

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

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

BF/2022/06

## Pharmacology – A

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 O.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]

- Whenever drug is administered to body it has tendency to produce good as well as bad effects both. The study of mechanism of action and effects of any drug is known as
  - Pharmacokinetics
  - Pharmacotherapeutics
  - Pharmacodynamics
  - Pharmaceutics
- A drug may have different categories of names. Which one of the following names of drug is same throughout the countries?
  - Generic name
  - Brand name
  - Proprietary name
  - Common name
- The WHO has classified medicines into different categories. Out of all some of these medicines should be available to satisfy the priority healthcare needs of the population. Which one of the following is the name for these group of medicines?
  - Emergency medicine
  - Essential medicine
  - Economic medicine
  - Generic medicine
- Drugs can be administered by different routes depending up on the nature of drug and the requirement. Which one of the following routes is most commonly used during the time of life-threatening emergency conditions?
  - Oral route
  - Transdermal route
  - Subcutaneous route
  - Intravenous route
- A drug can produce allergic manifestations. In case of high chance of allergy an allergy test to be performed before administration of therapeutic dose of drug. Which one of the following routes is most commonly used for the purpose of allergy testing?
  - Intramuscular
  - Intravenous
  - Intranasal
  - Transdermal
- Cytochrome P 450 sub family CYP3A4 is very important in metabolism of many drugs. Which one of the following drugs is inhibitor of CYP 3A4 enzymes?
  - Erythromycin
  - Rifampicin
  - Phenobarbitone
  - Chronic alcoholism
- Dose response curve (DRC) is sigmoid type in most of the drugs. The upper limit of DRC corresponds to which one of the following characters of drug?
  - Efficacy
  - Potency
  - Dose
  - Toxicity
- Drug can damage to foetus if administered to a pregnant female. Which one of the following durations is most dangerous regarding this unwanted effect on foetus?
  - 1 to 20 days
  - 20 to 60 days
  - 60 to 120 days
  - 120 to 180 days

9. A 36 years male visited to ophthalmologist with complaints of diminished peripheral vision, headache, and frequent nausea and vomiting. Detailed ophthalmic examination with Gonioscopy measured intra ocular pressure 24 mm Hg. Iridocorneal angle was found to be normal open. Which one of the following drugs should be prescribe for this patient?
- Pilocarpine
  - Atropine
  - Cyclopentolate
  - Tropicamide
10. A 20 years male has history of enuresis and incapability of holding urine. Because of this he feels embarrassed. Which one of the following compounds may be of use to relief of his symptoms?
- Tolterodine
  - Pilocarpine
  - Adrenaline
  - Dopamine
11. Lignocaine is used as local anaesthetic agent for small simple surgical procedures. Its duration of effect can be increased along with reduced bleeding by mixing it with
- Adrenaline
  - Dopamine
  - Dobutamine
  - Atropine
12. A 32 years female presented to medical OPD with symptoms of headache, palpitation, and recurrent panic attacks. Her CT abdomen showed a mass in the adrenal gland. A diagnosis of phaeochromocytoma was made. Which one of the following is most suitable drug to be used before and during the surgical removal of this tumour?
- Propranolol
  - Phentolamine
  - Atropine
  - Succinylcholine
13. A 43 years female presents with palpitation, sweating, nervousness, anxiety, tremors and weight loss of 6 kg in recent 2 months. Detailed history revealed that her diet is increased. Which one of the following drugs should be prescribed to benefit her symptomatically?
- Propranolol
  - Alfuzosin
  - Phentolamine
  - Dopamine
14. A first-year medical student is having severe sneezing and running nose. He is having examination of pharmacology on the next day. As a consultant which one of the following antihistaminic drugs you will prescribe to him?
- Levocetirizine
  - Pheniramine
  - Hydroxyzine
  - Promethazine
15. A female was prescribed cancer chemotherapy for her breast cancer. She developed severe vomiting in the first cycle. As a clinician you prescribed her ondansetron. Find out the mechanism of action of ondansetron as antiemetic drug in this condition?
- 5-HT<sub>3</sub> antagonist
  - 5-HT<sub>4</sub> antagonist
  - 5-HT<sub>5</sub> antagonist
  - 5-HT<sub>6</sub> antagonist
16. A female complaint of recurrent pulsatile unilateral headache, nausea, vomiting and photophobia. Which one of the following medicines will be most suitable to treat her acute condition?
- Sumatriptan
  - Ondansetron
  - Metoclopramide
  - Omeprazole
17. A 45 years female visits to rheumatology OPD with complaints of pain, swelling and stiffness in wrist, fingers joints. Symptoms become worst during morning hours and are persisting for 5 years with fluctuations in severity. As a clinician which one of the drugs you will prefer in this condition to improve the condition and also to reduce the occurrence of symptoms?
- Sulfasalazine
  - Diclofenac sodium
  - Low dose aspirin
  - Calcium
18. A syphilitic patient is suffering with hyperuricaemia. Which one of the following compounds will be beneficial in both reducing the dose of penicillin against syphilis and uric acid in blood?
- Allopurinol
  - Probenecid
  - Colchicine
  - Febuxostat
19. An old person complaint of resting tremors, akathisia, rigidity, excessive salivation and slurred speech for 4 years. The symptoms are worsening day by day. Which one of the following catechol o methyl transferase inhibitors will be suitable for this patient?
- Tolcapone
  - Ropinirole
  - Benserazide
  - Selegiline

20. A patient was brought to surgical OPD and a diagnosis of breast cancer stage one was made. She was told that if she gets operated the prognosis is excellent. However, she refused to go for operation and insisted that she should be treated on medicines only. Doctor team tried to convince her regarding benefits of surgery at this very stage but she refused altogether. Which one of the following is the bioethical principle that has been followed in this case scenario?
- Autonomy
  - Beneficence
  - Non-maleficence
  - Justice
- Q.2. What are the different types of adverse drug reactions? Enumerate the advantages of pharmacovigilance. [12]
- Q.3. **Write short notes on:-** [5x4]
- Leukotrienes antagonists
  - Lithium carbonate
  - Steady state concentration
  - Nasal decongestants
- Q.4. **Explain why:-** [3x5]
- Patients taking MAO inhibitors should avoid wine and beer consumption
  - Therapeutic drug monitoring essential for some drugs
  - Lignocaine used along with adrenaline
  - Theophylline in bronchial asthma
  - Fixed dose combinations of drugs are often considered irrational
- Q.5. **Discuss the rationale for the use of:** [6x3]
- Glycopyrrolate as preanesthetic medication
  - Central anticholinergics in the treatment of parkinsonism
  - Skeletal muscle relaxant agent during surgical procedures
- Q.6. **Short notes:-** [5x3]
- Advantages and disadvantages of subcutaneous route of drug administration
  - Beta blockers
  - Write a note on principles of bioethics