

MANIKGAD - II: APRIL / MAY - 2014
SUBJECT: COMMUNITY PHARMACY

Day: *Saturday*
Date: *19.04.2014*

Time: *2.00 P.M. To 5.00 P.M*
Max. Marks: 80

N.B.:

- 1) **Q. No. 1 and 5 are COMPULSORY.** Out of remaining attempt Any **TWO** from Section -I and Section - II.
- 2) Figures to the **RIGHT** indicate full marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.
- 4) Draw neat labeled diagrams **WHEREVER** necessary.

SECTION-I

- Q.1** A) Attempt Any **FOUR** of the following: (08)
- i) Explain term "Refill instructions" in prescription.
 - ii) Write the FDA licenses required to sale allopathic medicines according to Schedules of drugs.
 - iii) Define "Lead time" and its importance in inventory control.
 - iv) Write patient counseling for OTC pain killer medicines.
 - v) Write importance of endorsement of prescription.
- B) Discuss merits and demerits of Product Information Leaflets. (03)
- Q.2** a) Discuss various stages of patient counselling. (06)
- b) Elaborate principles of ABC analysis in inventory control. (06)
- Q.3** Discuss selection of site, space layout and design for a community pharmacy in a township area. (12)
- Q.4** Write short notes on Any **THREE** of the following: (12)
- a) Pictograms in Community Pharmacy
 - b) Records for stock management in community pharmacy.
 - c) Principles of Pharmaceutical care.
 - d) Nomenclature of community pharmacy as per drug laws.

SECTION-II

- Q.5** A) Attempt Any **FOUR** of the following: (08)
- i) Write equation for calculation of patient medication adherence.
 - ii) Write normal and abnormal values of blood glucose levels.
 - iii) Differentiate between OTC medication and Self Medication.
 - iv) Write types of barrier type of contraceptives. Explain any one.
 - v) Write causative organism for typhoid with signs and symptoms of typhoid.
- B) Enlist drugs used in Swine Flu with their dose and major ADR. (03)
- Q.6** a) Discuss code of ethics for community pharmacists. (06)
- b) Elaborate the concept of Rational Drug Use. (06)
- Q.7** Discuss paediatric drug therapy and role of community pharmacist in paediatric care. (12)
- Q.8** Write short notes on Any **THREE** of the following: (12)
- a) Non-pharmacological treatment for GI disturbances
 - b) Ophthalmic symptoms

MANIKGAD - II: APRIL / MAY 2014
SUBJECT : PHARMACEUTICAL MICROBIOLOGY

Day : Friday
Date : 25-04-2014

Time : 2.00 P.M. TO 5.00 P.M.
Max. Marks : 70

N.B.:

- 1) **Q.No.1 and Q.No.5** are **COMPULSORY**. Out of remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION - I

- Q.1** a) Answer **ANY FOUR** of the following: [08]
- i) Define following terms:
1) 'D-value' 2) 'Magnification Power'.
 - ii) Write a note on contributions of Robert Koch.
 - iii) What are the functions of Pili?
 - iv) Highlight characteristics of Rickettsiae.
 - v) Draw a neat labeled diagram of *Aspergillus niger*.
- b) Write in brief about 'Sterilization Monitors'. [03]
- Q.2** a) Draw a typical structure of bacteria. Describe the functions of each part. [07]
b) Discuss in detail bacterial growth curve. [05]
- Q.3** How will you isolate and identify an unknown culture of bacteria? [12]
- Q.4** Write short notes on **ANY THREE** of the following: [12]
- a) Cultivation of Viruses
 - b) Sterility Tests as per I.P.
 - c) Cold sterilization
 - d) Spirochetes

SECTION - II

- Q.5** a) Answer **ANY FOUR** of the following: [08]
- i) Write ideal properties of a disinfectant.
 - ii) Compare between Cellular and Humoral Immunity.
 - iii) What is 'Erythroblastosis foetalis'?
 - iv) List advantages and disadvantages of Microbial Assays.
 - v) Write about Immunization Programme.
- b) How preservatives in pharmaceutical preparations are evaluated? [03]
- Q.6** a) Write principle and characteristics Antigen-Antibody Reactions. [07]
b) How quality of vaccines is evaluated? [05]
- Q.7** Discuss various defence mechanisms of host against pathogens. [12]
- Q.8** Write short notes on **ANY THREE** of the following: [12]
- a) PCR test
 - b) Syphilis
 - c) Type III hypersensitivity
 - d) Evaluation of disinfectants

MANIKGAD -II : APRIL / MAY - 2014
SUBJECT: PHARMACOTHERAPEUTICS - I

Day: Monday
Date: 21-04-2014

Time: 2.00 P.M. To 5.00 P.M.
Max. Marks: 70

N.B.:

- 1) **Q. No. 1 and 5 are COMPULSORY.** Out of remaining any **TWO** questions from Section - I and any **TWO** from Section - II
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

- Q.1** A) Answer any **FOUR** of the following: **(08)**
- i) Write etiology of atherosclerosis.
 - ii) Write indication of aspirin in ischemic heart disease.
 - iii) Write the events in electro cardiography.
 - iv) Write with an example concept of rational drug therapy.
 - v) Enlist triggers for COPD.
 - vi) Write major adverse effect of leukotriene modifiers.
- B) Write note of inhaled corticosteroids **(03)**
- Q.2** Discuss indication of diuretics in hypertension with their pharmacotherapeutics, precautions and monitoring. **(12)**
- Q.3** a) Discuss stages of hypertension including clinical evaluation, predisposing factors and physical finding of essential hypertension. **(07)**
- b) Discuss indications, mechanism of action, dosage and administration of anticholinergic in asthma therapy. **(05)**
- Q.4** Write short notes on (**ANY THREE**) **(12)**
- i) Diagnostic tests for chronic bronchitis.
 - ii) Treatment goals in Hyperlipidemia
 - iii) Anti arrhythmic drugs
 - iv) Renin-angiotension- aldosterone system

P. T. O.

SECTION-II

- Q.5** A) Answer Any **FOUR** of the following: **(08)**
- i) Define paediatrics, infant and foetus
 - ii) Write two bands and composition of combined oral contraceptive pills.
 - iii) Differentiate between Type I and type II diabetic.
 - iv) Enlist the factors responsible for osteoporosis.
 - v) Expand SERMS and name any two drugs.
- B) Enumerate signs and symptoms of hypothyroidism. **(03)**
- Q.6** Discuss pharmacotherapy for diabetes mellitus. **(12)**
- Q.7** a) State drug-drug interactions of combined oral contraceptive pills. **(07)**
- b) Write a note on glaucoma. **(05)**
- Q.8** Write short notes on (**ANY THREE**) **(12)**
- i) Patient counselling for diabetic patient
 - ii) Antiresorptive drug in osteoporosis
 - iii) Role of calcium and vitamin D.
 - iv) Metabolism alteration in geriatric

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MANIKGAD – II: APRIL / MAY – 2014
SUBJECT: PHARMACOGNOSY AND PHYTOPHARMACEUTICALS

Day: *Saturday*
Date: *12-04-2014*

Time: *2:00 P.M. TO 5:00 P.M.*
Max. Marks: 70

N.B.:

- 1) **Q. No. 1 and Q. No. 5** are **COMPULSORY**. Out of remaining attempt any **TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer to both the sections should be written in **SEPARATE** answer book.

SECTION-I

- Q.1 A)** Solve any **FOUR** of the following: **(08)**
- i) Write two examples of alkaloids.
 - ii) Write two examples of antimalarial drugs.
 - iii) Write uses of gum tragacanth.
 - iv) Write significance of acid value.
 - v) What is agricultural control of pests.
- B)** What are insecticides? **(03)**
- Q.2**
- a) Write differences between gums and mucilages. **(06)**
 - b) Describe 'Honey'. **(06)**
- Q.3**
- a) Write classification and examples of fatty acids. **(06)**
 - b) Explain any three analytical parameters of lipids. **(06)**
- Q.4** Prepare notes on: **(12)**
- a) Advantages of cultivation
 - b) Storage of crude drugs
 - c) Chemistry of proteins

SECTION-II

- Q.5** Answer Any **FOUR** of the following: **(08)**
- i) State different plant cell contents.
 - ii) What is morphological classification of crude drugs?
 - iii) Write scope of pharmacognosy.
 - iv) What are secondary metabolites?
 - v) What are Weedicides?
- B)** Write history of pharmacognosy. **(03)**
- Q.6**
- a) Describe the carbohydrates in general. **(06)**
 - b) Write pharmacognosy of castor oil. **(06)**
- Q.7**
- a) Write in details therapeutic classification of crude drugs. **(06)**
 - b) Write in short about pectin. **(06)**
- Q.8** Prepare notes on: **(12)**

MANIKGAD - II: JUNE-2014 Supplementary.
SUBJECT : PHARMACOGNOSY & PHYTOPHARMACEUTICALS

Day : Wednesday
Date : 02-02-2014

Time : 2:00 P.M. TO 5:00 P.M.
Max. Marks : 70

N.B.:

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION - I

- Q.1** a) Attempt **ANY FOUR** of the following: [08]
i) Write biological source and uses of cod liver oil.
ii) Give adulterants of senna.
iii) Write different chemical constituents of castor oil.
iv) Explain PUFA and MUFA also give examples.
v) What are waxes? Give two examples.
- b) Give two examples of adulteration of crude drug with synthetic chemicals. [03]
- Q.2** Define adulteration. Write different methods of adulteration of crude drug. [12]
- Q.3** a) What are various methods of cultivation of crude drug? Explain with suitable example. [07]
b) Write in detail chemical classification of crude drug. [05]
- Q.4** Write short notes on **ANY THREE** of the following: [12]
a) Agar
b) Acacia
c) Shark liver oil
d) Arachis oil

SECTION - II

- Q.5** a) Attempt **ANY FOUR** of the following: [08]
i) What is aseptic method of micro propagation?
ii) Name different types of pests.
iii) What is taxonomical classification? Give example.
iv) Explain 'garbling' in processing of crude drug.
v) Write significance of vegetative propagation.
- b) Write in detail scope of pharmacognosy. [03]
- Q.6** Write in detail microscopic study of power crude drug. [12]
- Q.7** a) What are lipids? Give source, method of extraction, chemistry and analysis of lipids. [07]
b) What are proteins? Give classification, chemistry and analysis of proteins with suitable examples. [05]
- Q.8** Write short notes on **ANY THREE** of the following: [12]
a) History of pharmacognosy
b) Collection of crude drug

MANIKGAD - II: JUNE-2014 Supplementary.
SUBJECT : PHARMACOGNOSY & PHYTOPHARMACEUTICALS

Day : *Wednesday*
Date : *02-02-2014*

Time : *2:00 P.M. TO 5:00 P.M.*
Max. Marks : 70

N.B.:

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION - I

- Q.1** a) Attempt **ANY FOUR** of the following: [08]
- i) Write biological source and uses of cod liver oil.
 - ii) Give adulterants of senna.
 - iii) Write different chemical constituents of castor oil.
 - iv) Explain PUFA and MUFA also give examples.
 - v) What are waxes? Give two examples.
- b) Give two examples of adulteration of crude drug with synthetic chemicals. [03]
- Q.2** Define adulteration. Write different methods of adulteration of crude drug. [12]
- Q.3** a) What are various methods of cultivation of crude drug? Explain with suitable example. [07]
- b) Write in detail chemical classification of crude drug. [05]
- Q.4** Write short notes on **ANY THREE** of the following: [12]
- a) Agar
 - b) Acacia
 - c) Shark liver oil
 - d) Arachis oil

SECTION - II

- Q.5** a) Attempt **ANY FOUR** of the following: [08]
- i) What is aseptic method of micro propagation?
 - ii) Name different types of pests.
 - iii) What is taxonomical classification? Give example.
 - iv) Explain 'garbling' in processing of crude drug.
 - v) Write significance of vegetative propagation.
- b) Write in detail scope of pharmacognosy. [03]
- Q.6** Write in detail microscopic study of power crude drug. [12]
- Q.7** a) What are lipids? Give source, method of extraction, chemistry and analysis of lipids. [07]
- b) What are proteins? Give classification, chemistry and analysis of proteins with suitable examples. [05]
- Q.8** Write short notes on **ANY THREE** of the following: [12]
- a) History of pharmacognosy
 - b) Collection of crude drug

MANIKGAD- II: ~~JUNE-2014~~ (Supplementary)
SUBJECT: PHARMACOTHERAPEUTICS - I

Day: **Saturday**
Date: **05-07-2014**

Time: **2:00 P.M. TO 5:00 P.M.**
Max. Marks: 70

N.B.:

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of the remaining attempt any **TWO** questions from each section.
- 2) Figures to the **RIGHT** indicate full marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.
- 4) Draw neat labelled diagrams **WHEREVER** necessary.

SECTION-I

- Q.1** A) Answer any **FOUR** of the following: (08)
- i) Write the role of nitrates in angina.
 - ii) Enlist the adverse effects associated with oral corticosteroids.
 - iii) Enlist the various non -adherence factors associated with paediatric patients.
 - iv) Mention the adverse effects of ACE inhibitors.
 - v) Write the drug of choice prescribed in pregnancy induced hypertension and diabetes and mention suitable reasons for it.
 - vi) What do you mean by blue bloaters?
- B) Write the etio- pathogenesis of osteoporosis. (03)
- Q.2** Define Rational use of drugs and enumerate the factors contributing to irrational drug use. Write in short rational use of antibiotics. (12)
- Q.3** a) Explain in brief the management of chronic asthma. (07)
- b) Explain Pulmonary Function Test with neat illustration. (05)
- Q.4** Write short notes on Any **THREE** of the following: (12)
- a) Thyroid function test
 - b) Goals of drug therapy in elderly
 - c) Class II Antiarrhythmic agents
 - d) Conjunctivitis

P. T. O.

SECTION-II

- Q.5** A) Answer Any **FOUR** of the following: (08)
- i) Explain any two mechanisms involved in drug induced pulmonary disorders.
 - ii) Write a note on pink puffers.
 - iii) Enlist the drugs that affect thyroid function.
 - iv) Explain drug-drug interactions of oral contraceptive pills with suitable examples.
 - v) Why β -Blockers are contraindicated in asthma?
 - vi) Mention any one formula for child dose calculation.
- B) Explain the role of digoxin in heart failure. (03)
- Q.6** Classify hypertension and explain the JNC-7 guidelines for the management of hypertension. (12)
- Q.7** a) Explain the management of acute exacerbations of COPD. (07)
- b) Explain the etio-pathogenesis of Bronchitis. (05)
- Q.8** Write short notes on Any **THREE** of the following: (12)
- a) Myxoedema Coma
 - b) Statins in hyperlipidemia
 - c) Carbonic-anhydrase inhibitors in Glaucoma
 - d) Patient counselling on inhalers usage

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MANIKGAD - II : JUNE - 2014 (Supplementary)
SUBJECT : PHARMACEUTICAL MICROBIOLOGY

Day : Tuesday
Date : 01-07-2014.

Time : 2:00 P.M. TO 5:00 P.M.
Max. Marks : 70

N.B.

- 1) Q.No. 1 and Q.No. 5 are **COMPULSORY**. Out of the remaining solve any **TWO** questions from each Section.
- 2) Answers to both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION - I

- Q.1** a) Answer any **FOUR** of the following: (08)
- i) Explain morphology of Penicillin species.
 - ii) Define Z-value and Q_{10} -value.
 - iii) Give principle of endospore staining technique.
 - iv) Differentiate between flagella and pilli.
 - v) Write ideal properties of a disinfectant.
 - vi) Write advantages and applications of moist heat sterilization.
- b) Explain the scope and applications of Pharmaceutical Microbiology. (03)
- Q.2** Discuss the life cycle of bacteriophages. Explain different techniques used for cultivation of viruses. (12)
- Q.3** a) Give an account of sterility testing of pharmaceuticals as per I.P. (07)
- b) Explain different biochemical tests for identification of bacteria. (05)
- Q.4** Write short notes on any **THREE** of the following: (12)
- a) Rickettsia
 - b) *Candida albicans*
 - c) Evaluation of disinfectants
 - d) Growth curve for bacteria

SECTION - II

- Q.5** a) Answer any **FOUR** of the following: (08)
- i) Define phenotypic and genotypic changes
 - ii) Write merits and demerits of microbial assays.
 - iii) What are bacterial endotoxins?
 - iv) Give significance of booster dose.
 - v) Draw the structure of *Vibrio cholerae*
 - vi) Write quality control tests for vaccines.
- b) Differentiate between active immunity and passive immunity. (03)
- Q.6** Explain in detail 'Immunoglobulins'. Give a brief account of Antigen-Antibody reactions. (12)
- Q.7** a) Discuss Microbiological Assays of Antibiotics. (07)
- b) Describe in detail 'Hybridoma Technology'. (05)
- Q.8** Write short notes on any **THREE** of the following: (12)
- a) Preparation of vaccines
 - b) Fluid thyoglycollate medium
 - c) Tuberculosis
 - d) ELISA