

**The West Bengal University of Health Sciences**  
**1st BMLT November - December, 2022 Examination**



**Subject : General Pathology, Clinical Pathology and Haematology**

**Time: 3 hrs.**

**Full Marks: 100**

*Attempt all questions*

1. Tick the correct answer :

20 x 1

- a) Presence of bile pigment in urine sample can be determined by which method?  
 i) Benzidine test.      ii) Benedict's test.      iii) Rothera's test.      iv) Fouchet's test.
- b) SGPT also known as :  
 i) AST.      ii) ALT.      iii) ALP.      iv) GT.
- c) Pulmonary embolism is the cause of :  
 i) Acute cardiac failure.      ii) Chronic cardiac failure.  
 iii) Infective endocarditis.      iv) Angina pectoris.
- d) Bence jones protein can be detected in :  
 i) Whole blood.      ii) Serum.      iii) Peritoneal fluid.      iv) Urine.
- e) Megaloblastic anemia is due to deficiency of :  
 i) Folic acid.      ii) Iron.      iii) Vitamin A.      iv) Vitamin C.
- f) Reticulocyte can be observed after staining with :  
 i) Leishman stain.      ii) PAS stain.      iii) New Methelene Blue.      iv) Perl stain.
- g) Platelet count is most important in :  
 i) Malaria.      ii) Leishmania.      iii) Tuberculosis.      iv) Dengue.
- h) Grave's disease is the result of :  
 i) Hyperthyroidism.      ii) Hypothyroidism.  
 iii) Increase of Blood pressure.      iv) Increase of blood sugar level.
- i) Diabetes mellites is a disease of :  
 i) Liver.      ii) Pancreas.      iii) Blood.      iv) Heart.
- j) Hypoxia indicates :  
 i) Increase of pO<sub>2</sub>.      ii) Decrease of pO<sub>2</sub>.      iii) Decrease of pCO<sub>2</sub>.      iv) All of these.
- k) Which is type of gangrene noticed in Diabetic foot?  
 i) Gas.      ii) Dry.      iii) Wet.      iv) Internal.
- l) The apoptosis is classified :  
 i) Accidental cell death.      ii) Programmed cell death.  
 iii) Non-programmed cell death.      iv) Mitotic cell death.
- m) ESR estimation is done by which method?  
 i) Hemocytometer.      ii) Test tube.      iii) Wintrobe's tube.      iv) Colorimeter.
- n) CRP test is the indicator of :  
 i) Inflammation due to an infection.      ii) Rheumatoid arthritis.  
 iii) Risk of heart disease.      iv) All of these.
- o) Chyluria makes the urine sample :  
 i) Color less.      ii) Milky-white.      iii) Yellow.      iv) Brown.
- p) Ammoniacal urine indicates :  
 i) UTI with *Proteus*.      ii) UTI with *E. coli*.  
 iii) UTI with no specific bacteria.      iv) None of these.
- q) Which is not an example of mononuclear cell?  
 i) Macrophages.      ii) Neutrophils.      iii) Lymphocytes.      iv) Plasma cells.

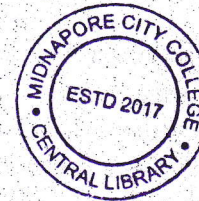
**P. T. O.**



- r) Haemoglobin electrophoresis is required :
- i) Intact RBC.                      ii) Haemolysate.                      iii) Blood serum.                      iv) Blood plasma.
- s) Anaplasia is seen in :
- i) Benign tumor.                      ii) Malignant tumor.                      iii) Apoptosis.                      iv) Necrosis.
- t) Arneht count indicates :
- i) Differential count of WBC.
- ii) Differential maturation of lymphocytes.
- iii) Differential count of lobes of neutrophils.
- iv) Differential count of B-lymphocytes + T-lymphocytes.

2. Answer the following :

- a) Application of Leishman stain.
- b) Use of Wintrobe's tube.
- c) Symptoms of obstructive jaundice.
- d) Write on the selection of blood vessel for the blood drawing.
- e) Application of Jamshidi needle.



5 x 2

3. Answer *any six* of the following :

- a) Systemic inflammatory response syndrome (SIRS).
- b) PCV
- c) Hyperthyroidism.
- d) Leukopenia.
- e) Oedema.
- f) Metastases.
- g) Cellular cast in urine.
- h) Phlebotomy.

6 x 5

4. Answer *any one* of the following :

- a) Classify blood cells. Write a short note on "neutropenia" and its clinical significance".                      5+5
- b) Classify anaemia. Which type of anaemia is most common in our country? How do you differentiate the different types of anaemia from a peripheral smear?                      3+2+5

5. Answer *any two* of the following :

- a) Classify necrosis. Pathogenesis of coagulative necrosis. Write a brief note on Gangrene.                      3+6+6
- b) Make a chart of colour indices of urine sample with its pathological significance. How will you qualitatively estimate the sugar in urine sample?                      6+9
- c) Briefly describe the Oral glucose tolerance test and make the pathological significance of this test. Briefly describe the laboratory diagnosis of Thalassemia.                      8+7

**The West Bengal University of Health Sciences**  
**1<sup>st</sup> BMLT Examination, 2022**  
**Subject: PATHOLOGY (General Pathology, Clinical Pathology and Hematology)**  
**Paper: 101 (Practical)**

**Max. Marks: 100**

**Time: 4 hrs**

**Attempt all questions**



1. Perform the following experiments: **2X25**
  - a) Estimate the haemoglobin in supplied blood sample. Write the principle, procedure and inference. (Experiment: 15; Write the protocol:5; Result and inference: 5). **(25)**
  - b) Make the total count of WBC from supplied blood sample. Write the procedure, calculate and infer your result. (Experiment: 15; Write the protocol:5, Inference: 5). **(25)**
2. Write a note on: **15X1**
  - a) Reticulocyte count. **(10)**
  - b) Advantages of dip sticks in urinalysis. **(5)**
3. Practical note book **(5)**
4. Viva-voce **30**

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