

I. Please describe an experiment in which pharmacological methods are used. (8%)

II. Multiple choice (每題四分, 每題只有一個答案, 答錯倒扣1分)

1. A competitive inhibitor of aldosterone.
 - A. Propylthiouracil
 - B. Fludrocortisone
 - C. Spironolactone
 - D. Methylprednisolone
 - E. Corticotropin
2. All of the following are recognized effects of oral contraceptives EXCEPT
 - A. Increased risk of myocardial infarction.
 - B. Nausea.
 - C. Edema.
 - D. Increased risk of endometrial cancer.
 - E. Decreased risk of ovarian cancer.
3. A drug that predictably prolongs the PR interval and increases cardiac contractility.
 - A. Quinidine
 - B. Digoxin
 - C. Verapamil
 - D. Lidocaine
 - E. Propranolol
4. A partial estrogenic agonist used in the treatment of infertility
 - A. Ethinyl estradiol
 - B. Chlorotrianisene
 - C. Norethindrone
 - D. Fludrocortisone
 - E. Clomiphene
5. A potentially nephrotoxic agent capable of displacing lead from the body.
 - A. Dimercaprol (BAL)
 - B. Penicillamine
 - C. Edetate calcium disodium
 - D. Deferoxamine
 - E. Levamisole
6. A drug that decreases gastric acid secretion
 - A. Diphenhydramine
 - B. Ergotamine tartrate
 - C. Terfenadine
 - D. Cimetidine
 - E. Aspirin
7. All of the following statements about cyclosporine are accurate EXCEPT
 - A. It is an effective immunosuppressant in organ and bone marrow transplantations.
 - B. It inhibits proliferation and early differentiation of lymphoid T cells.
 - C. It causes marked bone marrow toxicity.
 - D. It is a lipophilic peptide antibiotic.
 - E. Its nephrotoxicity may be reduced by mannitol diuresis.
8. Contraindications to the use of propranolol include
 - A. Angina pectoris
 - B. Migrane
 - C. Tachycardia
 - D. Asthma
 - E. Hypertension

9. Treatment of a staphylococcal infection is an appropriate use in clinics for each of the following drugs EXCEPT:

- A. Metronidazole.
- B. Erythromycin.
- C. Cefazolin.
- D. Vancomycin.
- E. None of the above.

10. Which of the following is an antidepressant agent that selectively inhibits serotonin (5-HT) uptake with minimal effect on norepinephrine uptake?

- A. Protriptyline.
- B. Maprotiline.
- C. Fluoxetine.
- D. Desipramine.
- E. Amoxapine.

11. All the mechanisms of resistance to antimicrobial drugs are correct, EXCEPT

- A. transduction.
- B. transformation.
- C. conjugation.
- D. transposition.
- E. none of the above.

12. The action site for lovastatin is:

- A. acetyl transferase.
- B. decrease of VLDL secretion.
- C. HMG-Co A reductase.
- D. HVA-Co A oxidase.
- E. none of the above.

(# 12 is on your right side !!) →

13. Captopril and enalapril do all of the followings EXCEPT:

- A. Inhibit an enzyme named as ACE.
- B. Displace the angiotensin at its receptor.
- C. Increase renin level in the blood.
- D. Decrease angiotensin II level in the blood.
- E. None of the above.

14. Which of the following compounds is a competitive antagonist of glycine receptor and can cause convulsion?

- A. Picrotoxin
- B. Pentylentetrazole
- C. Doxapram
- D. Bicuculline
- E. Strychnine

15. Which of the following is a selective inhibitor of monoamine oxidase B useful in the treatment of Parkinsonism?

- A. Deprenyl
- B. Carbidopa
- C. Bromocriptine
- D. Tranylcypromine
- E. Phenelzine

16. All the following antibiotics act on bacterial cell wall EXCEPT

- A. Bacitracin.
- B. Vancomycin.
- C. Cycloserine.
- D. Tobramycin.
- E. Ristocetin.

17. Which of the following agents can interrupt DNA chains of HIV (human immunodeficiency virus)?

- A. INH
- B. FCCP
- C. AZT
- D. PAS
- E. CCCP

18. Fatty acid cyclooxygenase is an enzyme which leads to the formation of prostaglandins. Which of the following drugs directly inhibits the enzyme activity?
- A. Dexamethasone.
 - B. Nitroprusside.
 - C. Diphenhydramine.
 - D. Aldosterone.
 - E. Indomethacin.
19. Theophylline is useful in asthma because
- A. It has no significant effects on the heart.
 - B. It decrease intracellular calcium in bronchial smooth muscle.
 - C. It is inactive by the oral route.
 - D. It increases cAMP without desensitizing receptors in bronchioles.
 - E. It is a potent stimulant of beta receptors.
20. Which of the following has a rapid diuretic effect, plus smooth muscle effects that make it useful in the treatment of acute pulmonary edema?
- A. Furosemide.
 - B. Acetazolamide.
 - C. Triamterene.
 - D. Spironolactone.
 - E. Thiazide diuretic.
21. Uric acid is formed from hypoxanthine by xanthine oxidase. The enzyme activity is inhibited by
- A. Hydrocortisone.
 - B. Allopurinol.
 - C. Probenecid.
 - D. Sulfinpyrazone.
 - E. Phenylbutazone.
22. Antihistamines (H_1) have various clinical uses including
- A. decreasing gastric secretion in peptic ulcer.
 - B. treatment of a severe bronchial asthma attack.
 - C. prophylaxis and treatment of motion sickness.
 - D. increasing blood flow to the extremities in peripheral vascular disease.
 - E. treatment of cardiac arrhythmias.
23. A polypeptide that causes increased capillary permeability and edema is
- A. Angiotensin I.
 - B. Saralasin.
 - C. Angiotensin II.
 - D. Bradykinin.
 - E. Captopril.