

**MBBS PHASE – II
DEGREE EXAMINATION – AUGUST 2023**

Time: 3 Hours

Max. Marks: 100

**PHARMACOLOGY
PAPER – I**

Q.P. Code: 1006

Answers should be specific to the Questions asked.

Draw neat, labeled diagrams wherever necessary.

All questions are compulsory.

Question Number	Marks
1. M.C.Q.	25 X 1 = 25
LONG ESSAY QUESTIONS:	2 X 10 = 20
2. Classify beta blockers. Write the therapeutic uses, adverse effects and contra indications of Propranolol.	
3. Classify Drugs acting on Renin Angiotensin system. Enumerate the uses and adverse effects of ACE inhibitors.	(5+3+2)
SHORT ESSAY QUESTIONS:	8 X 5 = 40
4. Discuss the various types of combined effect of drugs with suitable examples.	
5. Enumerate Atropine substitutes. Discuss their uses with the rationale for the same.	
6. Discuss the mechanism of action and uses of Sodium valproate.	
7. Discuss mechanism of action and uses of Lignocaine.	
8. Discuss the uses and adverse effects of Opioid analgesics.	
9. Write mechanism of action, uses and adverse effects of Glyceryl trinitrate.	
10. Discuss mechanism of action, uses and adverse effects of Oral anticoagulants.	
11. Write mechanism of action and therapeutic uses of Furosemide	
SHORT ANSWER QUESTIONS:	5 X 3 = 15
12. Enumerate three merits and demerits of sublingual route.	
13. Mention the rationale for the use of Adrenaline in Anaphylactic shock.	
14. Mention the rationale for the use of Lignocaine in the treatment of cardiac arrhythmias.	
15. Rationale for use of Ethyl alcohol in Methyl alcohol poisoning.	
16. Enumerate the uses and adverse effects of Spironolactone.	

MULTIPLE CHOICE QUESTIONS

Course: MBBS Phase-II, August 2023	Max. Marks: 25 Marks
Subject : Pharmacology Paper-I, QP Code: 1006	Time: 30 Minutes

Instructions:

- Each question is followed by four options.
- Pick up the single best option and darken the appropriate circle in the OMR Sheet provided.
- Each question carries one mark. No negative marking.

1. `Essential drugs' are:
(A) Life saving drugs
(B) Drugs that meet the priority health care needs of the population
(C) Drugs that must be present in the emergency bag of a doctor
(D) Drugs that are listed in the pharmacopoeia of a country
2. Majority of drugs cross biological membranes primarily by
(A) Passive diffusion
(B) Facilitated diffusion
(C) Active transport
(D) Pinocytosis
3. Bioavailability of drug refers to
(A) Percentage of administered dose that reaches systemic circulation in the unchanged form
(B) Ratio of oral to parenteral dose
(C) Ratio of orally administered drug to that excreted in the faeces
(D) Ratio of drug excreted unchanged in urine to that excreted as metabolites
4. Which of the following is a prodrug
(A) Hydralazine
(B) Clonidine
(C) Captopril
(D) Enalapril
5. The Therapeutic index of a drug is a measure of its
(A) Safety
(B) Potency
(C) Efficacy
(D) Dose variability
6. Pharmacogenetics is a study of
(A) Gene therapy
(B) Recombinant DNA technology
(C) Genetic basis for variability in drug response.
(D) Carcinogenic effect of drug.
7. Cholinomimetic that is used in the treatment of open angle glaucoma is:
(A) Arecoline
(B) Muscarine
(C) Pilocarpine
(D) Bethanechol
8. The Mydriatic anticholinergic is
(A) Clidinium
(B) Tiotropium
(C) Tropicamide
(D) Dicyclomine
9. The primary site of action of Beta 1 receptors is
(A) Adipose tissue
(B) Bronchi and GIT
(C) Heart and JG cells in kidney
(D) Urinary tract
10. The non-selective beta adrenergic blocker having additional sympathomimetic activity is
(A) Propranolol
(B) Pindolol
(C) Labetalol
(D) Sotalol
11. All of the following conditions are contraindications for the use of propranolol **EXCEPT**
(A) Cardiac arrhythmias
(B) Bronchial asthma
(C) Partial and Complete heart block
(D) Peripheral vascular disease

12. The first choice drugs in the treatment of open glaucoma are
 (A) Alpha adrenergic blockers (B) Beta adrenergic blockers
 (C) Miotics (D) Prostaglandin analogues
13. Select the skeletal muscle relaxant that is **commonly** used for endotracheal intubation
 (A) Pipecuronium (B) Dantrolene
 (C) Succinylcholine (D) Vecuronium
14. The following drug is eliminated through Hoffmann's elimination
 (A) Atracurium (B) Mivacurium
 (C) Pancuronium (D) Vecuronium
15. The **most** potent local anaesthetic with the longest duration of action but also **most** toxic is
 (A) Lidocaine (B) Prilocaine
 (C) Dibucaine (D) Bupivacaine
16. The drug of choice for trigeminal neuralgia is
 (A) Phenobarbitone (B) Valproic acid
 (C) Clonazepam (D) Carbamazepine
17. Second gas effect is exerted by the following gas when coadministered with Halothane
 (A) Nitrous oxide (B) Cyclopropane
 (C) Nitrogen (D) Helium
18. Drug of choice for intractable hiccoughs is
 (A) Metoclopramide (B) Chlorpromazine
 (C) Thioridazine (D) Domperidone
19. Following are selective serotonin reuptake inhibitors (SSRIs) **EXCEPT**
 (A) Dapoxetine (B) Sertraline
 (C) Citalopram (D) Mirtazapine
20. Which of the following compounds acts as a benzodiazepine antagonist?
 (A) Flumazenil (B) Naloxone
 (C) Furazolidone (D) Naltrexone
21. Which one of the following is **NOT** an adverse effect of ACE inhibitors?
 (A) Cough (B) Hypokalemia
 (C) Angioneurotic edema (D) Skin rash
22. Nitrates are used for all of the following conditions **EXCEPT**
 (A) Congestive heart failure (B) Cyanide poisoning
 (C) Esophageal spasm (D) Atrial fibrillation
23. Select the diuretic that can cause Gynecomastia, hirsutism and menstrual disturbance as a side effect on long-term use:
 (A) Amiloride (B) Spironolactone
 (C) Metolazone (D) Acetazolamide
24. The following can be used to antagonize the action of heparin in case of overdose
 (A) Heparin sulfate (B) Dextran sulfate
 (C) Protamine sulphate (D) Ancrod
25. Choose the **most** potent and **most** efficacious LDL cholesterol lowering HMG-CoA reductase inhibitor
 (A) Lovastatin (B) Simvastatin
 (C) Pravastatin (D) Atorvastatin

**MBBS PHASE – II
DEGREE EXAMINATION – AUGUST 2023**

Time: 3 Hours

Max. Marks: 100

**PHARMACOLOGY
PAPER – II**

Q.P. Code: 1007

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number	Marks
1. M.C.Q.	25 X 1 = 25
LONG ESSAY QUESTIONS:	2 X 10 = 20
2. Enumerate commonly used systemic and topical glucocorticoids. Write their adverse effects and uses.	
3. Classify drugs used in Bronchial asthma. Explain the MOA, pharmacological actions and therapeutic uses of inhalational steroids in asthma.	(3+3+2+2)
SHORT ESSAY QUESTIONS:	8 X 5 = 40
4. Discuss advantages of Azithromycin over Erythromycin. Write briefly on the therapeutic uses of Azithromycin.	
5. Enumerate Azole antifungal agents and write their uses.	
6. Discuss the drugs used in tape worm infestation.	
7. Write the mechanism of action and uses Bisphosphonate.	
8. Discuss the drug therapy of Migraine.	
9. Discuss the uses and adverse effects of Sulfasalazine.	
10. Discuss the management of peptic ulcer disease.	
11. What is sequential blockade? Give one example of antimicrobial combination acting by this mechanism.	
SHORT ANSWER QUESTIONS:	5 X 3 = 15
12. Rationale for use of combination of Trimethoprim with Sulfamethoxazole.	
13. Enumerate adverse effects of Aminoglycosides.	
14. Enumerate comparative features of Tetracyclines.	
15. Give Pharmacological basis / reasons for the following statement. Propranolol used for migraine prophylaxis.	
16. Contraindications of oral steroids in peptic ulcer.	

MULTIPLE CHOICE QUESTIONS

Course: MBBS Phase-II, August 2023	Max. Marks: 25 Marks
Subject : Pharmacology Paper-II, QP Code: 1007	Time: 30 Minutes

Instructions:

- Each question is followed by four options.
- Pick up the single best option and darken the appropriate circle in the OMR Sheet provided.
- Each question carries one mark. No negative marking.

1. Which of the following is **NOT** caused by Prostaglandins?
(A) Bronchodilation (B) Contraction of uterus
(C) Vasodilation (D) Diuresis
2. Aspirin produces analgesia by
(A) Preventing sensitization of peripheral pain receptors
(B) Affecting gating of pain impulses at spinal level
(C) Raising pain threshold at subcortical level
(D) Both A and C are correct
3. Choose the correct statement about paracetamol
(A) It increases uric acid excretion (B) It is the most common drug implicated in causing analgesic nephropathy
(C) In equianalgesic doses it is safer than aspirin (D) It stimulates cellular metabolism
4. The following is **true** of sulfonamides except
(A) They are more likely to produce crystalluria in alkaline urine in which they are less soluble
(B) They are primarily metabolized by acetylation
(C) They may exert bactericidal action in the urinary tract
(D) Used alone, they have become therapeutically unreliable for serious infections
5. Which antimicrobial should be avoided in patients of liver disease
(A) Tetracycline (B) Cotrimoxazole
(C) Cephalexin (D) Ethambutol
6. Nalidixic acid is primarily active against
(A) Cocci (B) Bacilli
(C) Gram positive bacteria (D) Gram negative bacteria
7. Currently the drug of choice for empiric treatment of typhoid fever is
(A) Chloramphenicol (B) Cotrimoxazole
(C) Ciprofloxacin (D) Ampicillin
8. Neutropenia is associated with the following drug
(A) Nafcillin (B) Methicillin
(C) Carbencillin (D) Ampicillin
9. Tetracyclines inhibit protein synthesis by
(A) Inhibition of initiation and misreading of mRNA (B) Binding to 30 S subunit and inhibiting the binding of aminoacyl-tRNA to A site
(C) Inhibiting peptidyl transferase activity (D) Inhibiting translocation
10. Which of the following antimicrobials has antipseudomonal action?
(A) Cefpodoxime proxetil (B) Cephadrine
(C) Cefotetan (D) Cefoperazone

11. Drug used in the treatment of Influenza virus infection is
 (A) Acyclovir (B) Amantadine
 (C) Zidovudine (D) Ritonavir
12. The following antineoplastic drug is a mitotic inhibitor and causes metaphase arrest
 (A) Busulfan (B) Vincristine
 (C) Cytarabine (D) Procarbazine
13. Following drugs are used in the treatment of osteoporosis **EXCEPT**
 (A) Calcitriol (B) Androgen
 (C) Estrogen (D) Vitamin D
14. Hormone replacement therapy is helpful in all of the following conditions **EXCEPT**
 (A) Vaginal atrophy (B) Flushing
 (C) Coronary heart disease (D) Osteoporosis
15. Prolonged testosterone treatment to a man results in
 (A) Increased spermatogenesis (B) Increased sperm motility
 (C) Azoospermia (D) Increased gonadotropins
16. Bone resorption is accelerated by
 (A) Estrogens (B) Parathormone
 (C) Bisphosphonates (D) Calcitonin
17. Ergometrine stops postpartum hemorrhage by
 (A) Causing vasoconstriction of uterine arteries (B) Increasing tone of uterine muscle
 (C) Promoting coagulation (D) Inducing platelet aggregation
18. Bromocriptine is useful in all **EXCEPT**
 (A) Parkinsonism (B) Prolactinoma
 (C) Endogenous depression (D) Infertility
19. One of the following statements about Iodine is **false**
 (A) Contraindicated in hyperthyroidism (B) Causes iodism
 (C) Inhibits the release of thyroxine (D) Inhibits the synthesis of iodo thyroxine and iodo thyronine
20. The physical half-life of radioactive I 131 is
 (A) 8 hrs (B) 8 days
 (C) 16 days (D) 60 days
21. Of the following drug **NOT** used in the management of thyroid storm is
 (A) Potassium iodide (B) Reserpine
 (C) Propanolol (D) Calcium channel blockers
22. Insulin acts by stimulation of
 (A) Ionotropic receptor (B) Enzymatic receptor
 (C) Metabotropic receptor (D) Nuclear receptor
23. The **most** potent topical corticosteroid is
 (A) Hydrocortisone butyrate cream 0.1% (B) Betamethasone valerate cream 0.5%
 (C) Clobetasol propionate cream 0.5% (D) Clobetasone butyrate cream 0.5%
24. Which of the following glucocorticoid preparation is used intra-articularly?
 (A) Hydrocortisone succinate (B) Prednisolone
 (C) Betamethasone (D) Hydrocortisone acetate
25. Leukotriene receptor antagonist used for bronchial asthma is
 (A) Zafirlukast (B) Zileuton
 (C) Cromolyn sodium (D) Aminophylline

MBBS PHASE – II
DEGREE EXAMINATION – AUGUST 2023

Time: 3 Hours

Max. Marks: 100

FORENSIC MEDICINE

Q.P. Code: 1012

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number

Marks

1. M.C.Q.

25 X 1 = 25

LONG ESSAY QUESTIONS:

2 X 10 = 20

2. Define Drowning. Describe the post mortem findings in a case of death due to drowning. (3+7)

3. Describe the signs, symptoms, treatment of Methyl alcohol poisoning. (4+6)

SHORT ESSAY QUESTIONS:

8 X 5 = 40

4. Who is a witness? What are their types? What type of witness is registered medical practitioner? What are his privileges?

5. Discuss Vicarious liability.

6. Describe preservation techniques of viscera in a case of poisoning.

7. What is Crush syndrome?

8. What are Abortifacient drugs?

9. List the Civil Responsibilities of an insane.

10. Mention three Physiological antidotes.

11. Enumerate the steps of management of Cyanide poisoning.

SHORT ANSWER QUESTIONS:

5 X 3 = 15

12. Enumerate the differences between succession teeth and superadded teeth.

13. What are artificial bruises?

14. Mention Lucid interval in head injuries.

15. Define Hallucination. Mention 3 examples.

16. What is Run Amok?

MULTIPLE CHOICE QUESTIONS

Course: MBBS Phase-II, August 2023	Max. Marks: 25 Marks
Subject : Forensic Medicine, QP Code: 1012	Time: 30 Minutes

Instructions:

- Each question is followed by four options.
- Pick up the single best option and darken the appropriate circle in the OMR Sheet provided.
- Each question carries one mark. No negative marking.

1. Taking oath is exempted in
(A) Dying declaration
(B) Expert witness
(C) Witness in lower courts
(D) Witness by investigating officer
2. Criminal negligence is punishable under
(A) 306IPC
(B) 307IPC
(C) 304-A IPC
(D) 304-B IPC
3. In case of death in lock up, the inquest is held by
(A) Police officer
(B) Magistrate
(C) Panchayat officer
(D) District Attorney
4. Telefona is
(A) Pulling of hair
(B) Beating on soles
(C) Beating on both ears
(D) Beating on head
5. Declaration of Geneva is related with
(A) Medical etiquette
(B) Disciplinary control
(C) Hippocratic oath
(D) Profession misconduct
6. Study of finger printing is
(A) DNA finger printing
(B) Dactylography
(C) Gene analysis
(D) Poroscopy
7. Rigor Mortis is caused by
(A) Low concentration of ATP
(B) Increased accumulation of Lactates
(C) Precipitation of protein
(D) Voluntary contraction of muscle
8. Intra ocular tension becomes nil
(A) Soon after death
(B) Within half an hour
(C) At the end of 2 hours
(D) After cooling of the body
9. Full dispersion is seen in
(A) Full choked
(B) Half choked
(C) Unchoked
(D) All of the above
10. In firearm injury entry wound blackening is due to
(A) Flame
(B) Hot gases
(C) Smoke
(D) Unburnt powder
11. Commonest organ to be injured in primary blast injuries is
(A) Lung
(B) Liver
(C) Spleen
(D) Skin
12. In a lacerated wound the hair bulb is
(A) Cut
(B) Crushed
(C) Both of the above
(D) Lacerated

13. Privation of any member of joint is which injury
 (A) Simple (B) Grievous
 (C) Serious (D) Dangerous
14. Suspended animation may be seen with
 (A) Electrocution (B) Strangulation
 (C) Drowning (D) Burn
15. White lathery froth is seen in death due to
 (A) Drowning (B) Hanging
 (C) Organophosphours poisoning (D) Mineral acid poisoning
16. A child presented by a woman to have been delivered by her, though she has not delivered that child is called as
 (A) Posthumous child (B) Supposititious child
 (C) Atavism (D) Battered baby
17. MTP Act was introduced in
 (A) 1961 (B) 1971
 (C) 1974 (D) 1975
18. In rupture of hymen of virgin, tear is in
 (A) Posterolateral (B) Anterior
 (C) Anterolateral (D) Posterior
19. Legal age by which foetus is capable of independent existence is
 (A) 240 days (B) 230 days
 (C) 220 days (D) 210 days
20. Aseptic autolysis is found in
 (A) Adipocere (B) Putrefaction
 (C) Mummification (D) Maceration
21. Benzedine test detects
 (A) Haemoglobin (B) Myoglobin
 (C) Bilirubin (D) Porphobilinogen
22. An irresistible desire to steal an article of little value is
 (A) Pyromania (B) Nymphomania
 (C) Kleptomania (D) Dipsomania
23. Metal fume fever is common in chronic poisoning with
 (A) Mercury (B) Lead
 (C) Zinc (D) Thallium
24. Carbolic acid poisoning, post mortem findings are
 (A) Greenish stomach (B) Yellow charred stomach
 (C) Lathery stomach (D) Black charred stomach
25. Dry wine is
 (A) Methylated spirit (B) Methyl alcohol
 (C) Opium (D) Chloral hydrate

**MBBS PHASE – II
DEGREE EXAMINATION – AUGUST 2023**

Time: 3 Hours

Max. Marks: 100

**PATHOLOGY
PAPER – I**

Q.P. Code: 1008

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All questions are compulsory.

Question Number	Marks
1. M.C.Q.	25 X 1 = 25
LONG ESSAY QUESTIONS:	2 X 10 = 20
2. A 2 years child with breathlessness, fatigue, haemoglobin of 6.8mg/dl requiring regular blood transfusion, What is the diagnosis? What are the clinical features and write laboratory findings to confirm the same.	(2+2+6)
3. Discuss the healing of fractured bone and its complications.	(7+3=10)
SHORT ESSAY QUESTIONS:	8 X 5 = 40
4. Describe the physical and chemical nature of Amyloid. Name the special stains for Amyloid.	
5. Describe the clinical features and chromosomal abnormalities of Turner's syndrome.	
6. Describe the role of cytochemistry in diagnosis of Acute Leukemias.	
7. Discuss the pathogenesis of Disseminated Intravascular Coagulation.	
8. Discuss the tests for detection and causes of Proteinuria.	
9. Describe the pathological findings in Scurvy.	
10. Discuss the various steps involved in phagocytosis.	
11. Describe the role of hormones in cancer production with examples.	
SHORT ANSWER QUESTIONS:	5 X 3 = 15
12. Enumerate three neoplastic lesions in AIDS.	
13. What is L.E cell? Draw a neat diagram.	
14. Name six common haemoparasites.	
15. Describe the morphology of Gaucher cell with diagram.	
16. Describe morphology of megaloblast with the diagram.	

MULTIPLE CHOICE QUESTIONS

Course: MBBS Phase-II, August 2023	Max. Marks: 25 Marks
Subject : Pathology Paper-I, QP Code: 1008	Time: 30 Minutes

Instructions:

- Each question is followed by four options.
- Pick up the single best option and darken the appropriate circle in the OMR Sheet provided.
- Each question carries one mark. No negative marking.

1. Increase in number of cells leading to increase in size of organ is known as
(A) Hyperplasia (B) Hypoplasia
(C) Hypertrophy (D) Anaplasia
2. Increased eosinophilia of necrotic cell is due to
(A) Protein denaturation (B) Karyorrhexis
(C) Cellular swelling (D) Ribosomal detachment
3. Brown induration is characteristic of
(A) C.V.C. Lung (B) Infarct Lung
(C) Pulmonary embolism (D) Pulmonary Hemorrhage
4. Heart failure cells are seen in
(A) Myocardial infarction (B) Chronic passive congestion of lungs
(C) Pulmonary edema (D) Chronic passive congestion of liver
5. Laminations seen in arterial thrombus are called as
(A) Lines of Zahn (B) Lines of Virchow
(C) Lines of Laconic (D) Lines of Langerhans
6. Class I Histocompatibility antigens of HLA are located on
(A) Monocytes (B) All nucleated cells
(C) T-Lymphocytes (D) NK Cells
7. Loss of fat, muscle wasting, atrophy of most organs seen in
(A) Marasmus (B) Kwashiorkor
(C) Scurvy (D) Beri-Beri
8. Pernicious anemia is
(A) Genetic disorder (B) Hypersensitivity reaction
(C) Neoplastic disorder (D) Autoimmune disorder
9. Specific gravity of urine can be measured by
(A) Refractometer (B) Reagent strips
(C) Urinometer (D) All of the above
10. In Bernard Soulier syndrome, there is defect of platelet
(A) Adhesion (B) Aggregation
(C) Secretion (D) All of the above
11. Nearly 30000 autopsies were performed by
(A) Bright (B) Addison
(C) Hodgkin (D) Von Rokitsky
12. Histamine is stored in the granules of all the cells **EXCEPT**
(A) Mast cells (B) Basophils
(C) Platelets (D) Neutrophils

13. Amyloid can be present in stroma of which type of thyroid tumor
 (A) Papillary carcinoma (B) Medullary carcinoma
 (C) Follicular carcinoma (D) Anaplastic carcinoma
14. A clean incised wound heals by
 (A) Primary intention (B) Secondary intention
 (C) Excessive scarring (D) Excessive contraction
15. Fibrinoid necrosis is a hallmark of
 (A) Tuberculosis (B) Sarcoidosis
 (C) Malignant hypertension (D) Endarteritis obliterans
16. Heavy proteinuria is characterized by loss of protein
 (A) > 3 to 4 G / day (B) > 2 to 3 G / day
 (C) 1 to 2 G / day (D) 0.5 to 1 G / day
17. Following person first ever identified occupational cancer in Chimney sweepers is
 (A) Bir. Percival Pott (B) Carl Rokitruiky
 (C) Richard Bright (D) Thomas Hodgkins
18. For chromosomal study, the cells are arrested in
 (A) Prophase (B) Metaphase
 (C) Anaphase (D) Telophase
19. The earliest change seen in the bronchial epithelium of a chronic smoker will be
 (A) Atrophy (B) Hypertrophy
 (C) Metaplasia (D) Dysplasia
20. Features of anaplasia are all **EXCEPT**
 (A) Bizarre atypical mitosis (B) Marked cellular pleomorphism
 (C) Loss of polarity (D) Well differentiated tumour
21. After prolonged labour, a 25 year old woman developed bleeding from multiple sites. She is probably suffering from
 (A) Thromboembolism (B) Disseminated intravascular coagulation
 (C) Idiopathic thrombocytopenic purpura (D) Haemophilia
22. Venous emboli are most often lodged in
 (A) Heart (B) Intestines
 (C) Kidney (D) Lungs
23. Gas Gangrene is caused by
 (A) Botulinum (B) Clostridium difficile
 (C) Clostridium perfringens (D) Clostridium tetany
24. Myofibroblasts are seen in
 (A) Muscle septae (B) Wound margin
 (C) Normal Connective tissue (D) Wall of blood vessels
25. Lepra cells are
 (A) Neutrophils (B) Plasma cells
 (C) Histiocytes (D) Lymphocytes

**MBBS PHASE – II
DEGREE EXAMINATION – AUGUST 2023**

Time: 3 Hours

Max. Marks: 100

**PATHOLOGY
PAPER – II**

Q.P. Code: 1009

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All the questions are compulsory.

Question Number	Marks
1. M.C.Q.	25 X 1 = 25
LONG ESSAY QUESTIONS:	2 X 10 = 20
2. A 50 year old man is admitted with sudden onset of central chest pain of 6 hours duration, profuse sweating and breathlessness. What is your probable diagnosis? Mention appropriate investigations. What morphological changes in the target organs are expected?	[1+4+5]
3. Classify bone tumours and write the morphology of osteosarcoma.	(4+6)
SHORT ESSAY QUESTIONS:	8 X 5 = 40
4. Describe the etiopathogenesis and microscopic changes of Barrett's esophagus.	(2+3)
5. Explain the etiopathogenesis and pathology of Bronchial asthma.	(2+3)
6. Classify ovarian tumours.	
7. Describe gross and microscopy of Benign Prostatic hyperplasia.	
8. Describe gross and microscopy of Seminoma of testis.	
9. Describe gross and microscopy of Fibroadenoma of breast.	
10. Describe gross and microscopy of Tuberculous osteomyelitis.	
11. Describe pathogenesis of Rheumatoid arthritis.	
SHORT ANSWER QUESTIONS:	5 X 3 = 15
12. Draw and describe the microscopic features of papillary carcinoma of Thyroid.	(2+1)
13. Enumerate the types of endometrial hyperplasia with clinical importance.	
14. Describe the gross and microscopic features of Retinoblastoma.	(1+2)
15. Name six renal function tests.	
16. List three Pre-malignant lesions of skin.	

MULTIPLE CHOICE QUESTIONS

Course: MBBS Phase-II, August 2023	Max. Marks: 25 Marks
Subject : Pathology Paper-II, QP Code: 1009	Time: 30 Minutes

Instructions:

- Each question is followed by four options.
- Pick up the single best option and darken the appropriate circle in the OMR Sheet provided.
- Each question carries one mark. No negative marking.

1. Most common cause of right ventricular failure is
(A) Aortic stenosis (B) Pulmonary stenosis
(C) Tricuspid stenosis (D) Mitral stenosis
2. In Lobar pneumonia, acute inflammation is of following type
(A) Catarrhal (B) Fibrinous
(C) Suppurative (D) Fibrino suppurative
3. Horner's syndrome may be manifestation of
(A) Seminoma testis (B) Carcinoma bronchus
(C) Carcinoma prostate (D) Lymphomas
4. Carrier state is seen in following types of Hepatitis **EXCEPT**
(A) Hepatitis A (B) Hepatitis B
(C) Hepatitis C (D) Hepatitis D
5. In most cases of Non obstructive chronic pyelonephritis, the bacteria reach the kidney via
(A) Blood Stream (B) Lymphatics
(C) Aberrant arteriovenous shunts (D) Vesicoureteral reflux
6. Condyloma accuminatum is caused by
(A) HSV I (B) HSV II
(C) HPV 6 and 11 (D) HIV I and II
7. Thymoma is **NOT** associated with
(A) Pure red cell aphasia (B) Hypogamma globulinemia
(C) Myasthenia gravis (D) Defects of humoral immunity
8. Malignant melanoma arises from
(A) Intradermal nevus (B) Junctional nevus
(C) Epidermal nevus (D) Hairy mole nevus
9. Giant cell lesions of the bone include all **EXCEPT**
(A) Osteoclastoma (B) Simple bone cyst
(C) Epulis (D) Fibrous dysplasia
10. Following are the examples of malignant connective tissue tumours **EXCEPT**
(A) Chondrosarcoma (B) Liposarcoma
(C) Rhabdomyosarcoma (D) Teratoma
11. Most **common** site for pancreatic carcinoma is
(A) Head of the pancreas (B) Body of the Pancreas
(C) Tail of the pancreas (D) Periapillary region
12. Chagas disease is characterized by
(A) Achalasia (B) Mega-ureter
(C) Mega colon (D) All of the above

13. In tubulovillous adenoma the malignant risk correlates best with
 (A) Proportion of lesion that is villus (B) Proportion of lesion that is tubular
 (C) Sessile or pedunculated (D) Size of the polyp
14. Foul smelling sputum is seen in
 (A) Emphysema (B) Chronic bronchitis
 (C) Bronchiectasis of lung (D) Bronchial asthma
15. Chorionic villi are seen in all the following conditions **EXCEPT**
 (A) Complete mole (B) Partial mole
 (C) Choriocarcinoma (D) Invasive mole
16. The **most** accepted theory of atherosclerosis is
 (A) Reaction to injury (B) Lipid infiltration into intima
 (C) Hyperlipidemia (D) Hypercoagulability
17. The most **common** site of pancreatic cancer is
 (A) Head (B) Body
 (C) Tail (D) Uncinate process
18. Glomerular crescents are composed of
 (A) Epithelial cells & macrophages (B) Mesangial cells & macrophages
 (C) Epithelial cells & mesangial cells (D) Endothelial cells & macrophages
19. Osteomalacia is
 (A) Normal osteoid, defective mineralization (B) Abnormal osteoid, normal mineralization
 (C) Abnormal osteoid, abnormal mineralization (D) Abnormal osteoid, normal remodeling
20. Pleomorphic (Anaplastic) type RS cells are seen in
 (A) Nodular sclerosis (B) Mixed cellularity
 (C) Lymphocyte predominant (D) Lymphocyte depleted
21. Hyperparathyroidism is associated with
 (A) Dystrophic calcification (B) Calcium deficiency
 (C) No calcification (D) Metastatic calcification
22. Sheehan syndrome is
 (A) Radiation damage to pituitary (B) Scarred pituitary adenoma
 (C) Surgical ablation of pituitary (D) Post partum pituitary necrosis
23. The tumour which has **most** extensive endocrine paraneoplastic effects
 (A) Squamous cell carcinoma (B) Small cell carcinoma
 (C) Large cell carcinoma (D) Adenocarcinoma
24. Most **common** type of salivary gland neoplasm is
 (A) Mixed cell parotid Tumor (B) Adeno carcinoma
 (C) Adenoid cystic carcinoma (D) Warthin's tumour
25. All are causes of Budd-Chiari syndrome **EXCEPT**
 (A) Paroxysmal nocturnal hemoglobinuria (B) Use of oral contraceptives
 (C) Hypercoagulable state (D) Patient on warfarin therapy

**MBBS PHASE – II
DEGREE EXAMINATION – AUGUST 2023**

Time: 3 Hours

Max. Marks: 100

**MICROBIOLOGY
PAPER – I**

Q.P. Code: 1010

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All the questions are compulsory.

Question Number	Marks
1. M.C.Q.	25 X 1 = 25
LONG ESSAY QUESTIONS:	2 X 10 = 20
2. Enumerate Antigen Antibody reactions. Describe the principle, types and applications of precipitation reactions.	(2+ 2+2+ 4=10)
3. Enlist organisms producing upper respiratory tract infections. Describe the clinical manifestations and laboratory diagnosis of diphtheria.	(2+2+6)
SHORT ESSAY QUESTIONS:	8 X 5 = 40
4. Compare Gram Positive and Gram Negative cell walls.	
5. Compare the structure and functions of T cell & B cell.	
6. Describe Type IV Hypersensitivity with suitable examples.	
7. Explain the morphology and pathogenesis of Gonococcus.	
8. Enumerate bacteria causing Dysentery. Summarize the microscopic findings of stool sample in Bacillary dysentery.	
9. Describe method of collection and transport of Urine sample for diagnosis of UTI.	
10. Discuss the specific (Treponemal) tests for the diagnosis of Syphilis.	
11. Discuss the pathogenesis and laboratory diagnosis of H. pylori infections.	
SHORT ANSWER QUESTIONS:	5 X 3 = 15
12. List three uses of ELISA.	
13. Define Antisepsis. List four antiseptics.	
14. List the different types of macrophages.	
15. Enlist three biochemical tests performed to diagnose Staphylococcus.	
16. Enumerate three rapid tests for the diagnosis of UTI.	

MULTIPLE CHOICE QUESTIONS

Course: MBBS Phase-II, August 2023	Max. Marks: 25 Marks
Subject : Microbiology Paper-I, QP Code: 1010	Time: 30 Minutes

Instructions:

- Each question is followed by four options.
- Pick up the single best option and darken the appropriate circle in the OMR Sheet provided.
- Each question carries one mark. No negative marking.

1. The optical resolution of light microscopy is
(A) 200 nm (B) 20 nm
(C) 0.2 nm (D) 300 nm
2. Ideal method of disinfection of bronchoscope in the OPD is
(A) 70% alcohol for 5 min (B) 2% Gluteraldehyde for 30 min
(C) 2% Formaldehyde for 10 min (D) 1% sodium hypochlorite for 15 min
3. An example for transport medium is
(A) Peptone water (B) Chocolate agar
(C) Nutrient agar (D) Amie's medium
4. Polymerase chain reaction was discovered by
(A) Robbin Warren (B) Salk
(C) Watson and Crick (D) Kary Mullis
5. A segment of DNA carrying codons specifying for a particular polypeptide is a/an
(A) Gene (B) Episome
(C) Nucleotide (D) Plasmid
6. Father of Chemotherapy is
(A) Paul Ehrlich (B) Gerhardt Domagk
(C) Alexander Fleming (D) Howard Florey
7. The design and use of the compound microscope is attributed to
(A) Antony Van Leeuwenhoek (B) Louis Pasteur
(C) Robert Koch (D) Ferdinand Cohn
8. Cell wall deficient bacterium is
(A) Mycoplasma (B) Treponema
(C) Staphylococcus (D) Klebsiella
9. Exponential phase of bacterial growth curve is ideal for
(A) Screening antibiotic sensitivity (B) Toxoid synthesis
(C) Spore detection (D) Identifying involuntary forms
10. Medium prepared by adding a substance to a solid medium that inhibits the growth of unwanted bacteria but permits the growth of wanted bacteria is known as
(A) Selective (B) Enrichment
(C) Enriched (D) Differential
11. Mycolic acid in Acid Fast Bacilli
(A) Is a candidate for vaccine preparation (B) Inhibits intracellular phygolysis
(C) Is present in cytoplasm (D) Confers antigenicity
12. Oxidase positive bacteria is/are
(A) Neisseria (B) Pseudomonas
(C) Vibrio (D) All of the above

13. Autoclave is used to sterilise
 (A) Pharmaceutical powders (B) Disposable syringe
 (C) Endoscopes (D) Gowns
14. Infection that spreads by the respiratory route are all **EXCEPT**
 (A) Common cold (B) Measles
 (C) Mumps (D) Hepatitis B
15. The carrier who harbours the pathogen but has never suffered from the disease is known as
 (A) Healthy (B) Convalescent
 (C) Paradoxical (D) Contact
16. Type of immunity induced by vaccines is
 (A) Active natural (B) Active artificial
 (C) Passive natural (D) Passive artificial
17. All of the following are characteristics of IgE, **EXCEPT**
 (A) Mediate allergic reaction (B) Involved in anti-parasitic action
 (C) Crosses placenta (D) Least abundant in plasma
18. ELISA is used for the detection of
 (A) Antigen (B) Antibody
 (C) Complement (D) All of the above
19. Transport media used for culture of throat swab from patients suffering from Streptococcal pharyngitis outbreak is
 (A) Alkaline peptone water (B) Pikes media
 (C) Carry Blair media (D) Stuart media
20. Shape of Gonococcus is described as
 (A) Lanceolate (B) Spherical
 (C) Kidney shaped (D) Safety pin
21. Gall bladder acts as a reservoir for
 (A) Yersinia (B) Shigella
 (C) Salmonella (D) Pasteurella
22. **Most** appropriate test for the diagnosis of Enteric fever in 1st week of illness is by
 (A) Urine examination (B) Throat culture
 (C) Stool examination (D) Blood culture
23. In quantitative urine cultures, what should be the number of bacteria per ml to represent significant bacteriuria?
 (A) 10, 000 (B) 100,000
 (C) 1,00, 00,000 (D) 1,000,000
24. Purulent sputum from a man on ventilator grew colonies producing blue green diffusible pigment. The organism causing infection is
 (A) Staphylococcus aureus (B) Burkholderia cepacia
 (C) Klebsiella pneumoniae (D) Pseudomonas aeruginosa
25. The bacterium causing nosocomial infection in burn wounds is
 (A) Escherichia coli (B) Klebsiella pneumoniae
 (C) Pseudomonas aeruginosa (D) Salmonella typhi

**MBBS PHASE – II
DEGREE EXAMINATION – AUGUST 2023**

Time: 3 Hours

Max. Marks: 100

**MICROBIOLOGY
PAPER – II**

Q.P. Code: 1011

Answers should be specific to the Questions asked.
Draw neat, labeled diagrams wherever necessary.
All the questions are compulsory.

Question Number	Marks
1. M.C.Q.	25 X 1 = 25
LONG ESSAY QUESTIONS:	2 X 10 = 20
2. Classify Herpes Viruses. Describe the clinical features and laboratory diagnosis of Epstein Barr virus infections.	[4+3+3]
3. Describe the pathogenesis, clinical features and laboratory diagnosis of Malaria.	(3+3+4=10)
SHORT ESSAY QUESTIONS:	8 X 5 = 40
4. List the Dimorphic fungi and discuss laboratory diagnosis of Histoplasmosis.	
5. Describe viral inclusion bodies.	
6. Describe Prion diseases.	
7. Discuss the laboratory diagnosis of Kala azar.	
8. Describe the life cycle of Toxoplasma gondii.	
9. Describe the pathogenesis of Amoebic dysentery.	
10. Describe primary Amoebic Meningoencephalitis.	
11. Describe the clinical features of and laboratory diagnosis of hook worm infection.	
SHORT ANSWER QUESTIONS:	5 X 3 = 15
12. Name three infections caused by Candida ssp.	
13. Describe the pathogenesis of Eumycotic mycetoma.	
14. Name three causative agents of Zygomycosis.	
15. Draw a neat labeled diagram of HIV virus.	
16. Explain Oral Polio vaccine.	

MULTIPLE CHOICE QUESTIONS

Course: MBBS Phase-II, August 2023	Max. Marks: 25 Marks
Subject : Microbiology Paper-II, QP Code: 1011	Time: 30 Minutes

Instructions:

- Each question is followed by four options.
- Pick up the single best option and darken the appropriate circle in the OMR Sheet provided.
- Each question carries one mark. No negative marking.

1. Which of the following fungus is non-cultivable?
(A) Rhinosporidium (B) Histoplasma
(C) Sporothrix (D) Penicillium
2. Example of superficial fungal infection is
(A) Sporotrichosis (B) Dermatophytosis
(C) Actinomycosis (D) Chromomycosis
3. Reynold's Braude phenomenon refers to the formation of
(A) Chlamydospores (B) Germ tubes
(C) Rhizoids (D) Chain of conidia
4. Zygomycosis is caused by
(A) Aspergillus (B) Histoplasma
(C) Rhizopus (D) Candida
5. Presence of nasal polyp is a feature of
(A) Rhinosporidiosis (B) Chromoblastomycosis
(C) Sporotichosis (D) Eumycetoma
6. Number of sporocysts present in mature oocysts of *Isospora belli* are
(A) Two (B) Four
(C) Six (D) Eight
7. Multiple ring forms in RBC are seen in one of the following Plasmodial infection
(A) Falciparum (B) Vivax
(C) Ovale (D) Malariae
8. Modified Ziehl-Neelsen staining is used for demonstration of oocysts of
(A) *Isospora belli* (B) *Cyclospora cayetanensis*
(C) *Cryptosporidium parvum* (D) All of the above
9. Pseudopodia is the mode of locomotion in
(A) *Giardia lamblia* (B) *Toxoplasma gondii*
(C) *Entamoeba histolytica* (D) *Trichomonas vaginalis*
10. Flat leaf-like helminths belong to
(A) Trematodes (B) Cestodes
(C) Nematodes (D) None of the above
11. Vit B₁₂ deficiency is caused by
(A) *Ascaris lumbricoides* (B) *Taenia solium*
(C) *Diphyllobothrium latum* (D) *Trichuris trichiura*
12. Hook worm infestation leads to deficiency of
(A) Vitamin B₁₂ (B) Folic acid
(C) Iron (D) Vitamin A

13. *Ascaris lumbricoides* is commonly known as

(A) Hook worm	(B) Round worm
(C) Whip worm	(D) Pin worm
14. Rectal prolapse is seen in infestation with

(A) <i>Enterobius vermicularis</i>	(B) <i>Trichuris trichiura</i>
(C) <i>Ascaris lumbricoides</i>	(D) <i>Strongyloides stercoralis</i>
15. Autoinfection occurs in

(A) Round worm	(B) Pin worm
(C) Hook worm	(D) Whip worm
16. Paul Bunnell test is used for the diagnosis of

(A) Chicken pox	(B) Herpes genitalis
(C) Cytomegalic inclusion disease	(D) Infectious mononucleosis
17. Which of the following viruses are isolated in Suckling mice?

(A) Pox	(B) Herpes
(C) Hepatitis	(D) Coxsackie
18. Inclusion body produced by *Molluscum contagiosum* is called as

(A) Negri body	(B) Cowdry type A
(C) Cowdry type B	(D) Handerson Peterson body
19. Which of the following cell line is **NOT** a continuous cell line?

(A) HeLa	(B) B. HEp-2
(C) Vero	(D) Monkey kidney
20. Virion is defined as

(A) Extra cellular infectious virus particle	(B) Smallest virus
(C) Smallest partical similar to virus	(D) None of the above
21. Koplik's spots on the buccal mucosa is a characteristic feature of

(A) Mumps	(B) Measles
(C) Chicken pox	(D) German measles
22. Mosquito transmitting Chickungunya is

(A) Anopheles	(B) Aedes
(C) Culex	(D) All of the above
23. Which of the following Hepatitis virus is DNA virus?

(A) Hepatitis A	(B) Hepatitis B
(C) Hepatitis C	(D) Hepatitis E
24. HIV testing strategy used in HIV surveillance is

(A) Strategy I	(B) Strategy II A
(C) Strategy IIB	(D) Strategy III
25. Acute haemorrhagic conjunctivitis is caused by which Enterovirus?

(A) Serotype 68	(B) Serotype 69
(C) Serotype 70	(D) Serotype 71
