

## MCQ's on Medicinal Chemistry-II

- 1) Histamine is ..... It is synthesized locally from amino acid histidine.
  - a)  **$\beta$ -Imidazolyl ethylamine**
  - b)  $\alpha$ -Indolyl ethylamine
  - c)  $\beta$ -Indolyl ethylamine
  - d)  $\alpha$ -Imidazolyl ethylamine
- 2) IUPAC name of Histamine is .....
  - a) 3-(Imidazol-4-yl) ethylamine
  - b) 2-(Imidazol-4-yl) propylamine
  - c) 3-(Imidazol-4-yl) propylamine
  - d) 2-(Imidazol-4-yl) ethylamine**
- 3) Basic nucleus of Promethazine is .....
  - a) 1,2-cyclopento perhydro phenanthrene
  - b) Phenothiazine**
  - c) Anthracene
  - d) Quinoline
- 4) For a molecule to exhibit antihistaminic activity, the distance between the aryl and aliphatic N should be .....
  - a. **5-6 A°**
  - b. 4-5 A°
  - c. 3-4 A°
  - d. 6-7 A°
- 5) The drug useful for the treatment of Zollinger Ellison syndrome is .....
  - a) Cetirizine
  - b) Promethazine.
  - c) Doxylamine
  - d) Omeprazole**
- 6) The separation of the ring and the side-chain nitrogen should be ... carbon for optimal H2 antagonist activity.
  - a) 2
  - b) 5
  - c) 4**
  - d) 6
- 7) Famotidine contains
  - a. Furan ring
  - b. Imidazole ring
  - c. Thiazole ring**
  - d. Pyrrole ring

8) Histamine is stored in mast cell, along with acidic protein .....

- a) Histidine
- b) Heparin**
- c) Haem Protein
- d) All of above

9) The cisplatin can be used as

- A. Calcium channel blocker
- B. Antiarrhythmic drug
- C. Antineoplastic cytotoxicity drug**
- D. Immunosuppressive agent

10) The term is used to indicate the ability of a cancer to invade other parts of the body and to produce secondary tumours is

- A. Carcinogenesis
- B. Apoptosis
- C. Metastasis**
- D. Mutagenesis

11) Busulfan acts by...

- A. Fragmentation of DNA
- B. Mispairing of nucleotides
- C. Separation of DNA strands
- D. All of the above**

12) The active form of mercaptopurine is

- A. 6-Thioguanophosphate
- B. 6-Thioinosinic acid**
- C. 5-FDUMP
- D. 5-FUMP

13) Which one of the following drugs belongs to class nitrosoureas?

- A. Thiota
- B. Lomustine**
- C. Busulfan.
- D. Dacarbazine

14) Which one is not an alkylating agent?

- Cyclophosphamide
- Chlorambucil
- Mechlorethamine
- Mercaptopurine**

- 15) An example of pyrimidine antagonist is.....
- a) Mechlorethamine
  - b) Carmustine
  - c) Chlorambucil
  - d) 5-Fluorouracil**
- 16) ..... prevents polymerization of microtubules.
- a) Vincristine**
  - b) 5-Fluorouracil
  - c) Chlorambucil
  - d) Melphalan
- 17) The normal blood pressure is
- a. 120/90    b. **120/80**    c. 139/80    d. 140/90
- 18) Which of the following us 1,4-dihydropyridine calcium channel blocker?
- a. **Nimodipine**   b. Diltiazem   c. Verapamil   d. Alprozolam
- 19) Mechanism of action of nitrates is .....
- a. Inhibits phosphodiesterase   b. **Stimulates guanylate cyclase**   c. B-blockers   d. Calcium channel blockers
- 20) Bumetanide belongs to which class of diuretics?
- a. CA's Inhibitors   b. Osmotic diuretics   c. **Loop diuretics**   d. K<sup>+</sup> sparing diuretics
- 21) The antihypertensive drug that is a potassium channel opener is .....
- a. Verapamil   b. **Minoxidil**   c. Propanolol   d. Diltiazem
- 22) The mechanism of furosemide is .....
- a. Inhibits CA's   b. Works as osmotic diuretics   c. **Inhibits Na<sup>+</sup> — K<sup>+</sup> — 2Cl<sup>-</sup> symport**
  - d. None of above
- 23) The antianginal drug that inhibits phosphodiesterase is .....

- a. Aspirin      b. **Dipyridamole**      c. Isosorbide dinitrate  
d. Nifedipine

24) The antihypertensive also useful topically to stimulate hair growth is

- a. Losartan      b. **Minoxidil**      c. Nifedipine      d. Esmolol

25) Mechanism of action of propafenone is

- a.  $\beta$ -Blocker  
b. Blocks K<sup>+</sup> channel  
**c. Blocks N a<sup>+</sup> channel**  
d. Blocks C a<sub>2</sub><sup>+</sup> channel

26) Mexiletine belongs to

- a. Class I A  
**b. Class I B**  
c. Class II  
d. Class I II

27) The antiarrhythmic drug with local anaesthetic action is

- a. Verapamil  
b. Bretylium  
**c. Procainamide**  
d. Disopyramide

28) Mechanism of action of bretylium is

- a.  $\beta$ -blocker  
**b. Blocks K<sup>+</sup> channel**  
c. Blocks N a<sup>+</sup> channel  
d. Blocks C a<sub>2</sub><sup>+</sup> channel

29) A normal heart beats ..... times a minute

- a. 75**  
b. 120  
c. 20  
d. 150

30) Acecainide is

- a. 4-Acetylamo-N-[2-(2-diethylamino)ethyl] benzamide**

- b. 4-Amino-N-[2-(2-diethylamino)ethyl]benzamide
- c. 4-Acetylamino-N-[2-(2-amino)ethyl]benzamide
- d. 4-Acetylamino-N-[2-(2-diethylamino)] benzamide

31) Synthetic statin derivative is

- a. Lovastatin
- b. Simvastatin
- c. Fluvastatin**
- d. Pravastatin

32) The drug that reduces the absorption of cholesterol from the GIT is

- a. Colestipol
- b. Niacin
- c. Ezetimibe**
- d. Gemfibrosil

33) The anti-hyperlipidemic drug that is a benzophenone derivative is

- a. Ezetimibe
- b. Probucol
- c. Fenofibrate**
- d. Dalvastatin

34) Anticoagulants interfere with

- a. Prothrombin
- b. Vitamin K**
- c. Factor V
- d. Factor X II

35) The most widely used anticoagulant is

- a. Warfarin**
- b. Dicoumarol
- c. Phenidione
- d. Bromindione

36) The following are naturally occurring female

hormones except:

- a. Oestradiol
- b. Oestriol
- c. Mestranol**
- d. Oestrone

37) Oestrogens are synthesised from

- a. Pregnenolone
- b. Androstenedione**
- c. Dehydroepiandrosterone
- d. Aldosterone

38) The inactive derivative of progesterone is

- a. 17- $\alpha$ -Hydroxyprogesterone**
- b. Hydroxyprogesterone caproate
- c. Medroxyprogesterone acetate
- d. Chlormadinone acetate

39) The steroid metabolite that acts as the main regulator of gonadotropin secretion is

- a. Testosterone
- b. Androstenolone
- c. Androstanediol**
- d. Androstenedione

40) The steroid having a role in promoting maturation of the lung in foetus is

- a. Androgens
- b. Oestrogens
- c. Progestins
- d. Glucocorticoids**

41) The structural feature essential for both glucocorticoid (GC) and mineralocorticoid

(MC) activity is (are)

- a. 6- $\alpha$  Substitution on ring-B
- b. 3-Keto group on ring-A**
- c. Double bond in the 1,2 positions of ring A
- d. Without 17- $\alpha$ -hydroxyl group

42) One of the following is not a parenteral androgen:

- a. Testosterone
- b. Testosterone propionate
- c. Testosterone enanthate
- d. Methyltestosterone**

43) One of the following is an orally active progestin:

- a. Progesterone
- b. Norethindrone**

- c. Chlormadinone acetate
- d. Medroxyprogesterone acetate

44) Glibenclamide belongs to the class

- a. Sulphonyl ureas**
- b. Thiazolidinediones
- c. Benzoic acid derivatives
- d. Biguanides

45) The mechanism of action of rosiglitazone is

- a. Insulin-releasing agent
- b. PPAR $\gamma$  agonist**
- c. Increases cellular uptake of glucose
- d. Reduces release of insulin

46) Which of the following statements is a characteristic of an ideal local anaesthetic?

- a. It should be reversible in action.
- b. It should be effective when used both systematically and topically.
- c. It should have maximum irritation either topically or at the site of injection.
- d. All of the above**

47) Anaesthesia of mucous membranes is called

- a. Infiltration anaesthesia
- b. Field block anaesthesia
- c. Nerve block anaesthesia
- d. Topical analgesia**

48) One of the following drugs does not belong to the benzoic acid class of anaesthetics

- a. Benzocaine**
- b. Cocaine
- c. Piperocaine
- d. Hexylcaine

49) The drug that was discovered accidentally while research actually aimed for the preparation of antimalarial agents related to quinine was

- a. Quinacrine
- b. Dibucaine**
- c. Dimethisoquin
- d. Benoxinate

50) The local anaesthetic with a bicyclic ring is

- a. Lidocaine
- b. Dyclonine
- c. Bupivacaine
- d. Cocaine**

