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5585

M.D. EXAMINATION, 2010

PHARMACOLOGY

Paper - I

(General Pharmacology)

Time : Three Hours]

[Maximum Marks : 100

1. Write different receptor mechanisms of drug action. 25
2. Enumerate changes in drug pharmacokinetics in elderly. Give suitable examples. 25
3. Write an essay on "concept of P-drugs". 25
4. Write short notes on : 25
 - (a) Essential drugs.
 - (b) Orphan drugs.
 - (c) Drug antagonism.
 - (d) First order kinetics for elimination.

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M.D. EXAMINATION, 2010

PHARMACOLOGY

Paper - II

(Systemic Pharmacology)

Time : Three Hours]

[Maximum Marks : 100

1. Discuss the methods of screening of analgesic agents. 30
2. (a) Angiotensin and Bradykinin receptors. 15
(b) Signal transduction. 20
3. (a) Status of nitrous oxide as inhalational anaesthetic. 15
(b) SERMs and anti-estrogens. 20

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M. D. Examination, 2010

PHARMACOLOGY

Paper - III

(Applied Pharmacology)

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3. Discuss: 20

- (a) Therapeutic status of atypical antipsychotics.
- (b) Pharmacological basis of combination therapy in treatment of pulmonary tuberculosis.

4. Write briefly on: 10

- (a) Meta-analysis.
- (b) Chi-square test. 10

Time : Three Hours]

Maximum Marks :100

- 1. Describe the electrophysiological basis of anti-arrhythmic drugs in treatment of arrhythmias. Describe merits and demerits of class III anti-arrhythmic drugs. 25
- 2. Write short notes on: 45
 - (a) Drug treatment of obesity.
 - (b) Hormone replacement therapy in post menopausal women.
 - (c) Anti-inflammatory drugs use in Bronchial Asthma.

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M. D. Examination, 2010

PHARMACOLOGY

Paper - IV

(Bioassy and Recent Advances)

Time : Three Hours] Maximum Marks :100

1. Discuss the screening methods for the evaluation of anti-inflammatory drugs. 25
2. Discuss briefly: 25
 - (a) Principles and applications of HPLC.
 - (b) Transgenic animals in drug research.
3. Discuss briefly: 25
 - (a) Emerging treatment modalities for venous thromboembolism.
 - (b) The revival of thalidomide,
4. Discuss briefly: 25
 - (a) IL-2 receptor antagonist.
 - (b) Treatment of T. B. in HIV-infected patients.

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S-4491

M. D. Examination, 2011

GENERAL PHARMACOLOGY

Paper - I

(General Pharmacological Principles and
Applied Sciences)

Time : Three Hours]

[Maximum Marks : 100

Note :- Attempt all questions.

1. Discuss the influence of pH of biological fluid and diffusion of drugs passage across biological system. 40
2. Write briefly on : 30
 - (a) Hepatic extraction of drugs
 - (b) Adverse drug reactions
 - (c) Quantification of bioavailability

3. Discuss on the following :

- (a) Plasma - half life of a drug and its clinical relevance
- (b) Serotonin in health and disease
- (c) Pharmacogenomics

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4492

M. D. Examination, 2011

PHARMACOLOGY

Paper II

(General and Systemic Pharmacology)

Time : Three Hours] [Maximum Marks : 100

Note : Attempt all questions. All questions carry equal marks.

1. Give an account of the drugs used for management of bronchial asthma.
2. Describe the structure of bacterial cell wall and the antimicrobial strategies for drug designing.
3. Define selective estrogen receptor modulators and outline their therapeutic implications.
4. Discuss the current therapeutic status of drug used for erectile dysfunction.

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5. Enumerate newer antidepressant drugs. Discuss their current therapeutic status.
6. Discuss current status of Proton Pump Inhibitors.
7. Discuss the pharmacological management of cerebral malaria.
8. Enumerate anti-anginal drugs. Discuss their current status.
9. Classify anesthetics. Discuss uses and techniques of local anaesthesia.
10. Discuss actions of insulin.

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M. D. Examination, 2011

SYSTEMIC PHARMACOLOGY,
CHEMOTHERAPY AND THERAPEUTICS

Paper - II

Time : Three Hours]

[Maximum Marks :

Note :- Attempt all questions.

1. Discuss the neurobiological basis of major psychiatric disorders and pharmacological concept for their treatment.
2. Describe the following :
 - (a) Fibrinolytic agents
 - (b) Vaughan Williams and Singh classification
 - (c) Drugs for chloroquine resistant malaria

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3. Write briefly on followings :

- (a) Drug resistance in tuberculosis
- (b) Alkylating agents
- (c) Drugs for erectile dysfunction

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M. D. Examination, 2011

PHARMACOLOGY

Paper III

(Experimental and Clinical Pharmacology)

Time : Three Hours] [Maximum Marks : 100

Note : Attempt all questions. 10x10=100

1. Outline the evaluation of a lead compound for its antihistaminic activity in animal models.
2. Define placebo. Give an outline of ethical considerations for its use in clinical trials.
3. Explain the role of genetic engineering in vaccine production.
4. Define LD50 and ED50. Discuss the methods for their calculation.

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5. What is the significance of randomization in a clinical trial? Explain with suitable examples.
6. Define 'transgenic animals'. Discuss their role in research on drug molecules.
7. Enumerate the principles of a good drug prescription with suitable examples.
8. Discuss the principles of New Drug Application.
9. Outline the evaluation of a new diuretic compound in animal models.
10. Discuss the phases of clinical trials. Give an outline of Phase I clinical trial.

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4494

M. D. Examination, 2011

PHARMACOLOGY

Paper IV

(Recent Advances in Pharmacology)

Time : Three Hours]

[Maximum Marks : 100

Note : Attempt all questions. All questions carry equal marks.

1. Discuss the recent advances in management of MI.
2. Outline hybridoma technique. Discuss the role of monoclonal antibodies in research and diagnostics.
3. Give an outline of the pathophysiology of DM. Discuss the recent advances in its management.
4. Discuss drug therapy of XDR tuberculosis.

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5. Give an account of pharmacotherapy of psoriasis.
6. Outline anti-microbial drugs to be avoided in liver diseases.
7. Discuss the recent advances in the management of AIDS patient.
8. Discuss factors affecting iron absorption.
9. Outline the pathophysiology of osteoporosis. Discuss the diagnostic and therapeutic advances in the management of osteoporosis.
10. Describe the management of Pancreatic cancer.

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M. D. Examination, 2011

**CLINICAL PHARMACOLOGY AND RE-
CENT ADVANCES**

Paper - IV

Time : Three Hours] [Maximum Marks :

Note :- Attempt all questions:

1. Discuss the phase-I clinical trial of a drug.
2. Write briefly on following :
 - (a) Informed consent process
 - (b) Post marketing surveillance
 - (c) Randomization in clinical trial
3. Discusss the followings :
 - (a) TDM in cancer therapy
 - (b) Evaluation of drug-cost analysis
 - (c) Recent development in treatment of bronchial asthma

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3101

M. D. Examination, 2012

PHARMACOLOGY

Paper - I

(General Pharmacology)

Time : Three Hours] [Maximum Marks : 100

Note :- Attempt all questions.

1. Discuss the influence of pH of biological fluid and diffusion of drugs passage across biological system.
2. Write briefly on :
 - (a) Hepatic extraction of drugs 10
 - (b) Adverse drug reactions 10
 - (c) Quantification of bioavailability 10

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3. Discuss on the following :

- (a) Plasma : half life of a drug and its clinical relevance. 10
- (b) Serotonin in health and disease. 10
- (c) Pharmacogenomics. 10

3102
MD PHARMACOLOGY-
Paper-II

Systemic Pharmacology, Chemotherapy and Therapeutics

Time : 3-00 Hours

MM: 100

Note: Attempt all questions.

- Q. 1. Discuss the pharmacological basis of drugs used in the treatment of Congestive Heart Failure 40
- Q. 2. Describe the drugs used in the treatment of followings- 3*10
- a Parkinson's disease
 - b Rheumatoid arthritis
 - c Glaucoma
- Q. 3. Write your point of view on the current knowledge on following- 3*10
- a mood stabilizers
 - b drug resistance to chemotherapy
 - c oral antidiabetics

3103

M. D. Examination, 2012

PHARMACOLOGY

Paper - III

(Applied Pharmacology, Therapeutics & Toxicology,
Biostatistics)

Time : Three Hours]

[Maximum Marks : 100

Note :- Attempt all questions.

1. Discuss the animal models for the screening and validation of anti-inflammatory property of an investigational molecule.
2. Write on the followings-
 - (a) Toxicity studies in animals in relation to schedule 'Y'
 - (b) Role of bioassay methods in understanding of basic principles in pharmacology
 - (c) Avoidance response in animal behavioral studies
3. Write briefly on-
 - (a) ANOVA
 - (b) Mass- spectroscopy in pharmacology
 - (c) Determination of sample size in a trial.

3104

M. D. Examination, 2012

PHARMACOLOGY

Paper - IV

(Experimental Pharmacology)

Time : Three Hours]

[Maximum Marks : 100

Note :- Attempt all questions.

1. Design the phase-II Clinical trial to study an antihypertensive new drug molecule.
2. Write on the followings-
 - (a) ADR monitoring programme
 - (b) Cytokines as a therapeutic target
 - (c) Atypical antidepressants
3. Discuss the following-
 - (a) Recent advance in treatment of type-II diabetes
 - (b) Drugs for treatment of obesity
 - (c) Cannabinoid receptors system and its potential therapeutic role

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