

Sr. No. 100915

Roll No. _____

BMLT/ BOTT – 1st SEMESTER EXAMINATIONS; JANUARY-2018
(SUB: - PATHOLOGY; PAPER CODE:-5200105 / 5230105)

TIME: 03:00 Hrs.

Max Marks:60

Instructions:-

1. Write your Roll No. on the Question Paper.
2. Candidates should ensure that they have been provided with correct question paper. Complaints in this regard, if any should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. Each Part is compulsory. Marks are indicated against each question.
4. Draw the diagram wherever required.

PART-A(OBJECTIVE TYPE QUESTIONS OMR SHEETS)

ATTEMPT ALL QUESTIONS:

Single Response Questions:-

- Q.1.** Following are the branches of pathology except:- (1)
a) Histopathology b) Cytology c) Hematology d) Pharmacology
- Q.2.** Normal cell have the following except:- (1)
a) Cell membrane b) Cytoplasm c) Epithelium d) Nucleus
- Q.3.** Cell membrane is:- (1)
a) Fully permeable b) Semipermeable
c) Impearable d) All of the above.
- Q.4.** Cytoplasm has the following? (1)
a) Proteins b) Clotting factors c) Cholesterol d) All of the above.
- Q.5.** Nucleus contains:- (1)
a) Nuleioli b) Chromatin c) Both a & b d) None of the above.
- Q.6.** Cell cycle does not have:- (1)
a) Prophase b) Metaphase c) Telophase d) Lipase.
- Q.7.** All are the causes of cell injury except:- (1)
a) Genetic and familial causes
b) Vegetarian foods.
c) Microbial infections.
d) Nutritional derangements.
- Q.8.** Various types of microscope are:- (1)
a) Light microscope.
b) Fluorescence microscope.
c) Electron microscope.
d) All of the above.
- Q.9.** What is not true about hemoglobin:- (1)
a) It consists of Haem and globin b) It carries oxygen from the lungs to the tissues and organs.
c) It carries genetic information d) The deficiency of hemoglobin concentration causes Anemia

P.T.O

Q.10. Blood have the following except:-

(1)

- a) RBC.
- b) Bacteria normally.
- b) WBC.
- d) Platelets

Q.11. Which statement is true:-

(1)

- a) Shape of RBC is biconcave.
- b) Life span of red cell is 60 days.
- c) Normal count of RBC is 10 millions/cmm
- d) Polycythemia is decreased in RBC count.

Q.12. Which statement is False about Erythropoietin:-

(1)

- a) It is produced by kidney.
- b) It helps in production of RBC.
- c) Its level is increased in Heart diseases.
- d) It is not normally present in blood.

Q.13. Match the following:-

(1)

- | | |
|--------------------|---------------------------------|
| a. ESR | 1. Hb estimation |
| b. MCH. | 2. RBC volume |
| c. MCV. | 3. Mean corpuscular hemoglobin. |
| d. Sahli's method. | 4. Westergren method |

- A. a4, b3, c2, d1
- B. a1, b2, c4, d4
- C. a3, b4, c1, d2
- D. a1, b4, c3, d2

Q.14. Match the following regarding their normal count in blood:-

(1)

- | | |
|----------------|----------------|
| a. Neutrophil | 1. 2% to 7% |
| b. Lymphocyte. | 2. 0% to 1% |
| c. Eosinophil. | 3. 25% to 40%. |
| d. Basophil. | 4. 40% to 60% |

- A. a3, b4, c2, d1
- B. a1, b2, c4, d3
- C. a4, b3, c1, d2
- D. a2, b1, c3, d4

Q.15. Match the following regarding their normal counts:-

(1)

- | | |
|-------------------------------|-----------------------|
| a. RBC | 1. 4000 to 11000/ cmm |
| b. WBC | 2. 40 to 400/ cmm |
| c. Platelet. | 3. 5 millions/ cmm. |
| d. Absolute eosinophil count. | 4. 1.5 to 4.5 lacs |

- A. a2, b4, c1, d3
- B. a3, b1, c4, d2
- C. a1, b2, c3, d4
- D. a4, b3, c2, d1

Q.16. Which of the following is true:-

(1)

- a) PCV can be measured by Westergren method
- b) ESR can be measured by both Wintrobe and Westergren method.
- c) Both are the correct statement.
- d) Both are incorrect.

Q.17. Stains used in staining of PBF:-

(1)

- a) Leishman stain b) H & E stain c) Giemsa stain d) All of the above

Q.18. Blood smear slide can be divided into:-

(1)

- a) Head b) Body c) Tail d) All are true.

Q.19. The best area of PBF to see the morphology of blood cells is:-

(1)

- a) Between Head and body of the blood film. b) Between Body and tail of the blood film
- c) Area of Head only. d) Area of tail only.

Q.20. Various anticoagulant used in the hematology lab are:-

(1)

- a) Trisodium citrate. b) EDTA
- c) None of the above d) Both a & b.

Q.21. What is false about the following statements?

(1)

- a) Various components of blood are formed by 'Stem cell'
- b) Leishman's staining is most commonly used method in hematology.
- c) Quality assurance is must for a good laboratories.
- d) Well trained Lab technician is the backbone of a standard good laboratory.

Q.22. A hematology laboratory must be equipped with:-

(1)

- a) Well trained lab staff. b) Visual as well as electronic cell counters
- c) Standardized stains and equipments. d) All of the above.

Q.23. Uses of Neubauer chamber are in the counting of the following except:-

(1)

- a) RBC b) WBC
- c) Bacteria d) Sperms

Q.24. Which statement is true?

(1)

- a) Neubauer chamber is good and reliable method of blood cell counting.
- b) Electronic cell counters are not must for a good standard laboratory
- c) A lab must be equipped with Electronic counters and manual visual aid in hematology.
- d) Hemocytometry is a branch of microbiology

Q.25. DNA is present in a normal cell in:-

(1)

- a) Nucleus b) Mitochondria
- c) Both a & b. d) None of the above.

Q.26. With leishman's stain which cell gives 2 to 5 lobes

(1)

- a) Neutrophil b) Eosinophil
- c) Basophil d) Monocyte.

Q.27. The reagent used in Sahli's estimation is:

(1)

- a) N/40HCL b) N/30HCL
- c) N/20HCL. d) N/10HCL

Q.28. Which statement is true about Reticulocyte:-

- a) It is an immature RBC
- b) It is a form of a Stem cell.
- c) It is a mature form of a red cell.
- d) Reticulocyte is a mature WBC.

(1)

Q.29. The production of RBC in bone marrow is regulated by:-

- a) Renin
- b) Thyroxin
- c) Erthropoietin
- d) None of the above.

(1)

Q.30. Which statement is true:-

- a) Cell membrane is totally impermeable.
- b) Cell cycle consists of four stages- Prophase, metaphase, Telophase and Anaphase.
- c) DNA has no genetic information.
- d) Nucleus does not have chromatin.

(1)

PART-B (DESCRIPTIVE TYPE)

I. Short note types (Attempt any three):-

(3x4=12)

Q.1. Sahli's method hemoglobin estimation.

Q.2. Various types of microscopy.

Q.3. Normal cell structure.

Q.4. Neubauer chamber counting of RBC.

II. Define and discuss (Attempt any Two):-

(2x5=10)

Q.1. Various hematological indices.

Q.2. Reticulocyte estimation.

Q.3. Visual and electronic counts of Leucocytes.

III. Long easy type (Attempt any one):-

(1x8=8)

Q.1. Mention various anticoagulants. Give their uses and mode of action?

Q.2. Write the full form of ESR. Describe the procedure for estimation and mention conditions with increased ESR value.

100915/40