

Pharmacology II

B. Pharm. 5th Semester

Model Question Paper

Topic Covered
Unit 3: Autacoids
Unit 4: Endocrine Pharmacology
Unit 5: Bioassay

Important Questions for Practice only

Semester #GPAT #NIPER #Pharmacist #DI

www.youtube.com/pharmacologyconceptsbyrajeshchoudhary

www.pharmacyconcepts.in

Section 1 MCQs

1. Positive Inotropic Effects of histamine is related to

- a) H1 R
- b) H2 R**
- c) H3 R
- d) H4 R

2. Match the related ans

- | | |
|--------------------|--|
| 1. Diphenhydramine | P. Morning Sickness |
| 2. Cinnargine | Q. Centrally anti-cholinergic activity |
| 3. Doxylamine | R. Torsades de Point |
| 4. Terfenadine | S. Raynaud's phenomeno |
| 5. Ketanserin | T. Antivertigo |
- a) 1-S, 2-T, 3-P, 4-R, 5-Q
 - b) 1-Q, 2-T, 3-P, 4-R, 5-S**
 - c) 1-Q, 2-P, 3-T, 4-R, 5-S
 - d) 1-Q, 2-T, 3-P, 4-S, 5-R

12. Drug used in RA

- a) Methotrexate
- b) corticosteroid
- c) Leflunomide
- d) Etanercept
- e) All**

13. Select an endocrine drug which is a steroidal derivative:

- a) Gonadorelin
- b) Insulin
- c) Levothyroxine
- d) Hydrocortisone**

14. Regarding the mechanism of action of steroidal hormones, indicate the statement:

- a) Hormones interact with the specific receptors in the inside the cells**
- b) Cyclic AMP acts as a second messenger system
- c) They stimulate adenylcyclase enzyme
- d) act on LGIC

15. Which of the following organs is a target for prolactin?

- a) Liver
- b) Adrenal cortex
- c) Thyroid
- d) Mammary gland**

16. Indications of bromocriptine are following, EXCEPT:

- a) Prolactin-secreting adenomas
- b) Amenorrhea-Galactorrhea
- c) Prolactin deficiency**
- d) Acromegaly

17. Currently used dopamine agonists decreasing pituitary prolactin secretion are following:

- a) Bromocriptine
- b) Cabergoline
- c) Pergolide
- d) All of the above**

18. Indications of vasopressin are following:

- a) Diabetes mellitus
- b) Hypertension
- c) Pituitary diabetes insipidus**
- d) Incompleted abortion

19. Oxytocin produces the following effects:

- a) It causes contraction of the uterus
- b) It brings about milk ejection from the lactating mammary gland
- c) All of the above**

20. Currently used antithyroid drugs include the following, EXCEPT:

- a) Propylthiouracil (PTU)
- b) Diatrizoate sodium (Hypaque)
- c) Methimazole (Tapazole)
- d) Potassium perchlorate**

21. Radioiodines in the body emit:

- a) Mainly β radiations**
- b) Mainly γ radiations
- c) β and γ radiations equally.
- d) Do not emit any radiation, therefore, are safe

22. Insulin causes reduction in blood sugar level by the following mechanisms, EXCEPT:

- a) Increased glucose uptake in the peripheral tissue
- b) Reduction of breakdown of glycogen
- c) Diminished gluconeogenesis
- d) Decreased glucose absorption from the gut**

23. Insulin can not be administered by:

- a) Oral route**
- b) Intravenous route
- c) Subcutaneous route
- d) Intramuscular route.

24. Sources of human insulin production are:

- a) Recombinant DNA techniques by inserting the proinsulin gene into *E. coli* or yeast**
- b) Postmortem insulin extraction from human autopsy pancreas
- c) All of the above
- d) None of the above

25. Correct statements about crystalline zinc (regular) insulin include all of the following, EXCEPT:

- a) It can serve as replacement therapy for juvenile-onset diabetes
- b) It can be administered intravenously
- c) It is a short-acting insulin
- d) It can be administered orally**

26. Sulphonylureas act by:

- a) Reducing the absorption of carbohydrate from the gut
- b) Increasing the uptake of glucose in peripheral tissues
- c) Reducing the hepatic gluconeogenesis
- d) Stimulating the beta islet cells of pancreas to release insulin**

27. Thiazolidinediones act by:

- a) Diminishing insulin resistance by increasing glucose uptake and metabolism in muscle and adipose tissues**
- b) Reducing the absorption of carbohydrate from the gut
- c) Stimulating the beta islet cells of pancreas to produce insulin
- d) All of the above

28. Currently used alpha-glucosidase inhibitors include the following, EXCEPT:

- a) Pioglitazone (Actos)**
- b) Acarbose (Precose)
- c) Miglitol (Glyset)
- d) All of the above

30. The major natural estrogens produced by women are following, EXCEPT:

- a) Estradiol (Estradiol-17 β , E2)
- b) Estron (E1)
- c) Ethinyl estradiol**
- d) Estriol (E3)

31. The major synthetic estrogens are following, EXCEPT:

- a) Dienestrol
- b) Diethylstilbestrol
- d) Estradiol**
- c) Benzestrol

32. Tamoxifen is:

- a) Antiprogestin
- c) Antiestrogen**
- b) Antiandrogen
- d) Androgen

33. Progesterone is secreted mainly by:

- a) Ovarian follicles
- b) **Corpus luteum**
- c) Granulosa and theca cells
- d) None

34. The major natural progestin is:

- a) Estradiol
- b) Estron
- c) Progesterone**
- d) Estriol

35. Mifepristone (RU-486) is:

- a) Antiprogestin**
- b) Antiandrogen
- c) Antiestrogen
- d) Androgen

36. All of the following statements about oral contraceptives are true, EXCEPT:

- a) The “combination pill” contains both estrogen and progestin
- b) Ethinyl estradiol and mestranol are commonly used in oral contraceptives
- c) The “minipill” contains progestin alone
- d) The “triphase pill” contains estrogen, progestin, and luteinizing hormone (LH)**

37. Glucocorticoids are hormonal steroids:

- a) Having an important effect on intermediary metabolism, cardiovascular function, growth, and immunity**
- b) Having principally salt-retaining activity
- c) Having androgenic or estrogenic activity
- d) All of the above

38. Which of the following glucocorticoids is a short- to medium-acting drug?

- a) Prednisolon**
- b) Dexamethasone
- c) Triamcinolone
- d) All of the above

39. Anti-inflammatory effect of glucocorticoids is caused by

- a) Reducing the prostaglandin and leukotriene which results from inhibition of phospholipase A2
- b) Reducing macrophages migration into the site of inflammation
- c) Decreasing capillary permeability
- d) All of the above**

40. Immunosuppressive effect of glucocorticoids is caused by:

- a) Reducing concentration of lymphocytes (T and B cells) and inhibiting function of tissue macrophages and other antigen-presenting cells**
- b) Suppression of cyclooxygenase II expression which results in reducing amount of an enzyme available to produce prostoglandins
- c) Activation of phospholipase A2 and reducing prostaglandin and leukotriene synthesis.
- d) All of the above

41. Which of the following NSAIDs is a nonselective COX inhibitor

- a) Piroxicam**
- b) Rofecoxib
- c) Celecoxib
- d) All of the above

42. Which bioassay is a type of quantal (End type) bioassay method

- a) Digitalis induced cardiac arrest model**
- b) Histamine induced contractile response in Guinea pig model
- c) bioassay of serotonin by rat fundus model
- d) bioassay of oxytocin by rat uterus model

43. which model used for bioassay of insulin

- a) hypoglycemic effects on rabbit
- b) hypoglycemic effects on rats/mice
- c) observation of glycogen content by using isolated diaphragm model
- d) all

44. Conc. Of unknown = $n_1/t \cdot \text{Antilog} \{T-S_1 / S_2-S_1 \cdot \log n_2/h_1\}$ this formula for

- a) **3-point bioassay**
- b) 4-point bioassay
- b) 6-point bioassay
- d) none

45. _____ is an example of graded response.

a) **Effect of Ach on muscle**

- b) Hypoglycemic convulsion by insulin
- c) Cardiac arrest of Digitalis
- d) None of the above

46. Bioassay of histamine on isolated guinea pig ileum is determined by

- a) Matching bioassay
- b) Interpolation bioassay
- c) Bracketing bioassay
- d) **All of these**

Section 2. Long Answer Type Questions

1. Define the Autacoids, classify them and discuss the pharmacology of Histamine or Serotonin
2. Define and Classify the NSAIDs. Discuss the Pharmacology of Aspirine
3. Classify the Diabetes Meletus and drug used in hyperglycaemia. Explain the pharmacology of Sulfonylureas.
4. Classify the steroidal hormones and discuss the pharmacology of corticosteroids

Section 3. Short Answer Type Questions

1. Prostaglandins
2. Bioassay of Insulin or Digitalis or oxytocin
3. Antirheumatoid Drugs
4. Oral contraceptive drugs
5. Bioassay
6. Anti-gout drugs (Colchicine)
7. Androgens
8. Vasoactive peptides
9. Antithyroid drugs (Propylthiouracil, Methimazole)