

Q.P.CODE:M102B010

Dr NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008

M.B.B.S. DEGREE EXAMINATION – JANUARY, 2025

SECOND M.B.B.S. EXAMINATION

PHARMACOLOGY -PAPER-I

(Theory Questions)

Time : 2 Hours 40 Minutes

Max. Marks : 80

Note : Answer all questions

Draw a neat diagram wherever necessary

SECTION-II (THEORY QUESTIONS - 80 MARKS)

WRITE ESSAY ON THE FOLLOWING:

2X15=30

- 1) A 60 year old man came to hospital with complains of chest tightness and discomfort particularly after walking or climbing stairs. His pain is relieved by rest. ECG and Echo was done and diagnosis of angina was made. Classify drugs used in angina. Enumerate mechanism of action, uses and adverse effects of nitrates. Add a note on drugs used in treatment of myocardial infarction
- 2) Classify antiepileptic drugs. Write mechanism of action, uses and adverse effects of valproate. Add a note on treatment of status epilepticus

WRITE SHORT NOTES ON THE FOLLOWING:

10X5=50

- 3) Write in detail about consequences of microsomal enzyme induction and possible clinical uses due to enzyme induction
- 4) Pharmacovigilance
- 5) Classify sympathomimetics and their therapeutic indications
- 6) As an ophthalmologist you would like to dilate the pupil for fundus examination.
 - a. What drug would you use to dilate the pupil
 - b. What advise you will give to patient after completing eye examination
 - c. Enlist mydriatics and their indications
- 7) Preanesthetic medication
- 8) Selective serotonin reuptake inhibitors
- 9) What is the rationale of combining levodopa with carbidopa. List out the drugs used in drug induced parkinsonism
- 10) Enlist prostaglandin analogues and their indications
- 11) Cardiac and non-cardiac uses of beta blockers.
- 12) Describe therapeutic uses and adverse effects of High ceiling diuretics

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M.B.B.S. DEGREE EXAMINATION – JANUARY, 2025
SECOND M.B.B.S. EXAMINATION
PHARMACOLOGY PAPER-II
(Theory Questions)

Time : 2 Hour 40 Minutes

Max. Marks : 80

Answer all questions. Draw a neat diagram wherever necessary

SECTION-II (THEORY QUESTIONS – 80 MARKS)

WRITE ESSAY ON THE FOLLOWING:

2X15=30

- 1) Classify drugs used in treatment of hyperthyroidism. Describe the mechanism of action, indications, route of administration and adverse effects of radioactive iodine. Write the management of thyrotoxic crisis
- 2) A 28 year old pregnant woman with 8 months gestation is diagnosed with deep vein thrombosis of right leg.
 - a. Which anti-coagulants are safe for the above patient
 - b. Classify anticoagulants.
 - c. Write the mechanism of action, uses and adverse effects of warfarin.
 - d. Describe how patients on warfarin therapy are monitored

WRITE SHORT NOTES ON THE FOLLOWING:

10X5=50

- 3) List two anabolic steroids. Write their uses and adverse effects
- 4) Enumerate iron preparation and discuss their role in anemia
- 5) List prokinetic agents. Mention their mechanism of action and uses
- 6) A 26 year old male complains of difficulty in breathing at least twice every month during the night time for the past 4 months. He is diagnosed with moderate asthma and is prescribe an inhaler for daily use. What are the likely medications in the inhaler and what is the rationale for the use of these medicines
- 7) List the drugs used in treatment of amoebiasis. What is their mechanism of action and adverse effects
- 8) Write the composition of ORS and describe the purpose of each component for the mechanism of diarrhea
- 9) Write the mechanism of action, uses and adverse effects of ciprofloxacin
- 10) How will you communicate with a 35 year old male with conjunctivitis who has been prescribed ciprofloxacin eye drops
- 11) Describe the pharmacotherapy for drug sensitive pulmonary tuberculosis
- 12) Discuss the mechanism of action of oral contraceptive tablets and list their adverse effects

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M.B.B.S. DEGREE EXAMINATION – JANUARY, 2025

SECOND M.B.B.S. EXAMINATION

PATHOLOGY - PAPER-I

(Theory Questions)

Time : 2 Hour 40 Minutes

Max. Marks: 80

Note: Answer all questions

Draw a neat diagram wherever necessary

SECTION-II (THEORY QUESTIONS - 80 MARKS)

WRITE ESSAY ON THE FOLLOWING:

2X15=30

- 1) A 50-year-old woman had reported having no energy and feeling tired all the time. She complained also of tingling and numbness of extremities since 1 year. On examination she was pale, no hepatosplenomegaly or lymphadenopathy. Peripheral smear showed macro ovalocytes
 - a. What is the probable diagnosis?
 - b. Enumerate pathogenesis of the same
 - c. Enumerate peripheral smear and bone marrow examination findings in this condition
- 2) 30-year male patient being treated for pneumonia developed shortness of breath. On examination systolic BP was 50mm Hg, with cold and clammy extremities.
 - a. What is the most probable diagnosis?
 - b. Enumerate pathogenesis of the same.
 - c. Enumerate the etiology and stages of the same.

WRITE SHORT NOTES ON THE FOLLOWING:

10X5=50

- 3) Necrosis
- 4) Healing by second intention
- 5) FNAC
- 6) Bombay blood group
- 7) Elaborate on microbial carcinogenesis
- 8) Enumerate and describe the cardinal signs and outcomes of acute inflammation
- 9) Enumerate the differences between hyperemia and congestion
- 10) Leukemoid reaction
- 11) Hemophilia
- 12) Morphology and staining property of amyloidosis

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Dr NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA - 8
M.B.B.S. DEGREE EXAMINATION – JANUARY, 2025
SECOND M.B.B.S. EXAMINATION

PATHOLOGY- PAPER-II

(Theory Questions)

Time : 2 Hour 40 Minutes

Max. Marks: 80

Note : Answer all questions

Draw a neat diagram wherever necessary

SECTION-II (THEORY QUESTIONS - 80 MARKS)

WRITE ESSAY ON THE FOLLOWING:

2X15=30

- 1) 30-year male patient C/O anorexia, nausea and vomiting, fatigue, malaise, headache, photophobia, pharyngitis, cough, and coryza & tastelessness since 1 week. History of fever 102°F since 2 days. Dark urine and clay-colored stools since 1 day. Icterus, tender hepatomegaly--- present Serum HBs Ag reactive
 - a. What is the probable clinical diagnosis?
 - b. Describe the main clinicopathologic syndromes associated with this disease
 - c. Describe the defining histologic feature of chronic viral hepatitis
- 2) A 7-year-old boy sustained an open compound fracture of the right tibia and fibula. The fracture is set by external manipulation, and the skin wound is sutured, but nothing more is done. One year later, he continues to have pain in the right leg, and a draining sinus tract has developed in the lateral lower right leg.
 - a. What is the probable clinical diagnosis?
 - b. Describe the morphology of all lesions of such cases

WRITE SHORT ESSAY QUESTIONS:

10X5=50

- 3) Phyllodes tumor
 - 4) Describe the importance of team work in arriving at a diagnosis.
 - 5) Urolithiasis
 - 6) Describe the morphology of gastric lesions associated with *Helicobacter pylori*.
 - 7) Hypertrophic cardiomyopathy
 - 8) Describe the morphology of bronchiectasis
 - 9) Endometrial hyperplasia
 - 10) Enumerate the CSF findings in tuberculous meningitis
 - 11) Enumerate the morphologic features of Seminoma
 - 12) Enumerate the pathogenesis and morphology of Hashimoto's thyroiditis
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M.B.B.S. DEGREE EXAMINATION – JANUARY, 2025

SECOND M.B.B.S. EXAMINATION

MICROBIOLOGY PAPER-I (Theory Questions)

Time: 2 Hour 40 Minutes

Max. Marks: 80

Note: Answer all questions. Draw a neat diagram wherever necessary

SECTION-II (THEORY QUESTIONS - 80 MARKS)

WRITE ESSAY ON THE FOLLOWING:

2X15=30

- 1) A young female from a slum area presents with complaints of febrile episodes. She was pale and on physical examination her spleen was palpable. Her peripheral blood smear examination shows multiple, small ring forms and large, crescent shaped gametocytes in the RBC.
 - a. What is your clinical diagnosis and what is the etiological agent?
 - b. Describe the pathogenesis and clinical manifestations of the disease?
 - c. Write about the laboratory diagnosis?
 - d. Add a note on prevention?
- 2) Define Immune response. Describe in detail about the cell mediated immune response? Add a note on assessment of cell mediated immune response

WRITE SHORT NOTES ON THE FOLLOWING:

10X5=50

- 3) Antimicrobial resistance
- 4) Mechanisms of bacterial pathogenesis
- 5) Laboratory diagnosis of fungal infections
- 6) Viral Gastroenteritis
- 7) Campylobacter infections
- 8) Hepatitis C
- 9) Varicella zoster virus
- 10) Methicillin Resistant Staphylococcus Aureus
- 11) Laboratory diagnosis of leprosy
- 12) A medical intern comes to the infection control division with a history of needle stick injury 1 hour back. The source patient's sample was collected and tested for HIV, Hepatitis B and C infections. The intern is waiting in the reception of the infection control division to know about the test result of source sample. The test results show that source patient is reactive to HIV but negative for hepatitis B and C. How will you assure the intern and what prophylaxis measures you will advise

SECTION-II (THEORY QUESTIONS - 80 MARKS)

WRITE ESSAY ON THE FOLLOWING:

2X15=30

- 1) Classify Cestodes. Describe the life cycle, pathogenesis and the laboratory diagnosis of Echinococcus granulosus
- 2) A 45 years old female has attended the Gynecology o.p. with c/o Mucopurulent vaginal discharge for the past one week. Gram's staining of cervical swab shows kidney shaped Gram negative cocci
 - a) Which organism causes the above symptoms
 - b) List out the other possible organism that cause Sexually Transmitted Infection.
 - c) Explain the pathogenesis and clinical feature of the organism
 - d) What are the diagnostic methods and management

WRITE SHORT NOTES ON THE FOLLOWING:

10X5=50

- 3) Primary amoebic encephalitis
- 4) Lab diagnosis of bacterial meningitis
- 5) Atypical pneumonia
- 6) Paragonimiasis
- 7) A 62 year old debilitated man presented with symptoms of severe upper respiratory tract infection had a history of exposure to a patient having similar condition. Nasopharyngeal swab collected was sent to the reference laboratory for real time PCR, which revealed that causative agent as influenza A/ H1N1.
 - a. Draw a neat diagram of morphology of this virus
 - b. Describe the lab diagnosis of the above mentioned virus
- 8) Difference between oral polio vaccines and inactivated polio vaccines
- 9) Legionnaires disease
- 10) Rapid plasma reagin (RPR) test
- 11) Clinical types of human plague
- 12) Pulmonary anthrax
