

B.Sc. NURSING FOURTH SEMESTER EXAMINATION, JANUARY - 2026
PHARMACOLOGY & PATHOLOGY (I & II) AND GENETICS

[Time allotted: Three hours]**[Max Marks: 75]****Note:** Attempt all sections.

Draw suitable diagrams wherever necessary.

SECTION A
(PHARMACOLOGY 38 Marks)

Q.1. Multiple Choice Questions:**(7x1=7)**

1. _____ are the agents used in treatment of epileptic seizures.
 - a. Antidiuretics
 - b. Antibiotics
 - c. Anticonvulsants
 - d. Antiemetics
 2. _____ is the scientific study of drugs and their use in medicine.
 - a. Toxicology.
 - b. Pharmacology
 - c. Pharmacognosy
 - d. Therapeutics.
 3. _____ takes place when one drug replaces another at the drug receptor site, increasing the effect of the 1st drug.
 - a. Side effect.
 - b. Antagonistic effect.
 - c. Incompatibility
 - d. Displacement effect.
 4. _____ is synthesized in the β (Beta) cells. Its Action is converting glucose into glycogen.
 - a. Insulin
 - b. Oral Hypoglycemics
 - c. Thyroid supplements
 - d. Progesterone Preparations
 5. _____ drug is effective against a wide variety of microbial types for example a drug effective against both gram negative and positive bacteria.
 - a. Antibiotic
 - b. Broad spectrum.
 - c. Synthetic drug.
 - d. Narrow spectrum
 6. _____ antibiotics inhibit the growth & multiplication of Bacteria. e.g. Tetracycline, Chloramphenicol, Sulphonamides, Dapsone, Erythromycin, Clindamycin.
 - a. Bacteriostatic.
 - b. Bactericidal.
 - c. Gram Positive.
 - d. Gram Negative.
 7. _____ drugs used to suppress abnormally fast heart rhythms.
 - a. Antihypertensives
 - b. Plasma Expanders
 - c. Antiarrhythmics
 - d. Antileprosy
- Q.2. Write essay on ANY ONE of the following:** **(1x10=10)**
- a. Write in detail about routes of drug administration
 - b. Discuss drugs used in Cardio Pulmonary Resuscitation (CPR)
- Q.3. Write short notes on ANY THREE of the following:** **(3x5=15)**
- a. Topical drugs used for diseases of nose
 - b. Hormone replacement therapy
 - c. Insulin
 - d. Expectorants
- Q.4. Write very short notes on the following:** **(3x2=6)**
- a. Define Uterine stimulants & relaxants
 - b. Define antiadrenergic.
 - c. Define antipyretics

SECTION B
(PATHOLOGY 25 MARKS)

Q.5. Multiple Choice Questions:

(4x1=4)

1. Formation of new blood vessels during the process of healing which are often leaky and may result in edema is called
 - a. Neovascularization
 - b. Vascular permeability
 - c. Hemodynamic change
 - d. Endothelial cell reaction
2. An accumulation of protein rich fluid with high specific gravity is called
 - a. Transudative effusion
 - b. Exudative effusions
 - c. Lung abscess
 - d. Bronchiectasis
3. The hardening and narrowing of coronary arteries by formulation of plaque of cholesterol, foam cells and necrotic debris in the vessel wall
 - a. Infective endocarditis
 - b. Myocardial infarction
 - c. Rheumatic heart disease
 - d. Atherosclerosis
4. Which of the following factor will not result in delayed fracture healing process:
 - a. Superimposed infection
 - b. Elderly
 - c. Excessive movement
 - d. Calcium supplements

Q.6. Write short notes on ANY THREE of the following:

(3x5=15)

- a. Vascular and cellular changes during injury or Infection
- b. CSF analysis
- c. Phases of wound healing
- d. Blood grouping and Rh factor

Q.7. Write very short notes on the following:

(3x2=6)

- a. Histopathology
- b. Agglutination
- c. Hyperplasia

SECTION C
(GENETICS 12 MARKS)

Q.8. Multiple Choice Questions:

(3x1=3)

1. If characteristics requires only one gene to show itself the characteristic is known as
 - a. Dominant
 - b. Recessive
 - c. Co-dominant
 - d. Independent
2. Down syndrome is characterized by
 - a. 13 trisomy
 - b. 19 trisomy
 - c. 21 trisomy
 - d. Only one X chromosome
3. A triplet of base on mRNA is known as a
 - a. Nucleotide
 - b. Antinucleotide
 - c. Codon
 - d. Anticodon

Q.9. Write short notes on ANY ONE of the following:

(1x5=5)

- a. Genetic counseling
- b. Neural tube defect

Q.10. Write very short notes on the following:

(2x2=4)

- a. Define cell division
- b. Types of gene therapy
