



**GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY,
GUNUPUR, ODISHA**

B. Sc. Nursing Fourth Semester Regular/Supplementary Examinations, July' 2025

PHAR II(205)&PATH(210)-PHARMACOLOGY

PATHOLOGY& GENETICS

Time: 3 hrs

Maximum: 75

Marks

The figures in the right hand margin indicate marks.

Section - A : <PHARMACOLOGY-II> (38 Marks)

PART – A: (Multiple Choice Questions)**(7 x 1 = 7 Marks)**Q. 1 Answer **ALL** questions

- What is the primary mechanism of action of beta-lactam antibiotics?
 - Inhibiting protein synthesis
 - Interfering with cell wall synthesis
 - Disrupting cell membrane function
 - Inhibiting DNA replication
- Which of the following drugs is used to treat rheumatoid arthritis?
 - Methotrexate
 - Cyclosporine
 - Both A and B
 - None of the above
- What is the mechanism of action of antihypertensive drugs?
 - Increasing cardiac output
 - Increasing cardiac output
 - Decreasing peripheral resistance
 - Decreasing peripheral resistance
- Which of the following is an example of an anti-anginal drug?
 - Nitro-glycerine
 - Beta blockers
 - Both A and B
 - None of the above
- Which of the following drugs is used to treat bronchospasm?
 - Salbutamol
 - Salmeterol
 - Both A and B
 - None of the above
- What is the primary use of corticosteroids?
 - To treat inflammation
 - To treat infections
 - To treat allergies
 - None of the above
- Which of the following is an example of an antiplatelet drug?
 - Aspirin
 - Clopidogrel
 - Both A and B
 - None of the above

PART – B: (Very Short Answer Questions)**(3 x 2 = 6 Marks)**Q.2. Answer **ANY THREE** questions

- What are the primary uses of diuretics?
- Beta blockers.
- What is an Antidotes?
- Define estrogens and progestogen.

PART – C: (Short Answer Questions)**(3 x 5 = 15 Marks)**Q.3. Answer **ANY THREE** questions

- What are uses of corticosteroids?
- What is the difference between bronchodilator and bronchial dilator?
- Short note on antiseptics and disinfectants.
- Explain the difference between first-generation and second-generation antihistamines.

PART – D: (Long Answer Questions)**(10 x 1 = 10 Marks)**Answer **ALL** questions

Marks

- What is infertility?
- Write in detail about the drugs used for infertility.

2

8

(OR)

- List out the anticonvulsant drugs.
- Describe the mechanism of action, indications, contraindications and nurse's role of anticonvulsant drugs.

2

8

Section - B : <PATHOLOGY-ii> (25 Marks)

PART – A: (Multiple Choice Questions)

(4 x 1 = 4 Marks)

Q. 5 Answer ALL questions

- What is the primary pathophysiological mechanism in asthma?
(i) Inflammation and hyperresponsiveness of airway (ii) Increased mucous secretion
(iii) Alveolar destruction (iv) Pulmonary edema
- Which of the following conditions is associated with the formation of renal calculi?
(i) Hyperparathyroidism (ii) Hypoparathyroidism
(iii) Hyperthyroidism (iv) Hypothyroidism
- Which type of cancer is most commonly associated with hepatitis B and C infections?
(i) Hepatocellular carcinoma (ii) Cholangiocarcinoma
(iii) Gastric cancer (iv) Pancreatic cancer
- Which is the primary cause of cervical cancer?
(i) Human papilloma virus (ii) Herpes Simplex virus
(iii) Human immunodeficiency virus (iv) Hepatitis B virus

PART – F: (Very Short Answer Questions)

(3 x 2 = 6 Marks)

Q.6. Answer ANY THREE questions

- Define thrombosis and embolism.
- What are the major risk factors for gastric cancer.
- Difference between Wet gangrene and Dry gangrene.
- Define uterine fibroid.

PART – G: (Short Answer Questions)

(3 x 5 = 15 Marks)

Q.7. Answer ANY THREE question.

- Describe the etiology, clinical features and management of glomerulonephritis.
- Explain in detail about tumor of CNS
- Describe etiology, clinical features and management of Cholecystitis.
- Explain in detail about prostate cancer

Section - C : <GENETICS> (12 Marks)

PART – H: (Multiple Choice Questions)

(3 x 1 = 3 Marks)

Q. 8 Answer ALL questions

- Which base is not present in RNA?
(i) Adenine (ii) Thymine
(iii) Cytosine (iv) Guanine
- The tendency of an offspring to resemble its parent is known as:
(i) Variation (ii) Heredity
(iii) Resemblance (iv) Inheritance
- The crossing of F1 to either of the parents is known as:
(i) Test cross (ii) Back cross
(iii) F1 cross (iv) All of the above

PART – I: (Very Short Answer Questions)

(2 x 2 = 4 Marks)

Q.9. Answer ANY TWO questions

- Define proto-oncogene and oncogene.
- What is amniocentesis?
- Explain sex-linked inheritance?

PART – J: (Short Answer Questions)

(1 x 5 = 5 Marks)

Q.10. Answer ANY ONE question.

- Define Neural tube defect? Explain the different types of Neural tube defect?
- Briefly explain Mendelian Theory of Inheritance and its principles by taking an example of monohybrid and dihybrid cross pollination?

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