

一、 單選題 (每題 2 分，共 20 分)，請在答案卡作答

1. Which of the following drugs is commonly used topically in the treatment of glaucoma?
  - (A) Silodosin
  - (B) Yohimbine
  - (C) Esmolol
  - (D) Timolol
2. Which medication would benefit a 63-year-old female patients recently diagnosed with amyotrophic lateral sclerosis?
  - (A) Riluzole
  - (B) Glatiramer
  - (C) Galantamine
  - (D) Pramipexole
3. Which one of the following is a short-acting hypnotic?
  - (A) Phenobarbital
  - (B) Diazepam
  - (C) Triazolam
  - (D) Chlordiazepoxide
4. A 57-year-old woman is being treated for chronic suppression of a ventricular arrhythmia. After 1 week of therapy, she complains of severe upset stomach and heartburn. Which antiarrhythmic drug is the likely cause if these symptoms?
  - (A) Propranolol
  - (B) Mexiletine
  - (C) Amiodarone
  - (D) Digoxin
5. Which drug is beneficial in the treatment of patients with acromegaly?
  - (A) Cosyntropin
  - (B) Oxytocin
  - (C) Somatropin
  - (D) Lanreotide
6. Which of the following agents is considered a narrow-spectrum antibiotic?
  - (A) Ciprofloxacin
  - (B) Isoniazid
  - (C) Imipenem

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(D) Ceftriaxone

7. Which of the following statements is "false" regarding leptin?

(A) Leptin is produced primarily by the adipocytes in adipose tissue.

(B) Leptin is a hormone that increases your appetite.

(C) Plasma leptin was observed to be higher in patients with obesity.

(D) Leptin binding to its receptor Ob-Rb in turn activates JAK-STAT pathway, which induces proliferation and angiogenesis in normal cells and malignant cells

8. Which of the following anti-obesity drugs "does not" suppress appetite?

(A) Lorcaserin

(B) Qnexa

(C) Sibutramine

(D) Orlistat

9. Which of the following agents is used in the treatment of "psoriasis"?

(A) Clobetasol

(B) Calcipotriene

(C) Acitretin

(D) All of the above

10. Which of the following drug theoretically improve asthma symptoms?

(A) Atropine

(B) Bethanechol

(C) Pilocarpine

(D) Pyridostigmine

二、 單選題 (每題 2 分，共 20 分) ，請在答案卡作答

11. Which of the following drugs does not suppress synthesis of cortisol?

(A) Ketoconazole

(B) Metyrapone

(C) Mifepristone

(D) Etomidate

(E) Aminoglutethimide

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12. To prevent the respiratory distress syndrome in premature infants, which of the following drugs can be given to mothers to promote fetal lung maturation?
- (A) Cortisone
  - (B) Metyrapone
  - (C) Mifepristone
  - (D) Betamethasone
  - (E) Fludrocortisone
13. Which of the following drugs act as a bronchodilator by suppressing phosphodiesterase (PDE) in respiratory epithelial cells?
- (A) Zileuton
  - (B) Theophylline
  - (C) Tiotropium
  - (D) Formoterol
  - (E) Montelukast
14. Which of the following drugs is a leukotriene receptor antagonist that can be used to treat exercise-induced bronchospasm?
- (A) Zileuton
  - (B) Theophylline
  - (C) Tiotropium
  - (D) Formoterol
  - (E) Montelukast
15. Which of the following drugs can be used to treat diabetes insipidus?
- (A) Vasopressin
  - (B) Ganirelix
  - (C) Prolactin
  - (D) Macrolide
  - (E) Somatotropin
16. A 25-year-old female presents with a 2-day history of dysuria and is diagnosed with a urinary tract infection (UTI) caused by *E. coli*. All of the following would be considered appropriate therapy for this patient **except**:
- (A) Levofloxacin
  - (B) Ciprofloxacin
  - (C) Cotrimoxazole
  - (D) Moxifloxacin

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(E) Norfloxacin

17. A 35-year-old male is diagnosed with community acquired pneumonia (CAP) caused by *S. pneumonia*. The patient is severely allergic to ampicillin. Which of the following would be an appropriate therapy for this patient?

(A) Levofloxacin

(B) Ciprofloxacin

(C) Aztreonam

(D) Amoxicillin

(E) Nitrofurantoin

18. All of the following are needed to adjust dosage in hepatic impairment except:

(A) Chloramphenicol

(B) Erythromycin

(C) Clindamycin

(D) Tigecycline

(E) Linezolid

19. Which of the following antibiotic combinations is inappropriate based on antagonism at the same site of action?

(A) Clindamycin and amoxicillin

(B) Clindamycin and Tigecycline

(C) Clindamycin and erythromycin

(D) Ciprofloxacin and amoxicillin

(E) Doxycycline and Vancomycin

20. A 64-year-old man presents fever, increased urinary frequency, and mental status changes. He has penicillin allergy of anaphylaxis. Which of the following is the most appropriate choice for gram-negative coverage of his infection?

(A) Amoxicillin

(B) Cefepime

(C) Ertapenem

(D) Aztreonam

(E) Ceftaroline

三、 試述下列藥物的作用機制與臨床用途 (每題 2 分，共 20 分)，請在答案卷作答

1. Caspofungin

2. Trastuzumab

3. Terbinafine

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科目： 藥理學  
節次： 7

國立臺灣大學 111 學年度碩士班招生考試試題

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4. Bevacizumab
5. Oseltamivir
6. 5-FU
7. Ritonavir
8. Cyclophosphamide
9. Foscarnet
10. Finasteride

四、問答題(每題 4 分，共 20 分)，請在答案卷作答

1. Please describe the therapeutic effects and mechanism for the cell-drug: “tisagenlecleucel (Kymriah®)” for Acute lymphocytic leukemia (ALL). (4 %)
2. Please describe the therapeutic effects and toxicity mechanism for acetaminophen. (4 %)
3. Please describe the mechanism for drug-drug-interaction between Warfarin and fluvastatin. (4%)
4. Please describe the role of UDP-glucuronosyl transferase in the disease of Neonatal jaundice. (4%)
5. Please describe the therapeutic mechanisms for Pembrolizumab (Keytruda®). (4%)

五、試述下列藥物之作用機制和主要臨床用途？(每題 4 分，共 20 分)，請在答案卷作答

1. Atenolol
2. Norepinephrine
3. Digoxin
4. Sulfonylurea
5. Spironolactone

試題隨卷繳回