PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc
SSc **DEGREE EXAMINATION MAY 2019**
(Second Semester)

Branch - CLINICAL NUTRITION & DIETETICS

CLINICAL BIOCHEMISTRY

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks!
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 x 1 = 10)

1 Name the cycle in which Pyruvate is oxidised to Co_2 and H_20 under aerobic condition.
(i) HMP shunt (ii) Glycolysis
(iii) Glycogenolysis (iv) Citric acid cycle

2 The hormone inhibits gluconeogenesis is_____ .
(i) Insulin (ii) Glucagon
(iii) Epinephrine (iv) GH

3 Phosphatidyl inositaol is otherwise called as_____ .
(i) Phosphatidases (ii) Cephalin
(iii) Lipositol (iv) Licithin

4 Structural formula of cholesterol is_____.
(i) $C_{27}H_{42}0$ (ii) $C_{27}H_{46}0$
(iii) $C_{27}H_{47}0$ (iv) $C_{27}H_{43}O$

5 In an iso-electric point amino acid remains as
(i) cation (ii) anion
(iii) zwitter ion (iv) no correlation

6 In urea cycle N-Acetyl glutamate act as an_____ .
(i) enzyme (ii) non factor
(iii) enzyme activator (iv) enzyme inhibitor

7 In t-RNA t stands for_____ .
(i) translating (ii) transforming
(iii) transcripting (iv) transfer

8 _____ is the direct manipulation of DNA using techniques in the laboratory to alter genes in organisms.
(i) Genetic engineering (ii) Nutri genetics
(iii) Nutri Genomics (iv) Neogenetics

9 Hipporic acid test is used to find out the_____ function of liver.
(i) Excretory (ii) Secretory
(iii) Storage (iv) detoxification

10 Echo cardiography is essentially_____ .
(i) ultrasound of heart (ii) echoing sound of heart
(iii) another name of TMT (iv) recording heart beats

Cont...

SECTION - B (35 Marks)

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

Explain TCA Cycle.

OR

Discuss the hormonal influences of Carbohydrate metabolism.

Illustrate the metabolism of Ketone bodies.

OR

State the functions of lipo proteins and its significance.

Explain on creatine synthesis and brief the regulations.

OR

Discuss on Acid-base balance.

Illustrate on DNA Replication.

OR

Sketch out the diseases of genetic origin.

Classify on oncogenic markers and give its clinical uses.

OR

Explain any two radiological investigations.

SECTION - C (30 MarksI

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

Determine how the enzymes are used in clinical diagnosis.

Elucidate on the metabolism of lipids.

Enumerate the dynamic aspects of protein metabolism.

Genetic engineering - design our own evolutionary progress - justify.

Analyse the tests used to estimate the increased risk of cardio vascular diseases.

Z-Z-Z END