(iii) Draw the chemical structure of cephalosporin and streptomycin. (1.5)

[This question paper contains 4 printed pages.]

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Your Roll No

Sr. No. of Question Paper: 1681

Unique Paper Code

: 32173909

Name of the Paper

: SEC: Pharmaceutical Chemistr

Name of the Course

: B.Sc. (Hons) / B.Sc. (Prog)

Semester

: III / V

Duration: 2 Hours

Maximum Marks: 38

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.

2. Attempt any four questions.

3. Each question carries 9.5 marks.

1. (i) Describe the Drug Discovery and Development procedure. (4)

(ii) What are drugs and explain the role of SAR studies in drug development? (4)

(iii) Difference between antimicrobial and antibacterial agents. (1.5)

- 2. (i) Write short note on any one of the following:
 - (a) Antilaprosyl drugs
 - (b) Cardiovascular drugs (4)
 - (ii) Describe the fermentation procedure for synthesis of penicillin. (4)
 - (iii) Difference between drugs and poisons. (1.5)
- 3. (i) What are central nervous system agents? Give two examples with structure. (4)
 - (ii) Mention the application of following pharmaceutical aids: $(2\times2=4)$
 - (a) Talc
 - (b) Diatomite
 - (iii) Distinguish between bacteriostatic and bactericidal agents. (1.5)
- 4. (i) Describe drug-receptor interaction with illustration. (4)

(ii) Match the following:

 $(1 \times 4 = 4)$

Column A	Column B
Streptomyces griseus	Acyclovir
Antiviral agent	Glyceryl nitrate
Cardiovascular drug	Lysine
Escherichia coli	Streptomycin

- (iii) Write the chemical reaction for synthesis of any sulphacetamide. (1.5)
- 5. (i) Mention the structure of the compounds A-D. (4)

$$\begin{array}{c|c}
NH_2 & O \\
\hline
NH_2OH & A & O \\
\hline
CI & \\
NaHSO_3 & C & (CH_3)_2SO_4 \\
\hline
Diazepam
\end{array}$$
Diazepam

(ii) Describe the fermentation synthesis procedure for vitamin C. (4)

P.T.O.