



Name : .....  
Roll No. : .....  
Invigilator's Signature : .....

**CS / B.PHARM (N) / SEM-6 / PT-608/ 2011**

**2011**

**PHARMACOLOGY**

*Time Allotted : 3 Hours*

*Full Marks : 70*

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**GROUP – A**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for any *ten* of the following :  

$10 \times 1 = 10$

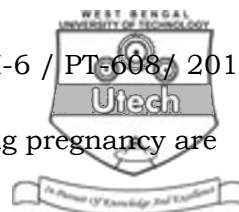
  - i) Diuretics of choice in uncomplicated hypertension is
    - a) Thiazide diuretics      b) Furosemide
    - c) Spironolactone      d) all of these.
  - ii) Which of the following is an anticoagulant ?
    - a) Lepuridin      b) Fibrinogen
    - c) Rutin      d) Menaquinone.
  - iii) Montelukast blocks the action of which of the following autacoid ?
    - a) Prostacyclin
    - b) Platelet activating factor
    - c) Leukotriene B<sub>4</sub>
    - d) Leukotriene C<sub>4</sub>/D<sub>4</sub>.

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- iv) Which of the following is type IV anti-arrhythmic drug ?
- a) Quinidine                      b) Propranolol
- c) Diltiazem                      d) None of these.
- v) Select the correct statement about salmeterol :
- a) It is a long acting selective  $\beta_2$  agonist bronchodilator
- b) It is a bronchodilator with anti-inflammatory property
- c) It is a  $\beta$  blocker that can be safely given to asthmatics
- d) It is an antihistaminic with mast cell stabilizing property.
- vi) Which of the following vasodilator(s) act(s) by opening  $K^+$  channels in the vascular smooth muscle ?
- a) Dipyridamole                      b) Minoxidil
- c) Diazoxide                      d) both (b) and (c).
- vii) Cardiac glycoside Digoxin binds to
- a)  $Na^+Ca^{2+}$  exchanger                      b)  $Na^+K^+$  ATPase
- c)  $Ca^{2+}$  ATPase                      d) none of these.
- viii) Glyceryl trinitrate acts as an antianginal drug by
- a) Preload reduction
- b) Afterload reduction
- c) Redistribution of coronary flow
- d) all of these.



- ix) Antihypertensives to be avoided during pregnancy are
- Diuretics
  - ACE inhibitors
  - nonselective  $\beta$  blockers
  - all of these.
- x) Which one of the following has both the antihistaminic as well as mast cell stabilizing activity ?
- Nedochromil sodium
  - Ketotifen
  - Zileuton
  - Sodium chromoglycate.
- xi) At equinatriuretic doses which diuretic causes the maximum  $K^+$  loss is
- Furosemide
  - Hydrochlorothiazide
  - Acetazolamide
  - Amiloride.
- xii) Glyceryl trinitrate is administered by the following routes *except*
- Oral
  - Sublingual
  - Intramuscular
  - Intravenous.

### GROUP – B

#### ( Short Answer Type Questions )

Answer any *three* of the following.  $3 \times 5 = 15$

- Write a note on the pathophysiology of cardiac arrhythmia ?
- Discuss electrolyte imbalance and its pharmacotherapy.
- Classify antihyperlipidemic drugs. Write down the mechanism of action of the Gemfibrozil.  $2 + 3$
- Write a note on antiplatelet drugs.
- Write a note on expectorants.



**GROUP – C**

**( Long Answer Type Questions )**

Answer any *three* of the following.  $3 \times 15 = 45$

7. Explain the process of absorption, transportation and storage of iron in our body. Describe the condition which occurs in case of iron deficiency. Discuss the pharmacotherapy of iron deficiency.  $6 + 3 + 6$
8.
  - a) Write in brief about actions and pathophysiological roles of Prostaglandin.
  - b) Classify 5-HT receptors.
  - c) Write a short note on therapeutic uses of Histamine antagonists.  $7 + 3 + 5$
9.
  - a) How will you perform 4-point bioassay of acetylcholine using rat colon preparation ?
  - b) Write about mechanism of action, adverse effects, drug interactions and therapeutic effects of Warfarin.  $7 + 8$
10.
  - a) Write the causes of hypertension.
  - b) Classify the drug use for hypertension.
  - c) Write the action of  $\beta$  bloker & ACE inhibitor for treatment of hypertension with example.  $3 + 5 + 7$
11. Explain the pathophysiology of asthma. Mention the factors which can aggravate asthma. What is / are the approach(es) for treatment of asthma ? Discuss the drugs used for the treatment of bronchial asthma.  $4 + 3 + 2 + 6$

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