



Name : .....

Roll No. : ..... 

*Invigilator's Signature :* .....

**CS/B.PHARM(N)/SEM-7/PT-708/2011-12**

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) An example of nucleoside reverse transcriptase inhibitors is

  - a) Efavirenz
  - b) Ritonavir
  - c) Delavirdine
  - d) Zalcitabine.

ii) Most common side effect of cisapride is

  - a) Abdominal cramps
  - b) Diarrhea
  - c) Headache
  - d) Convulsion.

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- iii) Which of the following antibiotics can produce 'Jarisch-Herxheimer Reaction' when it is injected in a syphilitic patient
- a) Oxytetracycline      b) Nystatin  
c) Polymyxin-B      d) Penicillin.
- iv) Which of the following drugs increase CNS toxicity of fluoroquinolones
- a) Antacids      b)  $\text{Ca}^{2+}$  salts  
c) Barbiturates      d) NSAIDs.
- v) Primaquine sensitivity is due to deficiency of
- a) Cholinesterase  
b) Pseudocholinesterase  
c) Glucose 6 phosphate  
d) Glucose 6 phosphate dehydrogenase.



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vi) First generation Ber-Abl tyrosine kinase inhibitors for patients with chronic myelogenous leukemia is

- a) Dasatinib
- b) Imatinib
- c) Bosutinib
- d) Nilotinib.

vii) Castor oil is a

- a) Bulk forming purgative
- b) Stimulant purgative
- c) Osmotic purgative
- d) Stool softener.

viii) Thiocyanates is a thyroid inhibitor which act by inhibiting

- a) Development of thyroid tissue
- b) Iodine trapping
- c) Thyroid hormone synthesis
- d) Thyroid hormone release.



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ix) Metronidazole acts by

- a) formation of highly reactive nitro radicals
- b) formation of highly reactive superoxide radicals
- c) formation of highly reactive hydroxyl radicals
- d) formation of highly reactive hydrogen peroxide radicals.

x) Which of the following fluroquinoline antibiotic is found at higher concentration in CSF ?

- a) Ofloxacin
- b) Norfloxacin
- c) Ciprofloxacin
- d) Levofloxacin.

xi) Oxytocin acts on

- a) Ligand gated ion channels
- b) G-protein coupled receptor
- c) Kinase linked receptor
- d) Neuclear receptor.



xii) Primary intracellular site of action of the aminoglycosides is

- a) 40S ribosomal subunit
- b) 30S ribosomal subunit
- c) 20S ribosomal subunit
- d) 60S ribosomal subunit.

#### **GROUP – B**

##### **( Short Answer Type Questions )**

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

2. What are mucolytics ? Classify them and mention the mechanism of action of Acetylcysteine as mucolytic.
3. Write down the anthelminthic treatment of neurocysticercosis.
4. Enumerate the differences between erythromycin, clarithromycin and azithromycin.
5. Write down the first and second line antitubercular drugs. Explain the mechanism of action and adverse effects of Isoniazid.
6. Write down the pharmacology of the thyroid hormones.



**GROUP - C**

**( Long Answer Type Questions )**

Answer any *three* of the following.

$3 \times 15 = 45$

7. Explain briefly the pathophysiology of emesis. Classify the antiemetic drugs. Explain the mechanism of action and adverse effect for  
a) Domperidone  
b) Ondansetron.  $4 + 5 + 6$
8. Explain the mechanism of action of aminoglycosides. Explain briefly the mechanism of resistance for aminoglycosides. Give the use and adverse effects of  
a) Amikacin  
b) Gentamicin  
c) Neomycin.  $4 + 5 + 6$
9. What do you mean by cell cycle specific and cell cycle non-specific cytotoxic drugs ? Give example of both classes. What are the general toxicities shown by cytotoxic drugs ? Write about mechanism of action and use of Methotrexate as antineoplastic agent.  $1 + 1 + 1 + 1 + 6 + 3 + 2$
10. What are the oral hypoglycaemic drugs ? Classify them with example. What is the mechanism of action of sulfonylureas ? Write a short note on the use of estrogen for hormone replacement therapy.  $1 + 5 + 5 + 4$



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11. Write short notes on any *three* of the following :  $3 \times 5 = 15$

- a) Write a note on the hypothalamus-Pituitary Adrenal Cortex axis.
- b) Mechanism of action of cotrimoxazole.
- c) Finasteride in benign hypertrophy of prostate.
- d) Mechanism of action, adverse effects and uses of
  - i) Zidovudine
  - ii) Prednisolone.

