2406000102010502-S
(SUPPLIMENTARY EXAM) FEBRUARY-2025
SECOND MBBS
PHARMACOLOGY (PAPER - II) (NEW) (OMR)

[Time: As Per Schedule] **[Max. Marks: 100]**

Instructions:
1. Fill up strictly the following details on your answer book
   a. Name of the Examination: **SECOND MBBS**
   b. Name of the Subject: **PHARMACOLOGY (PAPER - II) (NEW) (OMR)**
   c. Subject Code No: **2406000102010502-S**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.
5. Answers should be precise and to the point.
6. First 20 mins have been allotted to solve multiple choice questions.

Seat No:

Student's Signature

SECTION - I

Q.1 Multiple choice questions (MCQs) **1×20=20**
(Each question carries one mark and there is no negative marking.)

1. Which amongst the following antimicrobials exhibits a long post antibiotic effect?
   a) Fluorouinolones b) Macrolide
   c) Beta-lactams d) Oxazolidinones

2. Tadalafil should not be used in
   a) Diabetics b) Patient on vasodilator therapy
   c) Pulmonary hypertension d) Erectile dysfunction

3. Which of the following pair is correct for heavy metals and their chelating agents?
   a) Iron – BAL
   b) Mercury-Calcium disodium edetate
   c) Copper – d-penicillamine
   d) Arsenic – Deferasirox

4. Which of the following is pure bradycardia drug?
   a) Verapamil b) Acebutolol c) Ivabradine d) Amiodarone

5. A 30-year-old pregnant woman has a history of rheumatoid arthritis which has been Managed successfully with NSAIDS. However, she has recently visited her general practitioner complaining of burning epigastric pain worsened by food intake. Which of the following antiulcer drug is most likely contraindicated in this patient:
   a) Famotidine b) Omeprazole
   c) Misoprostol d) None of the above

6. Which of the following purgative increases the faecal bulk due to their water absorbing and retaining capacity?
   a) Methyl cellulose b) Lactulose
   c) Liquid paraffin d) Dioctyl sodium sulfosuccinate

7. Ciprofloxacin should not be given to an asthmatic using theophylline because:
   a) Ciprofloxacin decreases effects of theophylline
   b) Theophylline induces metabolism of ciprofloxacin
   c) Ciprofloxacin inhibits theophylline metabolism
   d) Theophylline inhibits ciprofloxacin metabolism

8. In post MI patient which dose of aspirin is recommended?
   a) 20 – 50 mg/day b) 75 – 150 mg/day
   c) 500 – 1000 mg/day d) 3000 – 4000 mg/day

9. Drug of choice for bleeding oesophageal varices is:
   a) Ethanolamine oleate b) Octreotide
   c) propranolol d) phytonadione

10. In which of the following disease is corticosteroids indicated?
    a) Osteoporosis b) peptic ulcer
    c) Neurocysticercosis d) kala-azar

11. Methotrexate is used for the management of all of these conditions except:
    a) Rheumatoid arthritis b) Psoriasis
    c) Leukopenia d) Organ transplantation

12. A 17-year-old girl had been taking a drug for treatment of acne for the last 2 years, which has led to pigmentation. Which drug could it be?
    a) Doxycycline
    b) Azithromycine
    c) Minocycline
    d) Chlorpromazine

13. Drug of choice for syphilis is:
    a) Penicillin b) Rifampicin c) Tetracycline d) Erythromycin

14. Which of the following antibiotic is used in the treatment of Clostridium difficile associated diarrhoea?
    a) Ciprofloxacin
    b) Metronidazole
    c) Piperacillin
    d) Clindamycin

15. Which of the following is valid indication for intramuscular iron therapy?
    a) Pregnancy
    b) Postpartum period
    c) Emergency surgery
    d) Oral iron intolerance

16. Tirofiban is:
    a) Monoclonal antibody
    b) Antiplatelet drug
    c) Anti-inflammatory drug
    d) Antianginal drug

17. Which of the following is the correct match about vitamin and its preferred use?
    a) Retinol- Alcoholic neuritis
    b) Cholecalciferol- Psoriasis
    c) Niacin- Hyperlipidaemia
    d) Ascorbic acid- Peripheral neuropathy

18. Ulipristal is
    a) A synthetic progesterone
    b) An antiprogesterone
    c) A selective progesterone receptors modulator
    d) A selective estrogen receptor modulator

19. Following drugs can cause gynaecomastia, except
    a) Cimetidine b) Spironolactone c) Finasteride d) Fluconazole

20. Which of the following SERM useful for treatment of osteoporosis?
    a) Estradiol b) Bisphosphonate c) Strontium d) Raloxifene

Q.2 Answer in Brief [any Five]: 3×5=15

a) Explain chemoprophylaxis against specific organisms by giving suitable examples.

b) Classify calcium channel blockers (CCBs). Why is nimodipine prescribed in subarachnoid haemorrhage?

c) Compare and contrast: Metoclopramide and Domperidone.

d) What is "relapse" in relation to malaria? Write drug therapy for relapsing malaria.

e) Give reason:
   A. Chloroquine is useful in hepatic amoebiasis but not in intestinal amoebiasis.
   B. Albendazole is preferred over praziquantel for the treatment of neurocysticercosis.

f) Explain two commonly employed "insulin regimens for diabetes" with suitable diagram

Q.3 Write answer in details [any three]: 5×3=15

a) Classify drugs used in Congestive Cardiac Failure (CCF). Write current status of digoxin in therapy of CCF. Point out any two drugs along with its pharmacological basis which arrest/reverse disease progression for the same?

b) Describe various complications and interactions of high ceiling diuretics. Elaborate role of spironolactone in cirrhotic oedema.

c) Classify thyroid inhibitors. Describe mechanism of action, two important adverse effects and indications of Propylthiouracil.

d) Enumerate Thrombolytics. Describe its mechanism and role in pharmacotherapy of acute myocardial infarction (MI). Write contraindications of thrombolytic therapy.

Q.4 Answer the following based on given case scenario. **10×1=10**

A 45-year-old male patient comes with complains of polyuria and weight gain (90 kg). His FBS and PP2BS were 140 mg/dl and 200mg/dl respectively. while HbA1C was 6.7%. He was diagnosed as Type II Diabetes mellitus (DM). he was advised diet, exercise and other life style modifications. Answer the following questions regarding management of this case.

a) Which oral antidiabetic drug will you prescribe for this patient? Why? **2**

b) Explain mechanism of action of drug which you have prescribed. **2**

c) Write treatment strategy of Type II Diabetes Mellitus. (Explain with flowchart) **2**

d) If above mentioned patient skipped his meal after taking antidiabetic drug, what could happen to him? and how will you manage this condition? **2**

e) How dapagliflozin and sitagliptin are beneficial in DM. **2**

SECTION - II

Q.5 Answer in Brief [any Five]: **3×5=15**

a) Write short note on "Integrase Inhibitors".

b) Classify anti-leprotic drugs. Describe pharmacotherapy of multibacillary leprosy as per NLEP guideline.

c) Write pharmacological basis for:
   i. Thiazides in diabetes insipidus
   ii. Dopamine in cardiogenic shock

d) Name two "Nitric Oxide (NO) donor". Describe therapeutic uses of any one of them.

e) Elaborate use of Probiotics in diarrhoea.

f) Compare and contrast: Oxytocin and Ergometrine.

Q.6 Write answer in details [any three]: **5×3=15**

a) Enlist various drugs from different categories for Hypertension. Write merits and demerits of any two 1st line antihypertensive drugs. Outline pharmacotherapy of Hypertensive emergency.

b) What is "Hormone Replacement Therapy (HRT)"? Describe HRT in post-menopausal women.

c) Enlist Fluoroquinolones. Outline Pharmacotherapy of Urinary tract infection.

d) Classify extended spectrum penicillins. Describe mechanism of action, adverse effects and therapeutic uses of ampicillin/amoxicillin.

Q.7 Answer the following based on given case scenario. **10×1=10**

A 35-year-old male presented to TB and Chest department with complaints of low-grade fever, weight loss, productive cough, night sweats and fatigue since more than 2 weeks. Patient's current weight is 56 kg. He is diagnosed as drug sensitive tuberculosis. The patient resides with his wife and two children (aged 7 and 4 years respectively). He had history of alcohol for 6 years.

a) Which TB regimen should be started in this patient? Write one important adverse effect of each drug which you mentioned in this regimen. **2+2**

b) Is prophylaxis required in this case? To whom and why is it required? **2**

c) What is Tuberculosis preventive treatment (TPT)? Write two TPT regimens used under NTEP. **1+3**

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