

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)  
**BSc DEGREE EXAMINATION MAY 2017 14-NDOH-**  
(Fourth Semester)

Branch - **NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS**

**BIOCHEMISTRY**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (10x2 = 20)

- 1 . Write the types of storage polysaccharides with examples.
- 2 Define gluconeogenesis.
- 3 . What is saturated and unsaturated fatty acids?
- 4 What is respiratory chain?
- 5 Give examples for sulphur containing amino acids.
- 6 Which cell organallae are involved in protein synthesis and storage?
- 7 Define ATP.
- 8 Mention the names of purine and pyrimidine bases in DNA.
- 9 What are enzymes? Name any two enzymes.
- 10 Give any two examples for detoxification reactions.

**SECTION - B (25 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks (5x5 = 25)

- 11 a Elaborate the structure of disaccharides.  
OR  
b Explain aerobic glycolytic pathway.
- 12 a Write a note on lipoprotein classification.  
OR  
b Write the reactions in p-oxidation of fatty acids.
- 13 a Explain urea cycle.  
OR  
b Give a brief summary on protein synthesis.
- 14 a Narrate the double helical structure of DNA.  
OR  
b Write short notes on the catabolism of haemoglobin.
- 15 a Explain enzyme classification.  
OR  
b Discuss the co-enzymic activities of B-complex vitamins in carbohydrate metabolism.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks (3x10 = 30)

- 16 Narrate TCA cycle and its energetics.
- 17 Elaborate the biosynthesis of cholesterol,
- 18 Discuss the structural organisation of proteins.
- 19 Explain the types and structure of RNA.
- 20 Discuss the technique and - applications of ascending paper chromatography.