment Committee**; from the head of department and 2 staff members. This committee will be responsible for:
  - Preparing with different curriculum course representatives a **List of Topics** (from 15-30) **focused around the Theme of Courses Studied** in a semester. It should **never** be directly typical to existing titles in students study books to permit for search of information in different external resources.
  - Distributing not more than 10 students in a group and allocating each group to a different assignment topic.
  - Assigning a tutor and assessor to each group and providing them with one copy of the assessment guide and group follow-up sheet and ten copies of students' Evaluation Check List (from assessment unit)
  - Collecting and filling the hard and soft copies of assignments post tutor and assessor evaluation
  - Collecting the checklist for each student covering each item of the assessed points
  - Reporting to assessment unit a feed-back on assignment implementation flow, met problems or raised suggestions per semester.

- **Tutors of each group** are responsible for providing guidance to their assigned groups by reacting as facilitators without lecturing or giving up information on the topic.
  This is suggested via organizing ***three formal meetings with the whole group***. They are kindly requested to offer opportunities for individual students' support during their announced office hours for enquires, questions or revision of accomplishments.
  The objectives to be fulfilled in the three group meetings, requested in the Group Follow-Up Sheet are as follows:

  In First Meeting:
  - Give opportunities for students and their tutor to know each other.
  - Explain the overall demands to be fulfilled during the assignment by showing up the evaluation check-list and explaining its parts.

- Motivate all students to actively react together, divide them-selves to assigned tasks and choose from them a group coordinator
- Direct students to search and read the assigned topic from varied medical scientific resources derived from literature or internet and confirm that their specific part should be covered in depth.
- Appoint the date of next meeting, and providing the tutor's available office hours for consultations.

In Second meeting,

- Verify that students' have a clear background on the entire topic by drive them to explain to each other their allocated parts
- Assist students to express themselves, communicate with others, respond and ask questions, share actively in the discussion…etc. according to specified items in evaluation check list.
- Allow students to demonstrate their search efforts relevant to the topic and to gently re-direct them to come up by correct information through their own discussions if that was not fulfilled
- Guide students to clearly figure what is need to be written out of the large information bulk collected.
- Then the tutor will decide when the students can come to him to revise what they have written on individual basis before they will handle all to the coordinator for editing. The coordinator will finalize the document and handle to the tutor for revision and marking at a date which will be fixed in the present meeting.
- The tutor will finally determine with the students the 3rd and last group meeting date.

In Third meeting

- Finalize demanded left out points of students' task whether relevant to the written formats or oral presentation.
- Discuss points of weakness *(if present)* in the provisional written document before it is finally handed.
- Supply students by necessary guidance, and important tips for a good presentation and provide them by constructive comments on their performance upon rehearsal. This is to give chance for self-improvement before the final evaluation.
- In conjunction with the assessor the presentation evaluation date will be specified. It is advisable that this date would be at least more than 2 weeks before the end of semester

➢ The **TUTOR:** Is solely responsible for;

- Giving evaluation marks for each students' performance throughout the three held meetings of ***assignment preparation*** depending on set remarks along the **ASSIGNMENT GROUP FOLLOW UP SHEET** (attached) and recording the marks following the provided items specified in the **ASSIGNMENT EVALUATION CHECK LIST** (attached)
- Give marks for ***handed written data of assigned topic*** to each student following the provided items specified in the **ASSIGNMENT EVALUATION CHECK LIST**

➢ **On PRESENTATION DAY;**

- Each student will present his talk
- Both **ASSESSOR** and **TUTOR** for a given group will evaluate each student for ***presentation skills*** following the provided items specified in the **ASSIGNMENT EVALUATION CHECK LIST.** The mean of their 2 marks will be considered for the presentation**.**
- Once presented, students need to receive a preliminary feed-back about their performance

➢ For fine tuning of OSPE stations during current Faculty Reform, site visits of faculty governing bodies will be randomly conducted with intention of providing updated support and bridging emerged implementation problems.

Constructing and conducting an effective assignment has the merit of achieving;

Minimum bias Recall bias minimised Reliable method of testing Uniform level of assessment
Large number of skills can be assessed objectively Minimum subjectivity
Wider sampling-most topics can be covered Tailor made assessment of skills as per importance

Thank you for the sincere efforts to make our students active learners, critically thinking, potential researchers, and future leaders who value team work.

ASSIGNMENT GROUP FOLLOW UP SHEET FOR STUDENT PERFORMANCE

Student Data	Comment & Evaluation		
	1st Meeting	2nd Meeting	3rd Meeting
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			
Name; ID No. Mobile Mail			

NOMINATED STUDENT FOR

1. Responsible student for Communication:
2. Ward document collection:
3. Power point collection:

CHECK LIST FOR ASSESSING STUDENTS' SELF-LEARNING ACTIVITIES

Semester …….

Student's name …… Student number ……..

Title of activity ……

Date of starting …….. Date of presentation……

ITEMS TO BE ASSESSED	MARKS		
I. DURING PREPARATION OF ASSIGNMENT (Assessed by tutor only)			
1- Interest, team work & professional behavior (15%) a. Works with colleagues as a team b. Attends tutorials regularly and arrives punctually c. Actively participates in discussion, gives & receives feedback in an open non-defensive manner			
2- Review of literature and available information (15%) a. Collects adequate, clear and relevant information using multiple sources &multimedia b. Demonstrates abilities to choose and organize information from different sources			
II. **THE WRITTEN ASSIGNMENT** (Assessed by tutor only)			
3- Accuracy of the written contents (10%) a. Presents accurate and correct knowledge in the written document b. Relates parts of the topic together			
4- Technical writing (15%) a. Organizes the topic in a logical sequence b. Uses heading and subheading appropriately c. Inserts images and illustrations when useful d. Follows copy rights rules*			
5- References Writes the references as a list at the end of the whole document			
III. PRESENTATION SKILLS (Assessed by tutor and Assessor)	**Tutor**	**Assessor**	**Average**
6- Presentation is logical, ordered and connected with others presented by his colleagues (8%)			
7- Uses images, diagrams and illustrations whenever possible (8%)			
8- Emphasis & Explains rather than recite & read rather than delivers information (8%)			
9- Faces audience, uses proper eye contact and body movements (8%)			
10- Other presentation skills (8%) a. Uses equipment and audiovisual aids effectively b. Manage time c. Speaks clearly			
Total items = 10	Total marks =		

Tutor's name …… Signature……

Assessor's name…… Signature……

Student's signature ……

****copy rights rules:***

- mention clearly number (or name) of references beside each part of the text

- write clearly for all photos& animation, etc…..the reference/website from which it is quoted/downloaded.

GUIDELINES
FOR CONDUCTING
STRUCTURED ORAL EXAM

CONDUCTING EFFECTIVE STRUCTURED ORAL EXAM

The oral examination is a traditional form of assessment in which one or more examiners ask the candidate questions.

Allows assessment of appearance, manner, personality alertness, confidence, honesty and self-awareness.

Face-to face discussions allows personal characteristics and intellectual abilities to be explored to a degree unavailable to other forms of examination.

Advantages	Disadvantages
1. Direct personal contact (Cox, 1982) 2. Assessing problem-solving and reasoning (Sandars, 1998; Wass et al., 2003) 3. Recognition of safe and competent clinicians (Zelenock et al., 1985) 4. Assessing professionalism and ethics (Wass et al., 2003) 5. Opportunity to probe depth of knowledge (Cox, 1982; Gibbs et al., 1988; Jolly & Grant, 1997) 6. Flexibility in moving from one area to another (Deale,1975; Schwartz & Sein, 1987; Gibbs et al., 1998; Wakeford et al., 1995) 7. Feedback on curriculum (Colton & Peterson, 1967) 8. The ability to tailor the questions asked to the needs of each individual candidate (Gibbs et al., 1993)	1. Poor Validity &Reliability 2. Different assessment of different content areas 3. Different difficulty levels of the questions asked 4. Varying levels of prompting or help provided 5. No marking scheme to ensure objectivity 6. no blue print to ensure content validity

CORRECTIVE ACTIONS TO INCREASE VALIDITY AND RELIABILITY

1. Structure the oral on clinical scenarios: Based on a **clinical case with well-defined learning outcomes** which Can assess knowledge, interpretive ability, problem solving & attitudes
2. Use a number of orals "reliability when using a number of orals is better than the reliability of a single oral examination"
3. Use multiple examiners to ensure fair assessment.
4. Ask all candidates the same set questions improve sampling of the syllabus, elimination of overlap between the orals and other components of the assessment.
5. Use descriptors, rubrics or criteria for answers provide clear guidelines on what is & is not an acceptable answer, Pre-planned blue print and Rating scale must be standardized
6. Train the examiners – Crucial - All examiners must be familiar with the rating scale.

GUIDELINES TO IMPLEMENT STRUCTURED ORAL EXAM SOE

1. **General principles**
    1. Creating a non-threatening environment.
    2. Equal duration of time for each candidate
    3. Starting with, easy topic, then proceeding to more difficult problems
    4. Shifting the topic if someone fails to answer in one area.
2. **Question construction and selection process**
    1. The questions should be constructed by a group of faculty with inputs from all those who have participated in the teaching process.
    2. A number of questions from each topic covering the content area of varying difficultly among the learning objective**s (exam blueprint is mandatory)**
    3. The questions are then framed some to assess recall, but most to assess their problem solving abilities.
    4. Most correct answers for each question are decided in advance.
    5. Marks allocated for each parts of question, weight age being for different level of difficultly
    6. Each question is typed on a card and put in boxes of defined domain.
    7. A number of questions are made for every topic and collected together
    8. Make a large series of cards, each card write one question carefully worded.
    9. Check the wording by reading the question to your colleagues and to make sure they understand the question as-you intended).
    10. Divide the cards into groups. Each group is representing one section of the course.
3. **The Examination Process**
    1. The candidate randomly selects on card from each box and answer.
    2. The examiner reads the question, repeat if necessary or the candidate reads the question if allowed.
    3. No cues or clues are provided.
    4. After the candidate answer the questions the examiners place a tick in an appropriate box on a prepared rating scale.
    5. There is a scoring related to the boxes.
    6. If student failed to answer the first question, no further chance in that area.
    7. The examiners should not indicate whether the student answers correctly or not
    8. Each examiner should have equal time, each marking individually and scores are averaged.
    9. Each question may be marked individually and summing up at the end.
    10. Questions, answers and scores are noted concurrently by the examiners for each candidate.

4. Marking and grading

The use of a rubric is usually essential;

1. It provides assessors with a common reference point for their judgments
   It reduces the likelihood that judgments will be based on extraneous factors
2. Students will understand the nature of good work and helps them to evaluate the quality of their own work
3. It provides a basis for peer evaluation/feedback
4. It makes marking more efficient.