Seat No.:	Enrolment No.
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## GUJARAT TECHNOLOGICAL UNIVERSITY

**BE - SEMESTER-III • EXAMINATION - SUMMER • 2014** 

	Subject Code: 133601 Date: 23-05-2014 Subject Name: Introduction to Medicinal Chemistry & Biochemistry		
Tir	-	02.30 pm - 05.00 pm Total Marks: 70	
	1. 2.	Attempt all questions.	
Q.1	(a) (b)	Discuss TCA cycle in detail. Explain Structure activity relationship and mechanism of action of Sulfonamides.	07 07
Q.2	(a) (b)	What is drug metabolism? Discuss Phase-2 transformations.  i. Explain Electron Transport chain in detail.  ii. What is coenzyme?	07 05 02
	<b>(b)</b>	<ul><li>i. What is drug? Discuss classification of drugs.</li><li>ii Discuss the different types of therapy used in the treatment of cancer.</li></ul>	04 03
Q.3	(a) (b)	Define the term: Transamination. Discuss Urea cycle in detail.  What is cell? Explain different cell organelles and their function with diagram?  OR	07 07
Q.3	(a)	What class of drugs does Penicillin belong to? Discuss structural variation of Penicillin.	07
Q.4	<ul><li>(b)</li><li>(a)</li><li>(b)</li></ul>	<ul> <li>What are hormones? Give the classification of hormones with their functions</li> <li>What is Glycolysis? Explain Glycolysis in detail with ATP synthesis.</li> <li>i. Explain enzyme inhibition in detail.</li> <li>ii. Define the terms: Gram negative bacteria and Gram positive bacteria.</li> </ul>	07 07 05 02
Q.4	(a) (b)	Give the classification of Sulfonamides on the basis of pharmacological action.  i. Discuss urea cycle in detail.  ii. Define the terms: in vivo and in vitro activity.	07 05 02
Q.5	(a) (b)	Give classification of anti-malarial agents with two examples in each class.  Write a note on various routes of drug administration.  OR	07 07
Q.5	(a) (b)	<ul> <li>Explain pentose phosphate cycle.</li> <li>i. Explain role of vitamins as co-enzymes with suitable example.</li> <li>ii. Discuss the various factors affecting the enzyme activity.</li> </ul>	07 04 03

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