

# Uttar Pradesh Rajarshi Tandon Open University, Prayagraj

Assignment-2019-2020

Master of Science Food and Nutrition (M.Sc. FN)

Subject : Food and Nutrition

Course Title : Advanced Nutritional Biochemistry

Subject Code : M.Sc. FN

Course Code : M.Sc. FN 1.2

Maximum Marks: 30
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## Section – A

Maximum Marks: 18

**Note: Long Answer type Questions. Answer should be given in 800 to 1000 words.**

**Answer all questions. All questions are compulsory**

- 1- What are monosaccharide's, Polysaccharides and oligosaccharides ? Give examples with their chemical structure. 6
- 2- What are the chemical active forms of Thiamine, Riboflavin and Niacin? Mention their role in metabolisms. 6
- 3- Write down the significance of citric acid cycle. Describe the reactions involved in ATP generation in the cycle. 6

## Section – B

Maximum Marks: 12

**Note: Short Answer type Questions. Answer should be given in 200 to 300 words.**

**All questions are compulsory**

- 4- Discuss briefly the chemistry and functions of phospholipids. 2
- 5- Present the structure and classification of nucleic acid. 2
- 6- How is biosynthesis of cholesterol regulated by the amount of cholesterol in diet 2
- 7- Define glycolysis and gluconeogenesis. 2
- 8- Write down the functions of plasma proteins. 2
- 9- Define proteoglycans. 2