

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER-V - EXAMINATION – WINTER-2017**Subject Code: 250003****Date: 07-11-2017****Subject Name: Pharmaceutical Chemistry V****Time: 10:30 am to 01:30 pm****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Define and classify carbohydrates with example. Write a note on functions of carbohydrates. **06**
(b) Describe mechanism of enzyme action. **05**
(c) Describe synthesis of glucose from non-carbohydrate sources. **05**
- Q.2** (a) Describe enzyme inhibition. **06**
(b) Write a note on structure and functions of phospholipids. **05**
(c) Describe hexose monophosphate shunt with its significance. **05**
- Q.3** (a) Write a note on metabolism of Glucose-6-phosphate. **06**
(b) Write a note on ATP synthesis and its biological importance. **05**
(c) Write a short note on: i) Essential amino acids ii) alpha-Helix **05**
- Q.4** (a) Describe citric acid cycle with its energetics. **06**
(b) Write a note on the importance of serum enzymes in the diagnosis of disease. **05**
(c) Write a note on structural configuration of monosaccharides, with special reference to glucose. **05**
- Q.5** (a) Define and classify lipids with example. Write a note on functions of lipids. **06**
(b) Describe role of insulin in maintenance of blood sugar level. **05**
(c) Write a note on metabolism of galactose. **05**
- Q. 6** (a) Write a note on properties of proteins. **06**
(b) Describe defects in fructose metabolism. **05**
(c) Write a note on metabolism of glycogen. **05**
- Q.7** (a) Write a short note on: i) Inversion of Sucrose ii) Deoxysugars **06**
(b) Write a note on role of metals in enzyme action. **05**
(c) Discuss transport process across the cell membrane. **05**
