



Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS / B.PHARM(OLD) / SEP.SUPPLE / SEM-7 / PT-708 / 2012**

**2012**

**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 )**

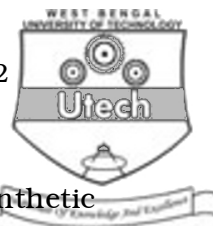
1. Choose the correct alternatives for any *ten* of the following :

10 × 1 = 10

- i) Aminoglycosides inhibits
  - a) protein synthesis      b) DNA function
  - c) cell wall synthesis      d) none of these.
- ii) An antidote of morphine is
  - a) pyridoxine      b) methylene blue
  - c) naloxone      d) none of these.
- iii) Therapeutic index =
  - a) ED 50 / LD 50      b) LD 50 / ED 50
  - c) TD 50 / LD 50      d) LD 50 / TD 50.

SS-358

[ Turn over



- iv) Chemotherapeutic agents are
- a) synthetic
  - b) semisynthetic
  - c) of natural origin
  - d) none of these.
- v) Acyclovir is an
- a) anti-viral drug
  - b) anti-bacterial drug
  - c) anti-fungal drug
  - d) none of these.
- vi) Selective toxicity is a property of
- a) microorganisms
  - b) antibiotics
  - c) host cells
  - d) none of these.
- vii) Gastrin is a/an
- a) hormone
  - b) enzyme
  - c) neurotransmitter
  - d) none of these.
- viii) Antidiarrhoeal drug Racecadotril is inhibitor of
- a) cholinesterase
  - b) enkephalinase
  - c) protease
  - d) gastrin.
- ix) Radioactive iodine
- a) is taken up by pituitary disorder
  - b) is administered by parenteral route
  - c) emits  $\beta$  radiation which destroy thyroid cell
  - d) can be given to all patients regardless of their age.
- x) Antiviral activity of Zidovudine is due to
- a) inhibition of viral RNA polymerase
  - b) inhibition of viral RNA topoisomerase II
  - c) inhibition of RNA dependent DNA polymerase
  - d) inhibition of viral transpeptidase.

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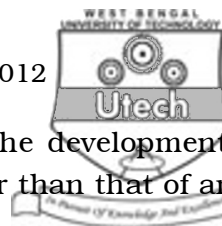
- xi) Vincristin and Vinblastin
- a) act by binding with protein tubulin and arrest the metaphase
  - b) act by inhibiting the protein synthesis
  - c) act as an alkylating agent
  - d) act as an antimetabolite.
- xii) Cytoprotective agent Misoprostol is an analogue of
- a) prostaglandin
  - b) histamine
  - c) acetylcholine
  - d) cytokine.

### GROUP – B

#### ( Short Answer Type Questions )

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

2. Classify the drugs used to inhibit the gastric acid secretion with proper example. Write about the mechanism of cytoprotective agent used to protect the gastric mucosa.
3. What is heavy metal antagonist ? Write about the different heavy metal.
4. Define the terms 'antibiotic' and 'chemotherapeutic' agents. Classify antibiotics.



5. What is drug resistance ? Explain why the development of resistance of anti-bacterial drugs are easier than that of anti-fungal drugs ?
6. Write short notes on acyclovir.

### GROUP – C

#### ( Long Answer Type Questions )

Answer any *three* questions.  $3 \times 15 = 45$

7. Write about the biosynthesis of corticosteroids. What are the pharmacological actions of corticosteroids ? What is the cellular mechanism of corticosteroids ?  $4 + 7 + 4$
8. What is beta lactum antibiotics ? Write down the mechanism of action of beta lactum antibiotics. Write mechanism of action, adverse effects and uses of cotrimoxazole.
9. What is chemotherapy ? Write about the principal molecular approach of mechanism of action of antimicrobial agents. Write different types of penicillins with their advantage and disadvantage. What is suicidal inhibitor ?  $1 + 6 + 7 + 1$
10. What are meant by aminoglycosides and broad spectrum antibiotics ? Describe the mode of action of aminoglycosides. Write its indication and adverse effects.
11. What do you mean by oral hypoglycemic agents ? Classify them. Write mode of action, indications, side effects and contraindication of biguanides.

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