



**Dr. Arvind Kumar Gupta**  
(M.Pharm, PDCR, PGDMM & Ph.D)  
GATE 2003 Qualified with 97.2 percentile

**OFFICE:** BUILDING No. 3/314, OFFICE-1, GAUSHALA ROAD, SHAMLI DISTRICT SHAMLI (U.P.) – 247776

**Mobile:**+91-9719638415

**Email:**arvindrkgit@gmail.com

### TEST SCHEDULE (TEST -2)

1. TEST DATE: 29-10-2023
2. TEST PATTERN: MCQ
3. TEST TIMING: 6:00 – 8:00 PM
4. MODE OF TEST: ONLINE
5. SUBJECTS & TOPIC COVERED
  - A. *Pharmacology*: General Pharmacology
  - B. *Biochemistry & Clinical Pathology*: Introduction to Biochemistry, Carbohydrates
  - C. *Pharmacotherapeutics*: Introduction of Pharmacotherapeutics
  - D. *Hospital & Clinical Pharmacy*: Introduction of Hospital Pharmacy

**PHARMACOLOGY (15 Questions)**

1. ....is the study of the effects of the drugs on the body and their mechanisms of action, i.e. what the drug does to the body.
  - A. Pharmacokinetics
  - B. Pharmacodynamics
  - C. Therapeutics
  - D. Chemotherapy
2. Which is/are the natural source of drug?
  - A. Animals
  - B. Minerals
  - C. Microorganisms
  - D. Human
  - E. All of the above
3. Which synthetic drug obtained by hybridoma technique?
  - A. Quinolones
  - B. Urokinase
  - C. Human insulin
  - D. Monoclonal antibodies
4. Iontophoresis is a .....
  - A. Transmucosal Route
  - B. Topical Route
  - C. Intraperitoneal Route
  - D. Transdermal Route
5. What is/are the reason to develop enteric coated tablet?
  - A. Prevent gastric irritation
  - B. Avoid destruction of the drug by the stomach
  - C. Provide higher concentration of the drug in the small intestine
  - D. All of the above
6. Drugs are injected directly into a joint for the treatment of arthritis and other diseases of the joints by ..... route.
  - A. INTRA-PERITONEAL
  - B. INTRA-THECAL
  - C. INTRA-ARTICULAR
  - D. INTRAMEDULLARY
7. Which drug is placed under the tongue. It dissolves in the saliva and the drug is absorbed across the sublingual mucosa?
  - A. Nitroglycerine
  - B. Nifedipine
  - C. Buprenorphine
  - D. All of the above
8. A prodrug crosses the blood-brain barrier and is then converted to dopamine in the CNS.
  - A. Dopamine
  - B. Adrenaline
  - C. Levodopa
  - D. Carbidopa
9. The transfer of drugs against a concentration gradient and needs energy. It is carried by a specific carrier protein.
  - A. Simple diffusion
  - B. Active transport
  - C. Facilitated diffusion
  - D. Endocytosis
10. The protein binding extent of warfarin drug is:
  - A. 50%
  - B. 30%
  - C. 70%
  - D. 99%

11. Which is /are the parenteral routes?

- A. Transdermal route
- B. Injections
- C. Inhalation
- D. Transmucosal route
- E. All of the above

12.....are phospholipids suspended in aqueous vehicles to form minute vesicles.

- A. Monoclonal antibodies
- B. Osmotic pumps
- C. Computerized miniature pumps
- D. Liposomes

13. If the dose of a drug given is 500 mg and attains a uniform concentration of 10 mg in the body, its Vd will be:

- A. 100 liters
- B. 10 liters
- C. 50 liters
- D. 20 liters

14. Which is the osmotic diuretic drug?

- A. Magnesium sulphate
- B. Barium sulphate
- C. Mannitol
- D. Potassium permanganate

15. It is a substance that binds to the receptor and prevents the action of agonist on the receptor. It has affinity but no intrinsic activity.

- A. Partial agonist
- B. Agonist
- C. Ligand
- D. Antagonist

### BIOCHEMISTRY & CLINICAL PATHOLOGY (15 Questions)

16. Which of the following is also known as invert sugar?

- A. Sucrose
- B. Dextrose
- C. Fructose
- D. Glucose

17. Which of the following glycosidic linkage found in maltose?

- A. Glucose ( $\alpha$ -1 – 2 $\beta$ ) Fructose
- B. Glucose ( $\alpha$ 1 – 4) Glucose
- C. Galactose ( $\beta$ 1 – 4) Glucose
- D. Glucose ( $\beta$ 1 – 4) Glucose

18. Disaccharide consists of two monosaccharide units held together by a \_\_\_\_\_ bond.

- A. Hydrogen
- B. Phosphodiester
- C. Glycosidic
- D. Ionic

19. How many total molecules of ATP are synthesized from ADP via glycolysis of a single molecule of glucose?

- A. 36
- B. 4
- C. 2
- D. 38

20. Which process is responsible for absorption of carbohydrates?

- A. Simple diffusion
- B. Active transport
- C. Facilitative transport

D. both 2 and 3

21. Which of the following is the simplest form of carbohydrates?

- A. Aldehyde and Ketone groups
- B. Alcohol and Carboxyl groups
- C. Hydroxyl groups and Hydrogen groups
- D. Carboxyl groups

22. Which of the following are the major functions of Carbohydrates?

- A. Storage
- B. Transport Materials
- C. Structural framework
- D. Both Storage and structural framework

23. Which of the following is an example of Epimers?

- A. Glucose and Ribose
- B. Galactose, Mannose and Glucose
- C. Glucose and Galactose
- D. Glucose, Ribose and Mannose

24. Inulin:

- A. Is a homopolysaccharide
- B. Decreases blood glucose
- C. Is metabolized in liver
- D. Is present in muscles

25. A pentose found in nucleotides is:

- A. L-Ribose
- B. D-Ribose
- C. D-Ribulose
- D. L-Ribulose

26. An L-isomer of monosaccharide formed in human body is:

- A. L-Fructose

B. L-Erythrose

C. L-Xylose

D. L-Xylulose

27. Monosaccharides can be separated by:

- A. Electrophoresis
- B. Salting out
- C. Titration method
- D. Chromatography

28. Open chain structure of glucose does not perform the test:

- A. 2,4-DNP test
- B. Schiff's test
- C. Borsche's test
- D. All of the above

29. Glucose reacts with hydroxylamine to form an:

- A. n- hexane
- B. Oxime
- C. Cyanohydrin
- D. Gluconic acid

30. What are the hydrolytic products of lactose?

- A. Glucose + Fructose
- B. Two molecule of Glucose
- C. Glucose + Galactose
- D. Galactose + Fructose

### PHARMACOTHERAPEUTICS (15 Questions)

31. ....is the branch of pharmacology that deals with drug absorption, drug distribution, drug elimination, and their action/effects.

- A. Toxicology

B. Biochemistry

C. Pharmacology

D. Pharmacotherapeutics

**32.** What is Rational use of Medicines?

A. Right drug

B. Right dispensing

C. Right drug efficacy, safety, suitability

D. Patient adherence to treatment

E. All of the above

**33.** What is Significance of Evidence-based medicine?

A. It provides cost-effective medical care.

B. It helps to establish national standards of patient care.

C. It promotes consistency of treatment and optimal outcomes.

D. It identifies and promotes practices that work, and eliminates those that are ineffective or harmful.

E. All of the above

**34.** The practice of evidence-based medicine involves non-essential steps:

A. Finding the best evidence

B. Converting information needs into answerable questions

C. Appraising the evidence for its non validity and usefulness

D. Applying the results of appraisal into clinical practice.

**35.** An essential medicine list is prepared by considering.

A. Disease occurrence

B. Safety of medicines

C. Efficacy of medicines

D. Comparative cost-effectiveness of medicines

E. All of the above

**36.** Who is the first country to prepare its Essential Medicine List?

A. Tanzania

B. America

C. Russia

D. India

**37.** Government of India prepared and released the first National List of Essential Medicines (NLEM) of India in .....

A. 1968

B. 1996

C. 1975

D. 1992

**38.** In 2021, National List of Essential Medicines (NLEM) of India containing..... medicines.

A. 209

B. 399

C. 475

D. 192

**39.** Which factor are not considered for the selection of essential medicines:

A. Efficacy, safety, and comparative cost-effectiveness of available medicines.

B. Training and experience of the available personnel.

C. The medicine should not be aligned with the current treatment guidelines for the disease.

D. Local availability of individual drugs.

40. National Guidelines for Clinical Management of Dengue Fever, National Vector Borne Disease Control Programme, WHO in .....

- A. 2018
- B. 2015
- C. 2010
- D. 2020

41. What is the full form of RCT?

- A. Rational Clinical Trial
- B. Randomised Clinical Trial
- C. Rare Clinical Trial
- D. Restricted Clinical Trial

42. An RCT in clinical research typically compares a proposed new treatment against an existing standard of care; these are then termed the:

- A. Experimental treatments
- B. Control treatments
- C. Experimental' and 'control' treatments
- D. None of the above

43. What is /are the limitation of evidence-based medicine?

- A. Time-consuming
- B. Require access to the medical literature
- C. Require some knowledge of statistics
- D. All of the above

44. Who play the main role, to development of standard treatment guidelines?

- A. ICMR
- B. DGHS
- C. FICCI
- D. All of the above

45. What is the full form of ICMR?

- A. Indian committee of medical research
- B. Indian council of medical research
- C. Indian council of medical representation
- D. None of the above

### HOSPITAL & CLINICAL PHARMACY (15 Questions)

46. The practice of hospital pharmacy started in India in.....

- A. 1945
- B. 1941
- C. 1950
- D. 1976

47. What is /are the objectives of hospital pharmacy?

- A. To act as a counselling department for medical staff, nurses and for patient.
- B. To ensure the availability of the right medication, at right time in the right dose at the minimum possible cost.
- C. To participate in research work.
- D. To act as an information center about drugs.
- E. All of the above

48. What is /are the incorrect capability of trained pharmaceutical personnel?

- A. Capable of purchasing medicine
- B. Capable of storing medicine
- C. Capable of handling medicine
- D. Capable of dispensing medicine
- E. Capable of writing Prescription

49. The space for hospital pharmacy department should be minimum ..... as per schedule N.

- A. 250sq. Feet

B. 210sq. Feet

C. 200sq. Feet

D. 300sq. Feet

**50.** The number of pharmacists required is Up to 100 beds:

A. 2 Pharmacist

B. 5 Pharmacist

C. 3 Pharmacist

D. 4 Pharmacist

**51.** In a hospital, equipment/ Instrument required for sterile product/section:

A. UV lamps

B. Laminar flow

C. Bacteria proof filters

D. Aseptic cabinet

E. All of the above

**52.** Bed capacity for medium hospital:

A. More than 1000 bed

B. 500 - 1000 bed

C. 200 - 500 bed

D. 100 - 200 bed

**53.** Classify the hospital on:

A. On clinical Basis

B. On the basis of size

C. On the basis of cost

D. On the basis of medicine

E. All of the above

**54.** Which is the non-government hospital:

A. City hospital

B. Eye hospital

C. Orthopedic hospital

D. Charitable hospital

**55.** Maternity hospital comes in the:

A. Type of disease hospital

B. Type of organ hospital

C. Type of patient hospital

D. None of the above

**56.** What is the function of store branch in hospital?

A. Receipts of stores

B. Storage

C. Issue of material

D. Documentation

E. All of the above

**57.** What is the full form of PHC?

A. Primary health center

B. Private health center

C. Public health center

D. None of the above

**58.** What is the full form of AMO?

A. Assistant district medical officer

B. Area district medical officer

C. Additional district medical officer

D. None of the above

**59.** What is bed capacity of community health centre?

A. 50 - 100

B. 30 - 50

C. 6 - 10

D. 10 - 20

**60.** Non-profit organization is:

A. Voluntary hospitals

B. Private nursing home

C. Corporate hospitals

D. All of the above