


NC-2106000102020102
Second Year M. B. B. S. Examination
December - 2021
Pharmacology : Paper-II
(New Curriculum)

Time : Hours]

[Total Marks :

Instructions :

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવર્તી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.		Seat No. : <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Name of the Examination : <input type="text"/>		<div style="border: 1px solid black; height: 80px; width: 100%;"></div> Student's Signature
Name of the Subject : <input type="text"/>		
Section No. (1, 2,): <input type="text"/> Nil		
Subject Code No. : <input type="text"/>		

- (2) Answers must be brief, precise and to the point
- (3) Give suitable examples and draw figures where necessary

1 Multiple choice questions (MCQs) 1×20=20

2 Answer the following: (Any five) 3×5=15

- (1) Enumerate Low molecular weight heparin (LMWH).
What are the advantages and disadvantages of LMWH?
- (2) Write pharmacological basis, dose and route of administration of Hydrochlorothiazide in essential hypertension.
- (3) Name two drugs which are "NO donor". Describe their mechanisms of NO release.

- (4) Use of 'Long acting, Nitrates + β -blockers' combination in angina rational or not? Justify your answer. Which other drugs are useful in angina ?
- (5) Explain two commonly employed "insulin regimens for diabetes" with suitable diagram.
- (6) Describe the role of "Probiotics" in Diarrhoea.

3 Short essay type questions: (Any three) 5×3=15

- (1) Classify diuretics. Describe therapeutic uses and adverse effects of furosemide.
- (2) Enlist various glucocorticoids and describe their therapeutic uses. Mention ADRs of prednisolone when used for long term therapy.
- (3) Give various ways of classification of antimicrobial agents giving suitable examples. Describe various reasons leading to failure of chemotherapy.
- (4) Enlist various antihypertensive drugs. Describe mechanism of action, therapeutic uses and adverse effects of ACE inhibitors.

4 Answer the following questions based on given case scenario. 10

A 54 years old male patient came to emergency department with complaints of chest discomfort since last half an hour associated with shortness of breath, excessive sweating and anxiety. On examination, patient had tachycardia and ST segment elevation on ECG. Patient was hemodynamically stable and his blood pressure was 172/98 mm Hg. Patient was diagnosed as having acute myocardial infarction.

- (i) Which drugs will you prescribe/ administer in the given case ? 2
- (ii) Describe pharmacological basis, doses and adverse effects of any two selected drugs for this condition. 2+2+2
- (iii) Which drug/s should be prescribed in the given case for secondary prophylaxis ? 2

SECTION - II

5 Answer the following: (Any **five**) **3×5=15**

- (1) Briefly describe HAART in relation to HIV infection.
- (2) Enumerate calcium channel blockers. Write their therapeutic uses and adverse effects.
- (3) Classify anti-leprotic drugs. Describe pharmacotherapy of multi-bacillary leprosy as per NLEP guideline.
- (4) Classify antianginal drugs. Explain "Coronary steal" phenomenon in relation with angina and name one drug causing this phenomenon.
- (5) Write short note on Emergency contraception.
- (6) Justify:
 - (i) Imipenem + Cilastin
 - (ii) Sulfadoxine + Trimethoprim combination

6 Short essay type questions: (Any **three**) **5×3=15**

- (1) Enlist various drugs from different categories for peptic ulcer. Describe Pharmacotherapy and non-pharmacological measures for recurrent peptic ulcer.
- (2) Enumerate first line and second line Antitubercular drugs. Write the mechanism of action and adverse effects of Rifampin. Write treatment regimen for Multidrug resistant Tuberculosis (MDRTB) as per National Tuberculosis Elimination Programme (NTEP) 2021 guideline.
- (3) Enlist drugs used in the treatment of Malaria. Write Pharmacotherapy of chloroquine resistant p. falciparum Malaria as per NVBDCP guideline.
- (4) Discuss drug therapy of various sexually transmitted diseases except HIV/AIDS.

7 Answer the following questions based on given case scenario. 10

A 45 year old obese male came to the OPD with history of increased thirst, increased frequency of micturition, increased appetite since 2 months. On examination his BP was found to be 130/80 mm Hg and Random blood sugar was 220 mg/dl (normal <180 mg/dl) and HbA1c was 9.3 % (normal = 4-6.1 %). Electrolytes, Blood Urea Nitrogen (BUN) and serum creatinine were normal, He has been diagnosed as Type II Diabetes Mellitus.

- (i) Classify the drugs available for the treatment of Type II Diabetes Mellitus. 2
- (ii) What is the drug of choice for treatment of this patient and write its mechanism of action and adverse effects? 3
- (iii) Write one newer group of drugs for above case condition and its mechanism of action and adverse effects. 0.5+1.5+1
- (iv) If above mentioned patient skipped his meal after taking antidiabetic drug, what could happen to him? and how will you manage this condition ? 2