

MBBS First Professional Examination (Part-II)

BIOCHEMISTRY (PART-II)

Model Questions of OSPE

OBSERVED STATION (2 Marks)

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

Steps

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

NONOBSERVED STATION (2 Marks)

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 (nephrogenic) drug.

Formula to calculate creatinine clearance: (1 Mark)

Creatinine Clearance in ml/min= $\frac{\text{Plasma concentration in mg/dl} \times \text{24-hour urinary volume in ml}}{\text{urinary creatinine concentration in mg/dl} \times 1440}$

Note: Where **1440** represents number of minutes in 24 hours