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B.PHARM.

THEORY EXAMINATION (SEM-VI) 2016-17 MEDICINAL CHEMISTRY-II

Time: 3 Hours Max. Marks: 100

Note: Be precise in your answer. In case of numerical problem assume data wherever not provided.

SECTION - A

1. Explain the following:

 $10 \times 2 = 20$

- (a) Define QSAR.
- **(b)** What is soft drug?
- (c) Define prodrug.
- (d) Give the structure and category of Procainamide.
- (e) What is angina pectoris and how will you cure.
- (f) Give the category of following drugs- Methimazole, Spironolactone, Glibenclamide, Mefenamic Acid
- (g) What is NSAIDS? Give any two examples.
- (h) Match the following:

Proton pump inhibitors Chlorthiazide
NSAIDS Amlodipine.
Diuretics Rabeprazole.
Antihypertensive drugs Diclofenac

- (i) Give the role of Rabeprazole.
- (j) What is Cosmeceuticals?

SECTION - B

2. Attempt any five parts of the following questions:

 $5 \times 10 = 50$

- (a) Discuss the basic concepts of drug design.
- (b) Explain analogue based drug design and structure based drug design,
- (c) Give the classification of Antiarrhythmic drugs also give the synthesis of Atenolol.
- (d) Write the synthesis and MOA of Furosemide.
- (e) Give the synthesis and uses of any two.
 - (i) Glibenclamide,
 - (ii) Spironolactone
 - (iii) Methimazole
- **(f)** Write the classification of Non steroidal anti-inflammatory drugs also give the MOA of Paracetamol.
- (g) Write about Hypoglycaemic agents. Explain them with suitable examples.
- (h) Discuss the, structure activity relationship, mode of action and uses of Aspirin.

SECTION - C

3. Attempt any two parts of the following questions:

 $2 \times 15 = 30$

- (a) Explain the basic concepts of QSAR. Discuss about molecular descriptors with reference to the 2D and 3D parameters.
- **(b)** Write the classification of Antihistaminics drugs. Give SAR and synthesis of Diphenhydramine.
- (c) Write in detail about the Antihypertensive drugs with reference to the Captopril.