

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022
(Fifth Semester)

Branch – ZOOLOGY

DISCIPLINE SPECIFIC ELECTIVE – I
MEDICAL LABORATORY TECHNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

- 1 A Histopathology lab will deal with _____.
(i) Cells (ii) Tissues
(iii) Organs (iv) Organ System
- 2 What is the temperature which is maintained by the Freezers in the pathology labs?
(i) 10°C – 15°C (ii) 0°C – 10°C
(iii) -10°C – -60°C (iv) -100°C
- 3 What solution is used to maintain sterility in labs?
(i) Sodium Chloride (ii) Sodium Hypochlorite
(iii) Sodium Cyanide (iv) Sodium Sulphate
- 4 Which device is used to separate the components of blood?
(i) auto analyzer (ii) centrifuge
(iii) hematocrit (iv) magnetic stirrer
- 5 How are the blood cells and plasma separated?
(i) hematocrit (ii) hot plate
(iii) centrifuge (iv) water bath
- 6 The cells related to blood are collectively called as
(i) oestoblast cells (ii) condrocyte cells
(iii) hematopoietic cells (iv) megakaryocytes
- 7 The best and safest method of sterilization is
(i) Autoclaving (ii) Immersion in chemical germicide
(iii) Flaming (iv) Boiling
- 8 Where is the liver situated in the body?
(i) Beside the pancreas (ii) Beside heart
(iii) Above kidney (iv) Above stomach
- 9 Bile salts acts as activator of which enzyme?
(i) Lipase (ii) Pepsinogen
(iii) Pancreatic lipase (iv) Trypsin
- 10 How many types of blood groups are present?
(i) 1 (ii) 2 (iii) 3 (iv) 4

SECTION - B (35 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)

- 11 a Explain various sterilization methods used in clinical laboratory.
OR
b Define Microscope. Write the principle, operating procedure and application of microscope.

Cont...

- 12 a Comment on PCV and its application.
OR
b Give an account on various methods used for the estimation of Haemoglobin.
- 13 a Write a detailed account on Sickle Cell Anaemia.
OR
b Enumerate the ABO blood group system and determination of blood grouping.
- 14 a Write about chemical examination of urine.
OR
b Explain the various methods of sputum collection.
- 15 a Give an account on glucose tolerance test.
OR
b Describe about faecal analysis.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Describe the basic laboratory rules that must be followed in the CLT.
- 17 Explain in detail about the collection and transport of any two clinical specimen.
- 18 What is Hemophilia? Explain the mechanism, complication and treatment of Hemophilia.
- 19 Write an essay on semen analysis.
- 20 Explain the various methods of liver function test.

Z-Z-Z

END