PD 2.1

MANIPAL UNIVERSITY SECOND YEAR PHARM D. DEGREE EXAMINATION – JULY 2010 SUBJECT: PD 2.1: PATHOPHYSIOLOGY

Reg. No.

Thursday, July 15, 2010

Time: 10:00 - 13:00 Hrs.

Max. Marks: 70

& Answer ALL questions.

∠ Long Essay Questions:

1. Describe the vascular events of acute inflammation.

(10 marks)

2. Define and classify Hypertension as per JNC VII guidelines. Explain role of reninangiotensin-aldosterone system pathway in the pathophysiology of hypertension.

(3+7 = 10 marks)

3. Describe the pathogenesis of acute renal failure and chronic renal failure.

(5+5 = 10 marks)

& Short Essay Questions:

- 4A. Explain the pathogenesis of alcoholic liver disease.
- 4B. Explain the pathophysiology of schizophrenia.
- 4C. Explain the different diagnostic tests for cancers.
- 4D. Enumerate the mechanism of irreversible cell injury.
- 4E. Describe malarial life cycle and enumerate the clinical symptoms of malaria.
- 4F. Explain the mechanism of autoimmunity.

 $(5 \times 6 = 30 \text{ marks})$

& Short Answer Questions:

- 5A. Differentiate between benign and malignant tumors.
- 5B. Explain the etiology for peptic ulcer disease.
- 5C. Enumerate four opportunistic infections of AIDS.
- 5D. Enlist various risk factors for stroke.
- 5E. Enumerate four symptoms of Parkinsonism.

 $(2 \times 5 = 10 \text{ marks})$

1A.	Describe	the	nutritional	requirements	and	mention	the	physical	parameters	required	for		
	laboratory	aboratory cultivation of bacteria.											
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- 1B. Discuss sterilization by Gamma radiations as under: Source, sterilization dose, mechanism of action and applications.
- 1C. Explain the structure, classification and functions of Immunoglobulins.

 $(10 \times 3 = 30 \text{ marks})$

Max. Marks: 70

Short Essay Questions: Ø

Time: 10:00 - 13:00 Hrs.

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Answer ALL questions.

Long Essay Questions:

2A. Describe the method of cultivation of viruses by tissue culture technique and enlist the other methods of cultivation

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SECOND YEAR PHARM D. DEGREE EXAMINATION – JULY 2010

SUBJECT: PD 2.2: PHARMACEUTICAL MICROBIOLOGY Saturday, July 17, 2010

- 2B. Define staining and classify staining techniques. Briefly outline the procedure in simple staining.
- 2C. Explain the role of phenol as disinfectant with respect to mechanism of action, specific example and applications.
- 2D. Write the principle and procedure of ELISA.
- 2E. Explain the principle of one level factorial assay of antibiotics.
- 2F. Explain the pathogenesis of cholera.

 $(5 \times 6 = 30 \text{ marks})$

Short Answer Questions. ø

- 3A. Name any two scientists and their major contribution to the field of microbiology.
- 3B. Enlist the different sexual spores formed by fungi.
- 3C. Virus cannot be cultivated in nutrient broth. Why? Suggest a method of cultivation.
- 3D. Elaborate IMViC and mention the specific tests for E.coli.
- Differentiate Western blot from Southern blot. 3E.

 $(2 \times 5 = 10 \text{ marks})$

 $(2 \times 5 = 10 \text{ marks})$

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SECOND YEAR PHARM D. DEGREE EXAMINATION – JULY 2010 SUBJECT: PD 2.3: PHARMACOGNOSY AND PHYTOPHARMACEUTICALS

Tuesday, July 20, 2010

Time: 10:00 - 13:00 Hrs.

Max. Marks: 70

& Answer ALL questions.

Draw structures and neat labeled diagrams wherever necessary.

Long Essay Questions:

- 1A. What is Honey? Describe the method of preparation, standards, chemical constituents, uses and purity tests.
- 1B. Give a detailed account of Cell wall materials and Cell inclusions with suitable tests.
- 1C. What are the purposes of drying? Discuss the various methods of drying of medicinal plant materials. Suggest the suitable methods for the drying of different plant parts.

 $(10 \times 3 = 30 \text{ marks})$

- 2A. Give the source, method of production, constituents, tests and uses of Castor oil and Chaulmoogra oil.
- 2B. Structure of Ephedrine, Coriandrol, Gingerol, Sennoside A and Quassin.
- 2C. Describe the method of cultivation, collection and preparation of Cardamnom.
- 2D. Describe the crude drugs based on their pharmacological action with examples.
- 2E. Give the method of collection and chemical tests for Acacia.
- 2F. Describe the Neem as repellent, nematicide and antimicrobial.

 $(5 \times 6 = 30 \text{ marks})$

& Short Answer Questions.

- 3A. Definition and significance of Acid value, Iodine value, Saponification value and Acetyl value.
- 3B. Preparation of gelatin from skin, tendons and ligaments.
- 3C. Flavonoids.
- 3D. Addition of worthless heavy materials.
- 3E. Surgical fibres.

MANIPAL UNIVERSITY SECOND YEAR PHARM D. DEGREE EXAMINATION – JULY 2010

SUBJECT: PD 2.4: PHARMACOLOGY - I

Thursday, July 22, 2010

Time: 10:00 - 13:00 Hrs.

& Answer ALL questions.

∠ Long Essay Questions:

- 1. Describe the Pharmacological actions of adrenaline.
- 2. Classify oral hypoglycemics with example. Discuss the mechanisms of action of biguanides. Write briefly on thiazolidinediones.
 - Describe the mechanisms of action of antiepileptic drugs. Mention the first line drugs for the treatment of generalized and partial seizures.

(7+3 = 10 marks)

(2+5+3 = 10 marks)

& Short Essay Questions:

3.

- 4A. Write short note on drug-antagonism.
- 4B. With a neat diagram describe various mechanisms by which a drug is absorbed in the body.
- 4C. With a neat diagram illustrate the sites and mechanisms of action of anti-arrhythmic drugs.
- 4D. Describe the structure and signal transduction mechanism of nuclear-receptor.
- 4E. Explain various stages of anaesthesia.
- 4F. Describe the therapeutic uses of calcium channel blockers.

 $(5 \times 6 = 30 \text{ marks})$

& Short Answer Questions:

- 5A. Give reasons why the anti-platelet dose of aspirin is much less than analgesic dose.
- 5B. How can the incidence of oropharyngeal candidasis be minimized in patients who are prescribed with inhaled corticosteroids for the treatment of COPD.
- 5C. What is cheese reaction?
- 5D. Why is neostigmine preferred over phyostigmine in the treatment of myasthenia gravis and the reverse in the management of atropine poisoning?
- 5E. Mention the advantages of angiotensin receptor antagonists over ACE inhibitors. Give the reason.

 $(2 \times 5 = 10 \text{ marks})$

Max. Marks: 70

(10 marks)

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MANIPAL UNIVERSITY SECOND YEAR PHARM D. DEGREE EXAMINATION – JULY 2010 SUBJECT: PD 2.5: COMMUNITY PHARMACY

Saturday, July 24, 2010

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

& Answer ALL questions.

∠ Long Essay Questions:

- 1A. Describe the selection of site and legal requirements to start a community pharmacy.
- 1B. Define patient medication adherence and explain the various factors affecting medication adherence with suitable recommendations.
- 1C. Describe the various methods used for inventory control in a community pharmacy.

 $(10 \times 3 = 30 \text{ marks})$

- 2A. Describe the various records and registers that are maintained in a community pharmacy.
- 2B. Explain the role of community pharmacist in health education.
- 2C. Explain the objectives and principles of pharmaceutical care.
- 2D. Discuss the content and advantages of patient information leaflets.
- 2E. Explain the various sources and preventive measures of medication errors.
- 2F. Explain the code of ethics for the pharmacists in relation to the medical profession.

 $(5 \times 6 = 30 \text{ marks})$

& Short Answer Questions.

- 3A. Enumerate four advantages and disadvantages of over the counter sales.
- 3B. List four contents of a balanced diet with their nutritional value.
- 3C. List the methods of transmission and prevention of tuberculosis and AIDS.
- 3D. Explain the parts of a prescription with a suitable example.
- 3E. Explain the role of copper T and condoms in contraception.

 $(2 \times 5 = 10 \text{ marks})$

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