

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – APPLIED MICROBIOLOGY

MAJOR ELECTIVE COURSE – I: PHARMACEUTICAL
MICROBIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 A bond in which atoms share a pair of electrons is?
(i) Ionic bond (ii) Covalent bond
(iii) Electrovalent bond (iv) Binary compound band
- 2 Which of the following is the most common adverse effect of amphotericin B?
(i) Bone marrow suppression (ii) Hypomagnesemia
(iii) Hypokalemia (iv) Nephrotoxicity
- 3 Which organs will make up the peripheral compartment?
(i) Lungs (ii) Liver
(iii) Kidneys (iv) Pancreas
- 4 Which of the following is a predictable cause of most adverse drug reactions (ADRs)?
(i) Nonadherence (ii) Allergic reactions
(iii) Dosage issues (iv) Idiosyncratic causes
- 5 International average time for drug to be discovered involves.
(i) 10 years (ii) 2 years (iii) 25 years (iv) 5 years

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Write a brief note on the structure of atom.
OR
b Explain about the Electron pair.
- 7 a Briefly explain the General properties and drug actions of Sulphonamides.
OR
b Write in short about the Quality assurance in pharmaceuticals.
- 8 a Analyze the Route of drug administration.
OR
b Evaluate the application of drug in biological fluids.
- 9 a Prepare the brief concept of drug summation.
OR
b Produce the drug regulation and development.
- 10 a Determine the process of drug discovery pipeline.
OR
b Discuss about the sterilization procedure and sterility assurance.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 11 a Discuss in detail about the Molecular orbital.
OR
b Categorize in detail about the Stoichiometry.
- 12 a Classify the therapeutical agents against medically important parasitic diseases.
OR
b Differentiate between British Pharmacopoeia and Indian pharmacopeia.
- 13 a Create in detail about the Biotransformation reactions.
OR
b Enumerate the Extraction and purification procedure for drugs.
- 14 a Formulate the types of drug antagonism.
OR
b Determine the Novel drug development strategy.
- 15 a Justify the Ethical consideration and guideline in clinical research.
OR
b Recommend the Drug regulatory agencies and safety monitoring.

Z-Z-Z

END