

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022
(Third Semester)

Branch – BIOCHEMISTRY

ADVANCED CLINICAL BIOCHEMISTRY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. _____ level in amniotic fluid is used to assess the fetal maturity.
(i) Bilirubin & L/S (ii) AFP & L/S
(iii) Creatinine & L/S (iv) All the above
2. Name the abnormal condition in which small amount of urine excreted due to shock or kidney damage.
(i) Polyuria (ii) Oliguria
(iii) Dysuria (iv) None
3. In Grave's disease TSI mimics the role of _____.
(i) TRH (ii) TSHR
(iii) TSH (iv) None of the above
4. An increase in LDH - 5 isoenzyme is seen in the following except _____.
(i) Acute hepatitis (ii) Muscular dystrophies
(iii) Prostatic carcinoma (iv) Breast carcinoma
5. Which enzyme deficiency occurs in Hyperlipoproteinemia type I?
(i) Lipoprotein lipase (ii) Acid lipase
(iii) Cholesterol lipase (iv) Apoprotein lipase

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a Organize the Principle, Procedure and Application of RA Test.
OR
b Explain Prothrombin Time and give its clinical significance.
- 7 a Sketch an account on Sputum and its biochemical investigation.
OR
b Illustrate the clinical significance of stool examination
- 8 a Analyze the clinical importance of protein hormones.
OR
b Discuss the general principles of hormonal assay.
- 9 a Justify the role of Troponin as cardiac marker.
OR
b Outline the process of free radical formation.
- 10 a Write in brief about mucopolysaccharidoses.
OR
b Evaluate the inborn errors of branched chain amino acids.

Cont...

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks (5 x 6 = 30)

- 11 a Determine the immunologic test for pregnancy.
OR
b What is amniotic fluid? Interpret its composition and diagnosis procedure.
- 12 a Elucidate the clinical significance of any four abnormal constituents of urine.
OR
b Analyze the composition of Kidney stones and its method of analysis.
- 13 a Develop a note on the following:
a) Diabetes insipidus b) SIADH C) Hypopituitarism
OR
b Differentiate hyper and hypothyroidism.
- 14 a Categorize the Gastric function tests.
OR
b Predict the enzyme pattern in myocardial infarction.
- 15 a Enumerate in detail about the disorders of Glycogen storage.
OR
b Justify the risk factors, biochemical findings and management of Atherosclerosis.

Z-Z-Z

END