

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER – 7- EXAMINATION –WINTER - 2018

Subject Code:2270003**Date: 19/11/2018****Subject Name: Pharmaceutical Chemistry – IX (Medicinal Chemistry - III)****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) Classify sulfonamide on the basis of chemical structure and explain biosynthetic pathway leading to THF synthesis with involvement of sulfonamides. **06**
- (b) Explain SAR of fluoroquinolones. **05**
- (c) Write chemical name and synthesis of sulfacetamide and norfloxacin. **05**
- Q.2** (a) Classify cephalosporin and represent various ring and numbering system of clinically available beta-lactam antibiotic types with examples. **06**
- (b) Explain chemical instability of penicillin in detail. **05**
- (c) Explain SAR activities of aminoglycoside antibiotics. **05**
- Q.3** (a) Give any three structures of macrolide antibiotics and explain why erythromycin is unstable in acid media. **06**
- (b) Explain epimerization and degradation of tetracycline in detail. **05**
- (c) Write a short note on carbapenem and monobactams. **05**
- Q.4** (a) Classify antimalarial agents with examples and structures. **06**
- (b) Write chemical name and synthesis of primaquine and metronidazole. **05**
- (c) Explain SAR activities of quinolines. **05**
- Q.5** (a) Explain XDR-TB. write a note on first-line anti TB agents. **06**
- (b) Classify and explain mechanism of action of azole antifungal agents. **05**
- (c) Write chemical name and synthesis of ketoconazole and isoniazid. **05**
- Q. 6** (a) What is carcinoma? Classify anticancer agent with examples and structures. **06**
- (b) Write a note on alkylating agents used as anticancer agent. **05**
- (c) Write a note on antiviral agents. **05**
- Q.7** (a) Explain in detail molecular modeling. **06**
- (b) Write a note on methods of lead discovery. **05**
- (c) Write a note on QSAR. **05**
