

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.

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|-------------|---|-----------|
| 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 |
