

Sample Question for Admission Written Test *Master of Pharmacy*



Full Marks: 75

Name of Candidate: _____

Admission Test Roll No:

Date: _____

Invigilator's Signature

Marks Obtained:	
Total Marks	

Answer Script Checked By

Select (Tick (✓) the correct answer. Each question carries 1 mark.

Questions 1-75

Marks: 75× 1 = 75

1. Which one of the following is known as “Power house” of the cell?

- | | |
|-----------------|--------------------------|
| a. Nucleus | b. Ribosome |
| c. Mitochondria | d. Endoplasmic Reticulum |

2. Which of the following cells produce antibodies?

- | | |
|----------------|--------------|
| a. Lymphocytes | b. Monocytes |
| c. Neutrophil | d. RBC |

3. Which of the following is essential for blood clotting?

- | | |
|--------------|----------|
| a. RBC | b. WBC |
| c. Platelets | d. Lymph |

4. Where does insulin secretion occur?

- | | |
|--------------------------|-----------------------------|
| a. Liver | b. Pancreatic β -cell |
| c. Pancreatic alpha cell | d. Small intestine |

5. What is the largest organ of the body?

- | | |
|-----------|----------|
| a. Skin | b. Liver |
| c. Kidney | d. Heart |

6. Which of the following is not a type of blood vessel?

- | | |
|----------------|---------------|
| a. Arteries | b. Veins |
| c. Capillaries | d. Ventricles |

7. Which of the following is an example of proteolytic enzyme?

- | | |
|------------|------------|
| a. Pepsin | b. Lipase |
| c. Amylase | d. Lactase |

8. Who is considered as the father of microbiology?

- | | |
|----------------------------|------------------|
| a. Alexander Fleming | b. Robert Hook |
| c. Antonie Van Leeuwenhoek | d. Edward Jenner |

9. Microorganisms live mainly in-

- | | | | |
|---------------|------------------|------------------|----------------|
| i. Air | ii. Water | iii. Soil | |
| a. i & ii | | | b. i & iii |
| c. ii & iii | | | d. i, ii & iii |

10. Which of the following is a pure branch of microbiology?

- | | |
|----------------------|--------------------------------|
| a. Food microbiology | b. Pharmaceutical microbiology |
| c. Mycology | d. Medical Microbiology |

11. Characteristics of bacteria-

i. Unicellular

- a. i & iii
- c. i, ii & iii

ii. Prokaryotic

iii. Microscopic

- b. i & ii
- d. ii & iii

12. Bacterial cell wall is made up of-

- a. Chitin
- c. Peptidoglycan
- b. Pectin
- d. Hemicellulose

13. Which of the following is a virus?

- a. Escherichia coli
- c. Saccharomyces cerevisiae
- b. Salmonella typhi
- d. SARS-CoV-2

14. Small pox vaccine was first discovered by?

- a. Louis Pasteur
- c. Robert Koch
- b. Joseph Lister
- d. Edward Jenner

15. The substances produced by or derived from living organisms that are used to kill bacteria or prevent their multiplication is called-

- a. Antibiotics
- c. Hormones
- b. Antidotes
- d. Enzymes

16. Which of the following is a source for obtaining drugs-

- a. Animal & Plants
- c. Synthetic origin
- b. Micro-organisms
- d. All of the above

17. The rate of absorption of a drug is affected by-

- a. Route of drug administration
- c. Site of administration
- b. Solubility of the drug
- d. All of the above

18. A drug that relieves itching is-

- a. Antiseptic
- c. Anti-infective
- b. Antipruritic
- d. Anti-inflammatory

19. Drugs which are used to increase the urine output are-

- a. Antihypertensive
- c. Anti-diuretic hormone
- b. Diuretics
- d. None of the above

20. Antifungal drugs include all except-

- a. 5 – FU
- c. Amphotericin
- b. Miconazole
- d. Flucytosine

21. The following are excreted faster in basic urine-

- a. Weak acid
- b. Weak Base
- c. Strong Acid
- d. All of the above

22. IF Drug A act as CYP inducer for Drug B, what will happen if Drug A and B administered together-

- a. Plasma concentration of Drug B Decreased
- b. Plasma concentration of Drug B Increased
- c. Plasma concentration of Drug B Remained unchanged
- d. Plasma concentration of Drug B Changed insignificantly

23. In case of liver disorders accompanied by a decline in microsomal enzyme activity the duration of action of some drugs is-

- a. Decreased
- b. Increased
- c. Remained unchanged
- d. Changed insignificantly

24. Which of the following processes proceeds in the second phase of biotransformation?

- a. Acetylation
- b. Reduction
- c. Oxidation
- d. Hydrolysis

25. Parenteral administration-

- a. Cannot be used with unconsciousness patients
- b. Generally results in a less accurate dosage than oral administration
- c. Usually produces a more rapid response than oral administration
- d. Is too slow for emergency use

26. Active transport differs from facilitated transport in following ways, except-

- a. Carrier is involved
- b. It is against concentration gradient
- c. Energy is required
- d. All of the above

27. The attachment of DNA fragment at a specific location of DNA became possible with the discovery of-

- a. Probes
- b. Restriction enzymes
- c. Ligases enzyme
- d. Selectable markers

28. Hybridoma technology is used to produce-

- a. Monoclonal antibody
- b. Polyclonal antibody
- c. Both
- d. None

29. The plasmid-

- a. is the genetic part in addition to DNA in microorganisms
- b. is a component of the cell wall of bacteria
- c. genes found inside the nucleus
- d. helps in respiration

30. The correct statement for enzyme technology is-

- a. Selection of plasmid
- b. Immobilization of enzyme
- c. sequencing of enzyme
- d. None

31. The PCR is a-

- a. DNA cutting technique.
- b. DNA degradation technique
- c. DNA amplification technique
- d. All

32. Which of the following is the advance treatment of cancer?

- a. Chemotherapy
- b. Radiotherapy
- c. Gene therapy
- d. None

33. Excision and insertion of a gene is called-

- a. Biotechnology
- b. Genetic engineering
- c. Cytogenetic
- d. Gene therapy

34. Which antidiabetic stimulates endogenous insulin secretion from beta cells?

- a. Biguanide
- b. Sulfonylurea
- c. Meglitinide
- d. Metformin

35. What do you mean by polydipsia?

- a. Excessive thirst
- b. Hunger
- c. Wight loss
- d. Blurred vision

36. Which of the following is a calcium channel blocker?

- a. Losartan
- b. Valsartan
- c. Verapamil
- d. Captopril

37. Cardiac output is-

- a. Heart rate x peripheral resistance
- b. Stroke Volume x peripheral resistance
- c. Heart rate x arterial pressure
- d. Stroke volume x heart rate

38. What was the first antibiotic discovered?

- a. Tetracycline
- b. Erythromycin
- c. Aminoglycoside
- d. Penicillin

39. If an antibiotic prevents bacteria from growing then its action is termed-

- a. Bactericidal
- b. Bacteriostatic
- c. Toxic
- d. Selectively toxic

40. Which of the following antibiotic cause gray baby syndrome?

- a. Penicillin
- b. Tetracycline
- c. Chloramphenicol
- d. Cephalosporin

41. The DNA does not contain-

- a. A
- b. U
- c. G
- d. C

42. Non-essential amino acid is-

- a. Available in body
- b. Not available in body
- c. Necessary to intake
- d. None

43. Which of the following is the source of energy?

- a. Carbohydrate
- b. Protein
- c. Lipid
- d. All

44. The correct statement for lipid is-

- a. Lipid produces ketone bodies
- b. Lipid produces glucose
- c. Lipid helps to reduce cholesterol
- d. None

45. Genetic code contains-

- a. 2 bases
- b. 3 bases
- c. 4 bases
- d. No bases

46. Which of the following is found in nucleic acid?

- a. Bases
- b. Phosphate
- c. Sugar
- d. All

47. Glycolysis is the-

- a. Breakdown of Glucose
- b. Breakdown of glycogen
- c. Production of glucose
- d. None

48. Compound with good activity and selectivity in screening during drug discovery is known as-

- a. Hit
- b. Lead
- c. NDA
- d. IND

49. IND stands for-

- a. Improved new drug
- b. Investigational new drug
- c. International new rug
- d. International novel drug

50. Which of the following is an opioid analgesic?

- a. Paracetamol
- b. Aspirin
- c. Naproxen
- d. Morphine

51. Aspirin is synthesized from-

- a. Nitric acid
- b. Hydrochloric acid
- c. Salicylic acid
- d. Nitric acid

52. Which of the following is carbonic anhydrase inhibitor?
- a. Acetazolamide
 - b. Spironolactone
 - c. Chlorothiazide
 - d. Furosemide
53. Which experiments are used to study tissues inside an entire organism?
- a. Ex vivo
 - b. In vivo
 - c. In situ
 - d. In vitro
54. Paracetamol act as both analgesic and-
- a. Antidiabetic
 - b. Antihypertensive
 - c. Antipyretic
 - d. Antimicrobial
55. In NMR spectroscopy which is used as reference standard-
- a. DDT
 - b. TMS
 - c. Chloroform
 - d. Methanol
56. Which is widely used to determine the structure of organic molecules in solution-
- a. Mass spectrometry
 - b. Complexometry
 - c. Potentiometry
 - d. Nuclear magnetic resonance spectroscopy
57. Which is used detect the exact molecular weight of the sample components-
- a. Polarography
 - b. Potentiometry
 - c. Nuclear magnetic resonance spectroscopy
 - d. Mass spectrometry
58. In chromatography the characteristic time that takes for a particular analyte to pass through the system under set conditions is known as-
- a. Analysis time
 - b. Detection time
 - c. Retention time
 - d. Sampling time
59. In which titration method the equivalence point is determined by using metal indicators or electrometrically-
- a. Complexometric titration
 - b. Precipitation titration
 - c. Acid-base titration
 - d. None of above
60. Which molecule absorbs light at a particular wavelength and emits color as a result-
- a. Elute
 - b. Chromophore
 - c. Sample
 - d. Analyte
61. Ultraviolet (UV) light is electromagnetic radiation of wavelengths of-
- a. 100-1000 nm
 - b. 40-400 nm
 - c. 20-200 nm
 - d. 10-400 nm

62. In which chromatographic technique column is prepared by packing a solid adsorbent into a cylindrical glass or plastic tube-

- a. Column chromatography
- b. Paper chromatography
- c. TLC
- d. Gas chromatography

63. The main mechanism of most drugs absorption in GI tract is-

- a. Active transport
- b. Filtration
- c. Passive diffusion
- d. Endocytosis

64. In biotransformation which reactions are true detoxification reactions-

- a. Phase I
- b. Phase II
- c. Phase III
- d. Phase IV

65. Which route of drug administration is most likely to lead to the first-pass effect?

- a. Sublingual
- b. Oral
- c. Intravenous
- d. Intramuscular

66. Which tissue has the largest capacity to bio-transform drug?

- a. Kidney
- b. Lung
- c. Liver
- d. Skin

67. The abbreviation of Latin word Rx is-

- a. To make
- b. You take
- c. To sold
- d. To use

68. Dose dumping is a problem in the formulation of-

- a. Suppository
- b. Syrup
- c. Compressed tablets
- d. Controlled release drug products

69. In the tablet coating process, inadequate spreading of coating solution before drying causes-

- a. Orange peel effect
- b. Sticking effect
- c. Blistering effect
- d. Picking effect

70. Carr's index is used to determine-

- a. Particle size
- b. Flowability
- c. Elasticity
- d. Sieve size

71. Disodium EDTA is an example of-

- a. Sweetening agent
- b. Flavoring agent
- c. Chelating agent
- d. Preservative

72. Simple syrup is a saturated solution of-

- a. Sucrose.
- b. Fructose.
- c. Dextrose
- d. None of these

73. Capsules in which powders are enclosed are made up of-

- | | |
|-------------|---------------|
| a. Gelatin. | b. Rice flour |
| c. Fructose | d. Dextrose |

74. When two or more drugs are used in combination to increase the pharmacological action, the phenomenon is known as-

- | | |
|-----------------|-----------------|
| a. Synergism | b. Tolerance |
| c. Potentiation | d. Idiosyncrasy |

75. Enteric coated tablet is disintegrated in-

- | | |
|--------------|----------|
| a. Stomach | b. Liver |
| c. Intestine | d. Mouth |

=====GOOD LUCK=====
