## PARUL UNIVERSITY

### PARUL INSTITUTE OF PHARMACY AND RESEARCH

B.PHARMA V SEMESTER SECOND THEORY INTERNAL EXAMINATION: 2022-23

Subject Name: MEDICINAL CHEMISTRY-I

Subject Code: BP501T

Date: 07/09/2022 Time: 07.45AM TO 09.00AM Total Marks: 30

#### **Instructions:**

- 1. Make suitable assumptions wherever necessary.
- Figures to the right indicate maximum marks.

## Q.1Multiple Choice Questions. (10 X 1=10)

10

- 1) Which of the following is thiol group containing ACE inhibitor:
- (a) Lisinopril (b) Fosinopril (c)Captopril (d) Ramipril
- 2). Identify drug Atenolol:

$$(a) \qquad \qquad (b) \qquad (c) \qquad (d) \qquad (d) \qquad (d)$$

3)All are related with the synthesis of dibucaine EXCEPT:

(a) 
$$O$$
 (b)  $O$  (c)  $O$  (d)  $O$   $O$ 

4). Identify the drug structure which releases Nitric oxide:

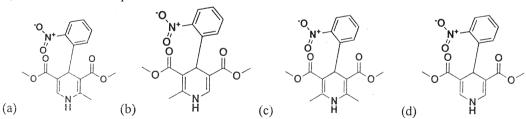
$$(a) \qquad (b) \qquad (c) \qquad (d) \qquad (d)$$

5). In the following structure activity will enhance when oxygen is substituted with following substituent EXCEPT:

$$R - \begin{cases} 0-R_1 \\ 0 \end{cases}$$

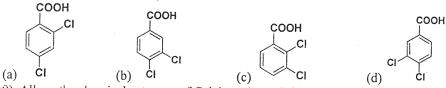
- (a)Alkoxy
- (b) Amino
- (c) Alkylamino
- (d)Nitro

6). Structure of Nifedipine is:



7). Precursor of aldosterone is:

8). Starting material for the synthesis of Furosemide:



- 9). All are the chemical category of Calcium channels blockers EXCEPT:
- (a) Phenylalkyamine (b) Benzothiazepines
- (c) Dihydropyridines
- (d) Benzodiazepines
- 10) Ions channels that are related with Sulfonylureas mechanism:
- (a)Na+,K+
- (b)  $K+,Ca+^2$
- (c)Na+,Ca+ $^{2}$
- (d) Na+,Ca+2, K+

Enrolment No
ACY AND RESEARCH
<b>NTERNAL EXAMINATION: 2022-23</b>
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Q.2Attempt any 01 out of 02 questions.  $(1 \times 10 = 10)$ 

10

- A) Classify Local anesthetic with all examples. Write synthesis and MOA of Procaine & Benzocaine.
- B) Classify Diuretics with all examples. Write SAR and synthesis of Chlorthiazide.

# Q.3Attempt any 02 out of 03 questions. (2 X 5=10)

10

- A) Classify Steroids with all structures
- B) Classify Anti diabetic agents with the synthesis of Tolbutamide.
- C) Classify Anti-hypertensive agents with MOA of ACE inhibitors

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