

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc. Winter 2018-19 Examination

Semester: 1
Subject Code: 11203102
Subject Name: Intermediary metabolism

Date: 07/12/2018
Time: 10:30 am to 1:00 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
(a) Describe the regulation of glycolysis.
(b) Give a note on Glyoxylate cycle.
- Q.1. B) Answer the following questions (Any two)**
(a) Describe Gluconeogenesis with the help of diagram. (04)
(b) Short note: Urea cycle. (04)
(c) Define transamination. List out silent features of transamination. (04)
- Q.2. A) Answer the following questions.**
(a) Give an account on HMP shunt. (04)
(b) Give difference between glycogenic amino acids and ketogenic amino acids. (04)
- Q.2. B) Answer the following questions (Any two)**
(a) Write a note on utilization of ketone bodies. (03)
(b) Short note: Melatonin. (03)
(c) Short note: Ketogenesis. (03)
- Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
Write a note on disorders of purine metabolism.
- Q.3. B) Answer the following questions (Any two)**
(a) Explain oxidation of fatty acids. (04)
(b) Describe the functions and metabolism of phospholipids. (04)
(c) Give outline of cholesterol biosynthesis and write its functions. (04)
- Q.4. A) Answer the following questions.**
(a) How AMP and GMP are synthesized from IMP? (04)
(b) Write a short note on any one inborn error of amino acid metabolism. (04)
- Q.4. B) Answer the following questions (Any two)**
(a) Write the name of disease caused by increased glucose level in blood. Explain it. (03)
(b) Give an account on Lesch-Nyhan syndrome. (03)
(c) List out disorders of urea cycle. (03)