B.Pharm Even Semester Examination, May, 2025

PHARMACEUTICAL SCIENCES

(2nd Semester)

Course No: BP-204T

(Pathophysiology)

FM: 75

Time: 3 Hours

The figures in the right margin indicate full marks for the question

I. A Choose the correct answer of the following: 1×10=10

(a) Which of the following statements is true

i) T3 is the most active molecule in thyroid hormone

ii) Iodine for thyroid hormone synthesis is taken up by active transport into the thyroid gland

iii) Thyroid hormone is transported in the blood in protein bound and free forms.

iv) All of the above

(b) Depression is an

i) Affective disorder

ii) Organic disorder

iii) Mood disorder

iv) Dissociate disorder

(c) Which of the following does not cause airway narrowing in asthma

i) Destruction of airways

ii) Mucus hypersecretion

iii) Airway edema

iv) Bronchospasm

(d) The neurotransmitters involved in depression are

i) GABA & acetyl choline

ii) GABA & dopamine

iii) Serotonin & noradrenaline

iv) Acetyl choline & adrenaline

(e) In atrophy, the cells are:

i) Dead cells

ii) Shrunken cells

iii) Irreversibly injured cells

iv) Reversibly injured cells

(f) Irreversible cell injury is characterized by

i) Dispersion of ribosomesCell membrane defects

ii) Cell swelling

iii) Lysosomal ruptured

iv) Cell membrane defects

(b) What are the risk factors that affect thyroid function? How hyperthyroidism develops. (2+3)

(c) What are the warning signs and hypothesis of pathophysiology of Alzheimer disease. (1+3)

(d) What are the factors affecting renal failure? Write down the manifestations of acute renal failure. (2+3)

(e) Discuss the process of wound healing.

(f) What is Jaundice? Discuss its pathophysiology.

(g) What is the pathophysiology of HIV AIDS.

(h) What are the components and types of feedback system?

(i) What do you mean by cancer? Discuss its pathophysiology and types of cancer. (2.5+2.5)

*****

(g) Latent tuberculosis infection (LTBI) is best described as:

i) Active disease with prominent symptoms

ii) Infection that is asymptomatic and non-contagious

iii) A reinfection following successful treatment

iv) TB is limited to extrapulmonary sites only

(h) Rheumatoid arthritis is different from some other forms of arthritis as it

i) occurs below the waist

ii) is more painful than other forms

iii) generally occurs above the waist

iv) is symmetrical, affecting the right and the left sides of the body

(i) What is the average incubation period of M leprae?

i) The incubation period of leprosy is long, ranging from a few months to 20-50 years.

ii) The incubation period of leprosy is short as possible.

iii) The incubation period of leprosy is ranging from 1 day to 1 week.

iv) None

(j) HIV is thought to have originated from

i) Birds

ii) Mosquitos

iii) Chimpanzees

iv) None

I. B. Objective type 2×5=10

(a) Give any two differences between angina and myocardial infraction.

(b) Name the causative agent of Syphilis and Gonorrhea.

(c) Name the types of necrosis.

(d) Name theprocesses occur during inflammation.

(e) Name thevarious stages of syphilis.

II. Long answers (Answer two out of three questions) 10×2=20

(a) What are the factors causing Parkinson's disease? Distinguish the pathogenesis of depression and schizophrenia. (3+7)

(b) What is cell injury? Discuss about apoptosis and the molecular mechanisms involved in apoptosis. (3+7)

(c) Discuss the pathophysiology of following disease: (2.5+2.5+2.5+2.5)

1. Gout
2. IBD
3. Meningitis
4. Tuberculosis

III. Short answers (Answer seven out of nine questions) 5x7=35

(a) Discuss the factors causing peptic ulcer and its pathogenesis. (2+3)