

ROYAL CIVIL SERVICE COMMISSION
CIVIL SERVICE COMMON EXAMINATION (CSCE) 2008
EXAMINATION CATEGORY: TECHNICAL

PAPER III: SUBJECT SPECIALIZATION PAPER FOR B.Sc. Pharmacy

Date : 20th December 2008
Total marks : 100
Examination time : 2.5 hours
Reading time : 15 minutes

1. Read the question carefully before proceeding to answer.
2. All the answer must be written on the answer sheet provided.
3. You are required to answer all the questions in section A.
4. The section B consists of two case studies. You are required to answer only one case study which carries 50 marks
5. The section A consists of two parts; part I which is the objective type question, 30 questions of 1 mark each. Part II consist of four questions which carries 5 marks each.
6. For the objective type question write down the question number and the correct answer against it.

Example

26. b

27. d

28. a

7. Answer the short question in part II of section A in brief and to the point
8. Before submitting the paper mention the number of answer sheets attached to ensure that the papers are not lost or tampered with.
9. Number of answered sheets attached

**CIVIL SERVICE COMMON EXAMINATION-2008
TECHNICAL GRADUATE SELECTION EXAMINATION
PAPER III: SUBJECT SPECIALIZATION**

SECTION A (50 Marks)

I. Multiple choice question : Answer in separate sheet as per above instruction (1X30=30marks)

- 1) Which from the following is an objective of the EDP?
 - a) To ensure availability and accessibility of essential drugs
 - b) Ensure safety and quality of drugs
 - c) Ensure good dispensing and prescribing practice
 - d) All of the above

- 2) The National Drug committee meets
 - a) Monthly
 - b) Quarterly
 - c) Annually
 - d) Once in two years

- 3) The 1st line treatment regimen for HIV/AIDS is
 - a) AZT/3TC/NVP
 - b) AZT/3TC/EFV
 - c) D4T/3TC/NVP
 - d) D4T/3TC/EFV

- 4) The treatment for TB (category I) as per the national TB guideline is
 - a) 2(3)EHRZ/6HE
 - b) 2SHERZ/1HRZE/5HER
 - b) 2HERZ/6HRE
 - d) All of the above

- 5) The treatment of uncomplicated PV malaria in Bhutan is
 - a) Chloroquine with premaquine
 - b) Chloroquine with artemether
 - c) Chloroquine with proguanil
 - d) All of the above

- 6) Which of the following is not a laxative
 - a) Lactulose
 - b) Senna
 - c) Metoclopramide
 - d) Magnesium sulphate

- 7) Which of the following is not an ACE inhibitor:
- a) Nifedipine
 - b) Enalapril
 - c) Captopril
 - d) Ramipril
- 8) The adult dose of Niclosamide is
- a) 2 gram as a single dose
 - b) 500 mg as a single dose
 - b) 1gram as a single dose
 - d) 1.5 gram as a single dose
- 9) The usual dose of Norfloxacin is
- a) 400mg once daily
 - b) 400mg twice daily
 - c) 400mg thrice daily
 - d) 400mg four times daily
- 10) The maximum dose of Paracetamol within 24 hours is
- a) 15mg/kg
 - b) 40mg/kg
 - c) 50mg/kg
 - d) 60mg/kg
- 11) Which of the following is an antidote for Paracetamol toxicity
- a) Atropine
 - b) Acetylcysteine
 - c) Naloxone
 - d) Pyridoxine
- 12) The usual dose of Omeprazole is
- a) 20mg once daily
 - b) 20mg twice daily
 - c) 40mg once daily
 - d) 40mg twice daily
- 13) Which of the following is not a treatment regimen for H pylori
- a) Amoxicillin 1gram twice daily + metronidazole 500mg twice daily + omeprazole 20mg twice daily
 - b) Amoxicillin 1gram twice daily + clarithromycin 500mg twice daily + omeprazole 20mg twice daily

- c) Clarithromycin 500mg twice daily + metronidazole 400mg twice daily
+ rabeprazole 20mg twice daily
- d) Amoxicillin 1gram twice daily + ranitidine 300mg twice daily + omeprazole
20mg twice daily

14) The main counseling to be provided while dispensing Cotrimoxazole tablet is

- a) Do not drive or operate machinery
- b) Drink plenty of fluids
- b) Do not drink alcohol
- d) All of the above

15) which of the following is not an antihistamine

- a) cetirizine
- b) loratidine
- c) chlorpheniramine maleate
- d) cinnarizine

16) What is the drug of choice for absence seizure?

- a) carbamazepine
- b) phenytoin
- b) Phenobarbital
- d) All of the above

17) what is the formula for calculating BSA

- a) $S = W \times \frac{0.425}{H} \times \frac{0.725}{71.84}$
- b) $S = W \times \frac{0.420}{H} \times \frac{0.700}{71.84}$
- c) $S = W \times \frac{0.250}{H} \times \frac{0.250}{71.84}$
- d) $S = W \times \frac{0.123}{H} \times \frac{0.725}{71.84}$

18) Diuretics should be taken

- a) At night
- b) In the Morning
- c) In the afternoon
- d) All of the above

19) Mixtard insulin contains

- a) 30 % regular insulin 70% isophane insulin
- b) 20% regular insulin 80% isophane insulin
- c) 40% regular insulin 60% isophane insulin
- d) 50% regular insulin 50% isophane insulin

20) Which of the following is a TCA

- a) flouxetine
- b) citalopram
- b) paroxetine
- d) amitriptyline

21) 1 lakh of penicillin (diluted with 9ml water for injection. 1 vial of penicillin contains 3000000IU penicillin) corresponds to

- a) 0.1ml
- b) 0.2ml
- c) 0.3ml
- d) 0.4ml

22) The following is not an anti viral drug

- a) Acyclovir
- b) Fluconazole
- c) Zidovudine
- d) Amikacin

23) Which of the following is not a drugs for meniers disease

- a) Cinnarazine
- b) Betahistine
- c) Cetrizine
- d) All of the above

24) Which of the following is not an calcium channel blocker

- a) Nifedipine
- b) Amlodipine
- c) Diltiazem
- d) Losartan

25) Which of the following is contraindicated in dengue

- a) Aspirin
- b) Indomethacin
- c) Ibuprofen
- d) All of the above

- 26) As per the national STI guideline the First choice for treating gonorrhoea is
- a) Penicillin
 - b) Doxycycline
 - c) Erythromycin
 - d) Ceftriaxone
- 27) Which of the following drugs need not be tested for sensitivity
- a) Penicillin
 - b) Ceftriaxone
 - c) Gentamicin
 - d) All of the above
- 28) Which from the following drugs are not an adjuvant (pre-treatment) for chemotherapy
- a) Dexamethasone
 - b) Ranitidine
 - c) Ondansetron
 - d) Paracetamol
- 29) Which from the following cannot be administered via the IV route
- a) Gentamicin
 - b) Metronidazole
 - c) Procaine Penicillin
 - d) Ceftriaxone
- 30) Which from the following are liable to be abused
- a) Codeine
 - b) Morphine
 - c) Pethidine
 - d) all of the above

II. Short answer question 5 marks each (5X4=20marks)

- a) Mention in points the procedure and functions of the medicine board and the Drug Technical Advisory Board
- b) List down the various steps involved, before a drug is being included in the Essential drug list of Bhutan
- c) List down the duties of a Pharmacist as per the BHMC regulation 2005.
- d) List down the top five disease outpatient and inpatient according to the statistical data with the MOH

Section B Answer any one of the case study 1X50=50marks

CASE STUDY 1:

Mr Namgay, 48/m was brought to causality with c/o pain, swelling and sore right leg. His past medical history revealed Type II Diabetes mellitus. O/E afebrile, BP 140/90 mm of Hg, pulse 90/min. Provisional diagnosis type II diabetes with diabetic foot and was admitted in the medical ward. He was prescribed following drugs:

1. IVF- normal saline
2. Injection ceftraizone 1 g iv bd
3. Inj cloxacillin 500 mg IV 6 hourly
4. Inj plain insulin on sliding scale
5. vitamin C 500mg twice daily
6. Enalapril 5 mg bd
7. Aspirin 75mg od
8. Amlodipine 5mg od
9. Tramadol 1 cap sos
10. Tab Lasix 40 mg od

He was advised for following test :

CBC, HBA1C, FBS,PP,LFT,RFT,S.Creatinine, Uine CS/RE, USG abd, funduscopy, ECG, X-ray Rt. Leg.

1. What are the cardinal symptoms of type II diabetes? (1)
2. What is the other form of diabetes mellitus and mention three difference from the above mentioned diabetes? (2)
3. Mention the therapeutic group of the above prescribed drug and provide rationale for why the above drugs are prescribed for Mr. Namgay? (5)
4. Provide the mode of actions of above drugs? (5)
5. Write down the full form of the above mentioned test and explain why these tests are done for Mr. Namgay? (12)
6. What are different types of insulin in terms of their duration of action and provide one e.g each? (3)
7. What are the major complications of diabetes and how can you prevent it? (3)
8. List down the various groups of cephalosporins with example? (4)
9. What is the difference between cloxacillin and ceftraizone and what is the rationale for prescribing these two antibiotics for Mr. Namgay?(2)
10. List one major side effect of the above prescribed drugs? (5)
11. What are the oral anti-diabetic drugs available in EDL and mention the difference between these drugs? (4)
12. What would be the first choice of oral anti-diabetic drug for a diabetic patient weighing 100kg and why? (1)
13. Mr. Namgay's S. creatinine was 1.7mg/dl. Calculate the renal function for Mr. Namgay? (3)

CASE STUDY 2:

Mr Phurpa 60/m was referred to psychiatrist from medical ward. Investigation revealed loss of interest, insomnia, impaired thinking and was diagnosed as suffering from chronic depression. O/E showed, BP 160/100mg hg Hg, Pulse 100/min, pitting oedema on both legs. He weighs 110kg. Past medical history revealed that he was suffering from CCF, arrhythmias.

He was prescribed following drugs:

1. losartan 5mg bd
2. Frusemide 40 mg od
3. Atenolol 50mg od
4. warfarin 5mg od
5. atorvastatin 20mg od
6. amiodarone 200mg tds
7. Fluoxetine 40mg od
8. spironolactone 25mg bd

Questions:

1. Provide the rationale for prescribing above drugs for Mr. Phurpa? (4)
2. What are the pharmacological groups of above drugs?(8)
3. What are the major side effects of above drugs(8)
4. What is mode of action of the above drugs? (8)
5. How do you monitor warfarin side effect? (1)
6. What is serotonin syndrome and which of the above drugs causes this syndrome? (2)
7. What are the major symptoms of CCF and explain why these symptoms occur in CCF? (3)
8. Give one e.g of injectable anti-coagulant available in EDL and how will you monitor the side effect of the mentioned drug? (2)
9. What is difference between spironolactone and frusemide? (2)
10. Mention one major counseling point for the above prescribed drugs? (4)
11. List down the various antidepressant with its therapeutic category and give an example for each (2)
12. What is the advantage of losartan over enalapril?(1)
13. What would be your non pharmacological advice for Mr. Phurpa? (5)

GOOD LUCK