## Workshop on "Biochemistry"



Friday, July 11, 2008

# "Workshops on Training of Examiners for OSPE, OSCE & TOACS"

FACILITATORS: Prof. Nasreen Sharif (CMHLMC, Lahore) Dr. Robina Sohail (SIMS, Lahore) Dr. Noor Fatima (FMH CMD, Lahore)

## ATTENDANCE SHEET

Sr	Institutions	Name of the Faculty Member	Designation	Signature
	Allama Iqbal Medical College, Lahore			
2.	Nishtar Medical College, Multan			
ł.	Punjab Medical College, Faisalabad	pry DR. M. Asmen	E Professer	Pa1
	Quaid-e-Azam Medical College, Bahawalpur	Prof. DZ. KHAWJA MUHAMMAD FAYYAZ		A A A A A A A A A A A A A A A A A A A
i.	Rawalpindi Medical College, Rawalpindi	PAJ. MALIK SHAH ZAMAN CATIF	Printerson of Postichamistry	Nuch hally
<b>i.</b>	Services Institute of Medical Sciences, Lahore.	DR.M.ZAMIR AHMAD	PROFESSOR	PH
•	Sheikh Zayed Medical College, Rahim Yar Khan	PROF Dr. M. Asghan Sullan.	PROFESSOR	F.
-	CMH Lahore Medical College, Lahore.	NAJREEN SHARIF	PROFESSER	N SW
	Lahore Medical & Dental College, Lahore	BRIGIRS PROF KHALID SAEED AHMAD CHAUDHAT	PROFESSOR AND HEAD OF DEPT	MinZul
].	Wah Medical College, Wah Cantt	Dr. Aldul Baseer	Professor	Ata Danu
	Fatima Memorial Hospital College of Medicine & Dentistry Lahore	Dr Sacher Malward	Schoralet	ch.
2.	College of Medicine & Dentistry, University of Lahore, Lahore.	MAHBOOB ISAA	Professe 1	S-had
•	Faisalabad Medical College, Faisalabad	Dr. MUHAHHADA M.IQBAL TAHIR	LI Onfessor. Assit: Phot.	Per Menorent
1 1 2 3	Independent Medical College, Faisalabad	Robina Rashiel	Asst. Pust. Senior Demonstrator	King /
	Sargodha Medical College, Sargodha.	Bry M Zahron -1-)-Hussa	Principal & Pofestor J Binchetry	Anzo seen

## Format (Practical Examination / OSPE) MBBS First Professional Examination (Part-II) BIOCHEMISTRY (PART-II)

## Total Marks: 75

Total marks allocated to Oral and Practical Examination are 75

## Internal Assessment: 7.5 Marks

### General Viva (Theory Viva): 30 Marks

15 Marks are allocated to internal examiner and 15 marks to external examiner.

### Practical Examination: 37.5 Marks

# Practical examination comprises three components i.e. Yearly Workbook, OSPE and experiment.

### A- Yearly Workbook: 3.5 Marks (Internal Examiner)

### B- OSPE: 18 marks

OSPE comprises 8 stations (two observed stations carrying 3 marks each and 6 non-

observed stations 2 marks each).

### **Observed Stations (3 minutes for each station)**

- i. Spectrophotometer, flame photometer, chromatograph, and electrophoresis: 1 station
- ii. Blood collection materials/apparatus, centrifuge machine, pipettes: 1 station

### List of Tests for Observed Stations:

- i. Spectrophotometer.
- ii. Centrifuge Machine.
- iii. Pipettes.

#### Non-Observed Stations (3 minutes for each station)

- i. Tests to determine the concentration of total cholesterol, HDL cholesterol, and triacyglycerols, in plasma : 1 station
- ii. Tests to determine the concentration of total proteins, and glucose in plasma and CSF, and albumin in plasma: 1 station
- iii. Determination of plasma uric acid and calcium: 1 station
- iv. Determination of creatinine and urea in plasma, and creatinine clearance: 1 station
- v. Determination of activities of ALT and alkaline phosphatase in plasma. Estimation of plasma bilirubin: 1 station
- vi. Determination of activities of creatine kinase, LDH, and AST: 1 station

#### C- Experiment: 16 marks

- Principle/supposed calculations of the experiment: 4 Marks (External Examiner)
- Performance of experiment and viva voce pertaining to experiment: 12 Marks (6 marks reserved for internal examiner and 6 marks for external examiner; one day the Internal examiner will take the Viva Voce related to practical and the External examiner will examine the performance related to the practical and the order shall be altered on a day to day basis.)

## Conduct of OSPE

- The Batches for Major viva voce and Practical / OSPE exam will be separate on any particular day and will be 26 students strong each.
- All OSPE Questions will be sent by the Department of Examinations, UHS in sealed confidential envelopes to each center clearly marked for each day of Examination and shall be kept secure in our Regional Safety Lockers at respective centres.
- For any particular day of Examination the same OSPE questions will be sent to each center to maintain standardization.
- The sealed confidential envelope containing the OSPE questions for that particular day will be collected from the UHS regional safe locker by both the Internal and External Examiners in the presence of the Principal or his nominee and the Regional Coordinator up to Two hours before the commencement of Examination.
- Each packet of examination material will contain for that particular day the complete set of six non-observed OSPE questions with keys and instructions for the candidates and the examiners as well as a set of two observed OSPE questions with key and instructions for candidates and examiners.
- Instruction/ questions for the candidates will be included in the examination material and should be placed on both the observed and non-observed stations.
- The Practical Answer Books for non-observed stations will be sent separately to each centre one for each candidate.
- The candidates are to carry the Practical Answer Books from station to station of the non-observed stations and are to register their responses to each question at these desks separately on the same Practical Answer Sheet in the designated areas.
- Before leaving the Assessment Hall the candidate should deposit the Answer Book either at the "Marking Desk" or with the organizer as per decision of the convener.
- The candidates leaves the OSPE Hall will not mingle with candidates awaiting assessment, who are to be kept under supervision in a separate holding bay.
- Each batch of the candidates while waiting for the OSPE in the waiting area should be briefed about the OSPE process and the layout of the OSPE hall as well as the flow of candidates through the hall. They are not to bring any mobile phones or any other technology that could be used for communication within the premises of the examination centre.
- Any student found having mobile phone or any other electronic medium should be removed from the OSPE examination centre and an Unfair Means Case registered against him/ her.
- All candidates will complete a mandatory "Feedback Proforma" and deposit the same confidentially in the sealed collection boxes provided.

## **Model Questions**

## **OBSERVED STATION**

Question: How will you proceed for the spectrophotometeric analysis of the given sample of glucose?

## Steps

1.	Adjust the wavelength at 530nm.	(0.5 Mark)
2.	Add 1 ml of reagent blank into the cuvette.	(0.5 Mark)
3.	Place the cuvette in the cuvette holder.	(0.5 Mark)
4.	Adjust zero absorbance for the reagent blank.	(0.5 Mark)
5.	Add 1ml of sample into the cuvette and measure the absorbance.	(1 Mark)

\* A comprehensive check list will be provided to the rater for each step of procedure.

## NONOBSERVED STATION

Question: Mention two indications for performing the 24-hour creatinine clearance. Write down the formula for the calculation of creatinine clearance.

#### Indications for performing creatinine clearance are (1 Mark) (any two indications are required, indications maybe other than the following mentioned three indications)

- 1. Potential kidney donors
- 2. Investigation of the patient with minor abnormalities of the renal function tests.
- 3. Calculation of the dose of a potentially toxic (nephorgenic) drug.

## Formula to calculate creatinine clearance:

Creatinine Clearance in (Plasma concentration in mg/dl x 24-hour urinary volume ml/min = in ml) / (urinary creatinine concentration in mg/dl x 1440)

Note: Where 1440 represents number of minutes in 24 hours

(2 Marks)

## (2 Marks)

## (1 Mark)

Station 1	OSPE STATIONS (ANSWER SHEET) (First Professional MBBS Part – II, Biochemistry)					
Station 2						
Station 3						
Station 4						
Station 5	·					
Station 6						



# **University of Health Sciences, Lahore** First Professional MBBS Part - \_\_\_\_\_ Annual / Supplementary Examination, 200\_\_\_\_\_

**OSPE** Award List for **Biochemistry** 

College: \_\_\_\_\_

Centre: \_\_\_\_\_

Roll Nos.	Non Observed Stations (Maximum Marks 12)							Observed Stations (Max Marks 6)			Grand Total	
	1	2	3	4	5	6	Total	7	8	Total	Figures	Words
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# University of Health Sciences, Lahore First Professional MBBS Part -

Annual / Supplementary Examination, 200 Practical Performance / Viva Voce & Yearly Work Book Award List for Biochemistry

College: \_\_\_\_\_

Centre: \_\_\_\_\_

Roll Nos.	Yearly Work BooK	Practical Performance/ Viva Voce (Delete as necessary) (Max Marks 6)	Total (Max Marks 9.5)		
	(Max Marks 3.5)	(Max Marks 6)	Figures	Words	

Internal Examiner: \_\_\_\_\_



# University of Health Sciences, Lahore First Professional MBBS Part - \_\_\_\_\_

Annual / Supplementary Examination, 200\_\_\_\_\_ Principle and Calculation of Experiment &

**Practical Performance / Viva Voce Award List for Biochemistry** 

College: \_\_\_\_\_

Centre: \_\_\_\_\_

Roll Nos.	Principle and Calculation of	Practical Performance/ Viva Voce (Delete as necessary)	Total (Max Marks 10)		
1105.	Experiment (Max Marks 4)	(Max Marks 6)	Figures	Words	

External Examiner: \_\_\_\_\_



# **University of Health Sciences, Lahore** First Professional MBBS Part - \_\_\_\_\_

Annual / Supplementary Examination, 200\_\_\_\_\_ **Structured Viva Voce Award List for Biochemistry** College: \_\_\_\_\_

Centre: \_\_\_\_\_

Roll Nos.	Structured Viva	Total					
KOII NOS.	(Max Marks 15)	Figures	Words				

Internal Examiner: \_\_\_\_\_



# University of Health Sciences, Lahore First Professional MBBS Part - \_\_\_\_\_

Annual / Supplementary Examination, 200\_\_\_\_ Structured Viva Voce Award List for Biochemistry

College: \_\_\_\_\_

Centre: \_\_\_\_\_

Roll Nos.	Structured Viva	Total					
KUII NOS.	(Max Marks 15)	Figures	Words				

External Examiner: \_\_\_\_\_