Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/B.PHARM(OLD)/SEM-8/PT-809A/2012

2012
ADVANCED 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 questions :   10 × 1 = 10

   i)   Functionally receptors are

   a)   two types   b)   three types

   c)   four types   d)   five types.

   ii)   An agonist has .... to the receptor.

   a)   only affinity

   b)   only efficacy

   c)   both affinity and efficacy

   d)   no affinity and efficacy.

   iii)   Which of the following drugs undergoes enterohepatic cyling ?

   a)   Cefuroxime   b)   Rifampicin

   c)   Gentamicin   d)   Ciprofloxacin.

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iv) IL-2 is a / an

   a) Immunostimulant   b) Immunosuppressant

   c) both (a) and (b)   d) Immunomodulator.

v) Gamma-interferon is a

   a) Lymphokine   b) Hormone

   c) Chemoattractant   d) Mediator.

vi) Insulin receptors

   a) Channel receptors

   b) G-protein coupled receptors

   c) Kinase-linked receptors

   d) Nuclear receptors.

vii) Heart muscle is never affected by myasthenia gravis. The statement is

   a) True

   b) False

   c) Sometimes true and sometimes false

   d) Never true.

viii) Juvenile myasthenia gravis occurs at

   a) a neonatal   b) an old age

   c) a young age   d) a child age.

ix) Parkinson's disease is not characterized by

   a) muscle rigidity   b) tremor

   c) language problem   d) heart disease.

x) Which statement is true ?

   a) Alzheimer's disease and dementia are same disease

   b) Alzhimer's disease and dementia are different diseases

   c) Alzheimer's disease is more dangerous than dementia

   d) Alzheimer's disease and dementia have different causes.

xi) Example of drug interaction during excretion is

    a) Tetracycline by antacid

    b) Methotrexate by aspirin

    c) Penicillin by citririzine

    d) Tricylic anti-depressant by Vitamin B_2.

xii) Which of the following is not the disadvantage of bio-assay ?

    a) Costly   b) Less time consuming

    c) Biological variation   d) Cruelty to animal.
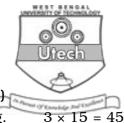
GROUP – B

(Short Answer Type Questions)

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

2. What do you mean by bio-assay ? Mention its advantages and disadvantages. Describe the principle of bio-assay.

3. Define immunosuppressive agent. Classify the components of immune system.

4. Define receptor. Classify receptors. What do you mean by signal transduction of a drug ?

5. Define biotransformation of a drug. What are the significance of drug biotransformation for expel out of the drug from the body ?

6. What do you mean by G-protein-linked receptor and second messenger ? Describe the pathway of adenyl cyclase-cAMP-PKA.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. 3 × 15 = 45

7. Discuss in detail about Insulin, Oxytocin and Progesterone bio-assay.

8. Define immunomodulators. Classify the drugs used as immunosuppressive agents. Write down the immunosuppressive mechanism of cyclosporine and glucocorticoids.

9. What do you mean by neurological disorder ? Define Parkinson's disease. How will you defect Parkinson's disease ? Mention drugs used for the management of the disease.

10. What is cancer ? Classify it. Write down the factors responsible for cancer. Describe in detail about folic acid antagonist.

11. Define drug interaction. Write in detail about the mechanism of drug interaction.

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