

# M.B.B.S. 2<sup>nd</sup> Prof.

(New Scheme w.e.f. 2019 admission onwards)

BF/2022/02

## Pharmacology – B

M.M. : 100

Time : 3 Hours(First30 Min. for MCQs)

- Note: 1. **Use OMR Sheet to answer Multiple Choice Questions(MCQs).**  
2. Attempt all questions. Illustrate your answers with suitable diagrams  
3. **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/PROVIDED**  
4. **The student must write Q.P. Code in the space provided on OMR Sheet and the Title page of the Answer Book.**

Q.1 MCQs (Attempt on OMR sheet) [1x20]

- A 36-year old pregnant woman is diagnosed with hypertension. Which of the following agents would be the most suitable to treat her hypertension?
  - Atenolol
  - alpha-methyl dopa
  - Clonidine
  - Lisinopril
- A 54-year-old woman is being treated for an atrial arrhythmia. She complains of headache, dizziness and tinnitus. Which of the following antiarrhythmic drugs is the most likely cause of these symptoms?
  - Amiodarone
  - Procainamide
  - lidocaine
  - Quinidine
- A 54-year-old woman had a myocardial infarction. Which of the following would be appropriate prophylactic antiarrhythmic pharmacotherapy?
  - Quinidine
  - Verapamil
  - Phenytoin
  - Metoprolol
- The vasodilator action of nitrates involves the formation of \_\_\_\_\_ and an increase in the amount of \_\_\_\_\_ in the vascular smooth muscle cell?
  - ATP, cAMP
  - NO, troponin
  - NO, cGMP
  - NO, cAMP
- Which of the following drug is useful in acromegaly by acting as somatostatin, a growth hormone release inhibiting factor.
  - Octreotide
  - bromocriptine
  - Nafarelin
  - Pramlintide
- 45 year old male with hyperthyroidism was prescribed drug which act by inhibiting T3 and T4 production in the thyroid gland, and also by preventing T3 conversion to T4 in tissues. Which of the following can be the drug
  - Carbimazole
  - Propylthiouracil
  - Radioactive iodine
  - Iopanoic acid
- Which drug increases liver and tissue sensitivity to insulin by activating AMP-activated protein kinases
  - Dapagliflozin
  - Metformin
  - Sitagliptin
  - Meglitinide

8. Depo-Provera is not recommended for use longer than 2 years. This is because...
  - a. It has been shown to decrease bone mass
  - b. It can cause breast cancer
  - c. It carries high risk of thromboembolism
  - d. It can cause endometrial cancers
9. Rituximab, a monoclonal antibody which binds to CD20, is particularly used for
  - a. Breast cancer
  - b. Prostate cancer
  - c. B-cell lymphoma
  - d. Renal Tumor
10. POMP regimen is a common multidrug anticancer therapy used to treat resistant cancer. Which of the following drug is NOT involved in the regimen
  - a. Methotrexate
  - b. Vincristine
  - c. Mercaptopurine
  - d. Dactinomycin
11. A 37-year-old man complained of anorexia, nausea, enlargement of his breast, and impotence. The man, recently diagnosed with pulmonary coccidioidomycosis, has been receiving an antifungal treatment for two weeks. Which of the following drugs most likely caused these adverse effects?
  - a. Amphotericin B
  - b. Nystatin
  - c. Ketoconazole
  - d. Flucytosine
12. A baby born to mother who has received ART during pregnancy and had viral suppression near delivery (HIV RNA level <50 copies/mL), which of the following drug can be recommended for HIV prophylaxis in newborn
  - a. lamivudine
  - b. Zidovudine
  - c. Tenofovir
  - d. Nelfinavir
13. Which of the following drugs has a max dose of 120mg/kg/d and a black box warning for seizures from mineral/electrolyte imbalance and toxicity in renal impaired patients?
  - a. Amantadine
  - b. Trifluridine
  - c. Foscarnet
  - d. Cidofovir
14. A 2 months child accidentally got a dose of chloramphenicol which may be harmful to him due to low metabolizing enzymatic activity. Which of the following mechanism is responsible for its metabolism
  - a. Acetylation
  - b. Reduction
  - c. Methylation
  - d. Glucuronidation
15. A 60 year old female suffering from deep vein thrombosis in her left leg was well maintained on warfarin but now suddenly reported back for severe nose bleeding. She must be immediately treated with
  - a. Factor VIII
  - b. Protamine
  - c. Vitamin K
  - d. Aminocaproic acid
16. A 50 year old male presents with striking hypertriglyceridemia, after 6 months of drug treatment, his TGs and VLDL cholesterol levels decreased dramatically and HDL-C almost doubled. Which of the following is most likely agent?
  - a. Gemfibrozil
  - b. Niacin
  - c. Colestipol
  - d. Lovastatin
17. A 20 year old male is suffering from an acute attack of malaria, His blood film has shown P- vivax malaria. To prevent relapse of malaria, he should be prescribed which of the following drug
  - a. Mefloquine
  - b. Primaquine
  - c. Pyrimethamine- sulfadoxine
  - d. Proguanil
18. Deferoxamine is a known chelator which has selectively high affinity for
  - a. Aluminium
  - b. Lead
  - c. Iron
  - d. Arsenic

19. TG is a 43 year old woman who presents with a 2 week history of epigastric pain and a positive serum antibody for H. pylori. Which of the following would be considered the preferred initial therapy for H. pylori?
- PPI+metronidazole+levofloxacin
  - PPI+amoxicillin+levofloxacin
  - PPI+amoxicillin+clarithromycin
  - PPI+metronidazole+bismuth+tetracycline
20. The bactericidal antibiotic that interferes with bacterial cellwall synthesis and that may cause “red man syndrome” if injected too rapidly is
- Piperacillin
  - Vancomycin
  - Gentamicin
  - Clindamycin
- Q.2. Classify antianginal drugs. Describe mechanism of action and adverse effect of glyceryl trinitrate. [4+4+4]
- Q.3. **Write short notes on:-** [5x4]
- Vasodilators in congestive heart failure
  - Antiplatelet drugs
  - Therapeutic status of histamine-2 receptor blockers in peptic ulcer disease
  - Sodium glucose cotransporter 2 (SGLT-2) inhibitors in diabetes mellitus
- Q.4. **Explain why:-** [3x5]
- Dosing advice is extremely important with corticosteroid therapy
  - Dry cough may be observed as a patient in enalapril therapy
  - Domperidone is preferred over metoclopramide as anti-emetic in a patient with Parkinson’s disease
  - Tissue plasminogen activator is administered to a patient with myocardial infraction preferably as early as possible
  - History of G6PD deficiency must be taken before prescribing primaquin
- Q.5. **Short notes on(applied aspect):-** [6x3]
- Discuss treatment of type-2 diabetes mellitus
  - Discuss treatment of new cases of pulmonary tuberculosis
  - Write the clinical significance of antimicrobial resistance. How do you manage it?
- Q.6. **Short notes on:-** [5x3]
- Enumerate principles of bioethics. Explain all by giving one example of each.
  - Vaccines for Covid infection.
  - Post coital hormonal pills.