

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2019
(Fourth Semester)

Branch - BIOCHEMISTRY

ADVANCED CLINICAL BIOCHEMISTRY

Time: Three Hours

Maximum: 75 Marks

SECTION -A 130 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 1 a Describe the collection of blood by Arterial and Venous puncture.
OR
b Write a note on Coagulation test and Prothrombin time.
- 2 a Explain the clinical examination of Gastric contents.
OR
b Mention the different types of Renal stones and its composition.
- 3 a Write the principle involved in the assay of Protein hormones. Add a note on its clinical significance.
OR
b Narrate the Laboratory methodology and findings commonly followed for evaluation of dysfunction of Adrenal cortex.
- 4 a Explain how Troponin marker is helpful in the clinical evaluation of Cardiac function test?
OR
b Elaborate the diagnostic importance of the enzyme pattern in Hepatobiliary disease.
- 5 a Give an overview on the metabolism and disorders of Calcium.
OR
b Write the characteristics and clinical significance of Alpha fetoprotein.

SECTION -B (45 Marks)

Answer any **THREE** questions

ALL questions carry **EQUAL** Marks (3 x 15 = 45)

- 6 Describe in detail the origin, collection, composition and analysis of Amniotic fluid.
- 7 Explain the procedures for chemical examinations of stool. What are its clinical implications?
- 8 Explain the clinical significance of Thyroid hormones. Describe how will you determine hypo and hyperthyroidism by assaying T3, T4 and TSH?
- 9 What is Liver Cirrhosis? Explain the clinical complications of different types of Cirrhosis.
- 10 Describe the diagnostic and biochemical parameters associated with abnormal Lipid metabolism.