KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH, BELAGAVI.
[Declared as Deemed-to-be University u/s 3 of the UGC Act, 1956]
Accredited A$^+$ Grade by NAAC (3rd Cycle) **Placed in 'A' Category by MHRD (GoI)**

MBBS PHASE – II
(CBME)
DEGREE EXAMINATION – MARCH 2023

Time: 3 Hours **Max. Marks: 100**

PHARMACOLOGY
PAPER – I

Q.P. Code: A007

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. **20 X 1 = 20**

LONG ESSAY QUESTIONS: **2 X 10 = 20**

2. A 50-year-old lady complains of feelings of sadness, hopelessness and worthlessness. On examination all systems are normal and routine investigations do not reveal any abnormality. She is diagnosed to be having unipolar depression. (2+4+4)
   a) Mention the various classes of drugs effective in the above condition with relevant examples in each class
   b) Write the differences between selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs)
   c) Mention the uses and adverse effects of SSRIs

3. A 70 year old male smoker, known case of hypertension, diabetes gets admitted in emergency. The patient developed symptoms such as crushing pain in chest, profuse sweating while he was climbing upstairs. He was given "drug A" sublingually and the symptoms were relieved within 5 minutes. (1+4+3+2)
   a) Identify drug A.
   b) Discuss the mechanism of action, uses and adverse effects of drug A.

SHORT ESSAY QUESTIONS: **9 X 5 = 45**

4. Discuss the merits and demerits of oral route of drug administration with examples.
5. Discuss the salient features of pharmacovigilance programme in India.
6. Explain the mechanism of action of atropine as a Mydriatics with help of a neat diagram. Mention its uses as Mydriatics.
7. Discuss the uses and adverse effects of adrenergic blockers.
8. Mention differences between peripherally and centrally acting skeletal muscle relaxants. Mention uses of centrally acting skeletal muscle relaxants.
9. Discuss the uses and adverse effects of benzodiazepines.
10. Describe the treatment of Acute Myocardial Infarction.
11. Classify Hypolipidaemic agents. Write mechanism of action and uses of Statins.
12. Discuss the mechanism of action, uses and adverse effects of Spironolactone.

SHORT ANSWER QUESTIONS: **5 X 3 = 15**

13. Enumerate the drugs, merits and demerits of transdermal route of drug administration.
14. Mention the rationale for the use of Ipratropium Bromide in bronchial asthma.
15. Explain the rationale for use of morphine in acute left ventricular failure with pulmonary edema.
16. Name **three** Parenteral Iron preparations and write their three indications.
17. Name **three** osmotic diuretics. Write three uses of this class of drugs.

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MULTIPLE CHOICE QUESTIONS

Course:	**MBBS Phase-II, (CBME) March 2023**	**Max. Marks:**	**20 Marks**
Subject :	**Pharmacology Paper-I, QP Code: A007**	**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. Transdermal drug delivery systems offer the following advantages **EXCEPT**
   (A) Produce high peak plasma concentration of the drug
   (B) Uniform plasma concentration of the drug
   (C) Less interindividual variations in the achieved plasma drug concentration
   (D) Avoid hepatic first-pass metabolism of the drug

2. Majority of drugs cross biological membranes primarily by
   (A) Passive diffusion (B) Facilitated diffusion
   (C) Active transport (D) Pinocytosis

3. Microsomal enzyme induction can be a cause of
   (A) Tolerance (B) Physical dependence
   (C) Psychological dependence (D) Idiosyncrasy

4. The following is a competitive type of enzyme inhibitor
   (A) Acetazolamide (B) Disulfiram
   (C) Physostigmine (D) Theophylline

5. A drug R producing no response by itself causes the log dose-response curve of another drug S to shift to the right in a parallel manner without decreasing the maximal: response, drug R is a
   (A) Partial agonist (B) Inverse agonist
   (C) Competitive antagonist (D) Noncompetitive antagonist

6. Fixed dose combination formulations are not necessarily appropriate for
   (A) Drugs administered in standard doses (B) Drugs acting by the same mechanism
   (C) Antitubercular drugs (D) Antihypertensive drugs

7. Tolerance is generally not acquired to
   (A) Antisecretory action of atropine (B) Sedative action of chlorpromazine
   (C) Emetic action of levodopa (D) Vasodilator action of nitrates

8. Therapeutic drug monitoring is essential for drugs with
   (A) Low LD 50 (B) High ED 50
   (C) Low therapeutic index (D) High therapeutic index

9. Dr. Sunil used Edrophonium for differentiating Myasthenic crisis from Cholinergic crisis. He preferred it over other anticholinesterase agents because of its
   (A) Shorter duration of action (B) Longer duration of action
   (C) Direct action on muscle end plate (D) Selective inhibition of true cholinesterase

10. A farmer comes to you in the emergency in comatose state. Patient had profuse sweating and lacrimation. Diarrhea and urination were apparent. On examination pupil was constricted and BP of the farmer was 80/60 mm Hg. You make a diagnosis of anticholinesterase poisoning. You decide to administer him atropine. All of the following actions will be reversed by atropine **EXCEPT**
    (A) Hypotension (B) Central excitation
    (C) Muscle paralysis (D) Bronchoconstriction

11. All are Vasicoselective anticholinergics **EXCEPT**
    (A) Oxybutynin (B) Flavoxate
    (C) Tropicamide (D) Tolterodine

12. In a patient of hypertension, the dose of propranolol that normalized blood pressure, reduced resting heart rate to 50/min. Which of the following blockers will be most suitable for him as an alternative so that heart rate is not markedly reduced
    (A) Esmolol (B) Timolol
    (C) Pindolol (D) Sotalol

13. Injection of adrenaline along with a local anaesthetic serves the following purpose
    (A) Lowers the concentration of the local anaesthetic to produce nerve block
    (B) Prolongs the duration of local anaesthesia
    (C) Increases the anaesthetised area
    (D) Reduces the local toxicity of the local anaesthetic

14. A 30 year old manic patient was prescribed haloperidol a week ago. For past 2 days, he has become restless, keeps pacing in the room and has been diagnosed to be having Haloperidol induced akathisia. Drug of choice to treat this condition is
    (A) Haloperidol in increased doses (B) Clonazepam
    (C) Carnitine (D) Propranalol

15. Absorption of oral Iron preparations can be facilitated by coadministering
    (A) Antacids (B) Tetracyclines
    (C) Phosphates (D) Ascorbic acid

16. Recombinant human erythropoietin is indicated for
    (A) Megaloblastic anaemia (B) Haemolytic anaemia
    (C) Anaemia in patients of thalassemia (D) Anaemia in chronic renal failure patients

17. Digitalis slows the heart in congestive heart failure by
    (A) Increasing vagal tone (B) Decreasing sympathetic overactivity
    (C) Direct depression of sinoatrial node (D) All of the above

18. A semiconscious patient of haemorrhagic cerebral stroke has been brought to the emergency. His blood pressure is 240/120 mmHg. Select the procedure to lower his blood pressure as rapidly as possible:
    (A) Sublingual Nifedipine (B) Intramuscular injection of Hydralazine
    (C) Intravenous infusion of Sodium Nitroprusside (D) Intravenous injection of Clonidine

19. Furosemide acts by inhibiting the following in the renal tubular cell
    (A) Na^+-K^+-$2Cl^-$ cotransporter (B) Na^+- Cl^- symporter
    (C) Na^+- H^+ antiporter (D) Na^+ K^+ ATPase

20. Desmopressin is a drug of choice in
    (A) Neurogenic diabetes insipidus (B) Nephrogenic diabetes insipidus
    (C) Diabetes mellitus (D) Hypovolemic shock

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MBBS PHASE – II
(CBME)
DEGREE EXAMINATION – MARCH 2023

Time: 3 Hours **Max. Marks: 100**

PHARMACOLOGY
PAPER – II

Q.P. Code: A008

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. **20 X 1 = 20**

LONG ESSAY QUESTIONS: **2 X 10 = 20**

2. Enumerate fluroquinolones. Explain the mechanism of action, therapeutic uses and adverse effects of Ciprofloxacin.
3. Classify analgesic drugs. State mechanism of action, therapeutic uses and adverse drug reactions of NSAIDs.

SHORT ESSAY QUESTIONS: **9 X 5 = 45**

4. Discuss the treatment of systemic fungal infection.
5. Name the drugs used for the treatment of amoebiasis and their adverse effects.
6. Discuss the drug therapy of Migraine.
7. Compare and contrast between Paracetamol and Aspirin.
8. Describe the role of oestrogen in postmenopausal HRT.
9. Describe the mechanism of actions and therapeutic use of Sulfonylurea.
10. Enumerate Prokinetic drugs. Mention their uses and adverse effects.
11. Discuss drugs used in Inflammatory Bowel Disease (IBD).
12. Explain mechanism of action of different antitussives along with examples.

SHORT ANSWER QUESTIONS: **5 X 3 = 15**

13. Enumerate antiproliferative drugs with their uses.
14. Rationale of using triple drug regimen in peptic ulcer.
15. Name 3 leukotriene antagonists with their uses.
16. Mention three antiseptics containing Iodine with their uses.
17. Enumerate chelating agents along with their indications.

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MULTIPLE CHOICE QUESTIONS

Course:	**MBBS Phase-II (CBME), March 2023**	**Max. Marks:**	**20 Marks**
Subject :	**Pharmacology Paper-II, QP Code: A008**	**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. Drug resistance transmitting factor present in bacteria is
   (A) Plasmid (B) Chromosome
   (C) Introns (D) Centromere

2. Indicate the enzyme(s) inhibited by fluoroquinolones
   (A) Topoisomerase I (B) Topoisomerase II
   (C) Topoisomerase III (D) DNA gyrase

3. Which of the following antimicrobials has antipseudomonal action?
   (A) Cefpodoxime proxetil (B) Cephradine
   (C) Cefotetan (D) Cefoperazone

4. Disulfiram like interaction with alcohol has been reported with
   (A) Cefepime (B) Cephradine
   (C) Cefoperazone (D) Cefaclor

5. All the following are known as eicosanoids **EXCEPT**
   (A) Thromboxanes (B) Leukotrienes
   (C) Leucocytes (D) Prostaglandins

6. The NSAIDs aggravate the following diseases **EXCEPT**
   (A) Hypertension (B) Congestive heart failure
   (C) Peptic ulcer (D) Chronic gout

7. Select the first choice drug for acute gout
   (A) Cholchicine (B) Indomethacin
   (C) Allopurinol (D) Dexamethasone

8. TNF-alpha inhibitors should **NOT** be used in
   (A) Rheumatoid arthritis with HIV infection (B) Rheumatoid arthritis with Hepatitis B
   (C) Rheumatoid arthritis with Hepatitis C (D) Rheumatoid arthritis with pulmonary fibrosis

9. Etanercept used in rheumatoid arthritis act by the inhibition of
   (A) TNF alpha (B) TFG beta
   (C) IL-2 (D) IL-6

10. Bone resorption is enhanced by
    (A) PGD2 (B) PDF2
    (C) PGE2 (D) PGI2

11. Select the drug that has been used to suppress labour
    (A) Atropine (B) Ritodrine
    (C) Prostaglandin E_2 (D) Progesterone

12. Triiodothyronine (T 3) as compared to T 4
    (A) Is more plasma protein bound (B) Is shorter acting
    (C) Is less potent (D) Has delayed action

13. Insulin acts by stimulation of
    (A) Ionotropic receptor
    (B) Enzymatic receptor
    (C) Metabotropic receptor
    (D) Nuclear receptor

14. Select the drug which is an inhibitor of gastric mucosal proton pump
    (A) Carbenoxolone sodium
    (B) Sucralfate
    (C) Famotidine
    (D) Lansoprazole

15. The following anti-ulcer drug does not act by reducing the secretion of or neutralizing gastric acid
    (A) Magaldrate
    (B) Sucralfate
    (C) Misoprostol
    (D) Omeprazole

16. Leukotriene receptor antagonist used for bronchial asthma is
    (A) Zafirlukast
    (B) Zileuton
    (C) Cromolyn sodium
    (D) Aminophylline

17. Drug effective in the treatment of acute asthmatic attack is
    (A) Zafirlukast
    (B) Nedocromil
    (C) Prednisolone
    (D) Albuterol

18. All of the following statements about Mycophenolate mofetil are true **EXCEPT**
    (A) It is a prodrug
    (B) Gastrointestinal toxicity is common
    (C) It is used in transplant recipients where other drugs are not effective
    (D) It is highly nephrotoxic

19. Hypervitaminosis is characterized by all of the following **EXCEPT**
    (A) Alopecia
    (B) Anorexia
    (C) Bony swelling
    (D) Peripheral neuritis

20. Calamine powder contains
    (A) Salicylic acid
    (B) Benzoic acid
    (C) Mercuric chloride
    (D) Ferric oxide

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MBBS PHASE – II
(CBME)
DEGREE EXAMINATION – MARCH 2023

Time: 3 Hours **Max. Marks: 100**

PATHOLOGY
PAPER – I

Q.P. Code: A009

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. **20 X 1 = 20**

LONG ESSAY QUESTIONS: **2 X 10 = 20**

2. Define and classify Neoplasia. Enumerate the differences between benign and malignant tumours. (2+3+5)
3. An elderly male presented with per rectal bleeding and hemoglobin 4.6mg/dl. What is your diagnosis? Enumerate the causes and discuss laboratory findings. (2+2+6)

SHORT ESSAY QUESTIONS: **9 X 5 = 45**

4. Define cell injury. Discuss the etiopathogenesis of reversible cell injury. (1+4=5)
5. Discuss the contrasting features of necrosis and apoptosis.
6. Describe the etiopathogenesis of Type I hypersensitivity reaction with examples.
7. Discuss the etiopathogenesis of thrombosis.
8. Discuss cell derived chemical mediators of inflammation.
9. Discuss the steps of fracture healing.
10. Describe the pathogenesis of disorders caused by alcohol.
11. Describe the clinical features and chromosomal abnormalities of Turner syndrome. (3+2)
12. Differences between the CSF findings seen in Pyogenic, Viral & Tubercular meningitis.

SHORT ANSWER QUESTIONS: **5 X 3 = 15**

13. Enumerate types of embolism with examples.
14. Describe gross and microscopy of skin changes in Lepromatous Leprosy.
15. Mention 4 tumours which produce paraneoplastic syndrome.
16. Discuss peripheral blood smear findings in Iron deficiency anemia.
17. Enumerate 6 causes of lymphadenopathy.

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MULTIPLE CHOICE QUESTIONS

Course:	**MBBS Phase-II, (CBME) March 2023**	**Max. Marks:**	**20 Marks**
Subject :	**Pathology Paper-I, QP Code: A009**	**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. It is one of early signs of cell injury is
   (A) Loss of cytoplasmic basophilia (B) Excessive synthesis of proteins
   (C) Cytoplasmic glycogen exhausted (D) Lipid not synthesized

2. The cells continue to multiply throughout life are
   (A) Labile cells (B) Stable cells
   (C) Permanent cells (D) Any of the above

3. Pathogenesis of increased vascular permeability is due to
   (A) Histamine (B) Interleukin
   (C) Tumour necrosis factor (D) All of the above

4. Gastric B cell lymphomas are related to
   (A) Chromosomal translocation (B) Genetic mutation
   (C) H.pylori infection (D) Dietary deficiency

5. All of the following are the acceptable characteristics of granuloma, **EXCEPT**
   (A) Composed of altered macrophages (B) Composed of epitheloid cells
   (C) Composed of chronic inflammatory cells (D) Composed of neutrophils, cellular debris & fibrin

6. Oliguria is the excretion of urine less than
   (A) 100 ml / day (B) 500 ml / day
   (C) 200 ml / day (D) 50 ml / day

7. Presence of needle shaped strongly birefriengant crystals in synovial fluid indicates
   (A) Gouty arthritis (B) Osteoarthritis
   (C) Rhematoid arthritis (D) Suppurative arthritis

8. Thiamine defficiency is associated with following **EXCEPT**
   (A) Alcoholism (B) Causes cardiac failure
   (C) Causes Subacute combined degeneration of spinal cord (D) Produce confusion and amnesia

9. Gas gangrene is caused by
   (A) Botulinum (B) Clostridium difficile
   (C) Clostridium perfringens (D) Clostridium tetany

10. Metastatic calcification is seen in
    (A) Atherosclerotic plaques (B) Hyperparathyroidism
    (C) Tuberculous lymph nodes (D) Damaged cardiac valves

11. Pale infarct is seen in
    (A) Lung
    (B) Ovary
    (C) Spleen
    (D) Intestines

12. The commonest source of embolism is
    (A) Air
    (B) Fat
    (C) Thrombus
    (D) Amniotic fluid

13. All are autosomal dominant **EXCEPT**
    (A) Adult polycystic kidney
    (B) Huntington's Chorea
    (C) Hereditary spherocytosis
    (D) Phenylketonuria

14. The commonest site of amyloid deposition is
    (A) Colon
    (B) Tongue
    (C) Heart
    (D) Liver

15. Most common malignancy in AIDS is
    (A) T-Cell lymphoma
    (B) Burkitt's Lymphoma
    (C) Kaposi sarcoma
    (D) Angiosarcoma

16. The gene considered as the Guardian of genome is
    (A) Rb
    (B) p53
    (C) APC
    (D) RAS

17. All the following are oncogenic viruses, **EXCEPT**
    (A) EBV
    (B) HSV-I
    (C) HTLV-I
    (D) HPV-16

18. Malaria affects all the organs **EXCEPT**
    (A) Liver
    (B) Brain
    (C) Heart
    (D) Spleen

19. Lepra cells are
    (A) Neutrophils
    (B) Plasma cells
    (C) Histiocytes
    (D) Lymphocytes

20. Example of point mutation is
    (A) Thalassemia
    (B) Sickle cell Anemia
    (C) Iron deficiency anemia
    (D) Thalassemia

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MBBS PHASE – II
(CBME)
DEGREE EXAMINATION – MARCH 2023

Time: 3 Hours **Max. Marks: 100**

PATHOLOGY
PAPER – II

Q.P. Code: A010

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.	**20 X 1 = 20**
LONG ESSAY QUESTIONS:		**2 X 10 = 20**
2.	53 years/ Male, a chronic smoker, presented with cough, breathlessness & hemoptysis. There was history of loss of weight & loss of appetite. X-ray showed rounded mass on the hilar aspect of the left lower lobe of the lung. a. What is the diagnosis? b. Discuss the etiopathogenesis & pathology of the same c. What are the complications?	(2+5+3)
3.	Classify testicular tumors. Describe etiology, morphology of Seminoma with a note on role of markers in assessing prognosis.	(3+2+3+2)
SHORT ESSAY QUESTIONS:		**9 X 5 = 45**
4.	Discuss the etiopathogenesis & pathology of Silicosis.	(2+3)
5.	Discuss the morphology of Peptic ulcer with a note on it's complications.	
6.	Discuss the complications of Cirrhosis of liver.	
7.	Discuss the contrasting features between Adult and Infantile polycystic kidney disease.	
8.	Discuss the contrasting features between acute nephritic and nephrotic syndrome.	
9.	Describe gross and microscopy of Fibroadenoma of breast.	
10.	Discuss etiopathogenesis and lab diagnosis of Rheumatoid arthritis.	
11.	Enumerate the causes of Hyperparathyroidism.	
12.	Describe CSF findings in pyogenic meningitis.	
SHORT ANSWER QUESTIONS:		**5 X 3 = 15**
13.	List 6 causes of pericadial effusion	
14.	Describe the gross appearance of Flea bitten kidney and give 2 causes for the same.	
15.	Enumerate Secondary effects of Benign Prostatic Hyperplasia.	
16.	Describe gross and microscopy of Osteoclastoma with diagram.	
17.	Enumerate 6 predisposing factors for squamous cell carcinoma.	

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MULTIPLE CHOICE QUESTIONS

Course:	**MBBS Phase-II, (CBME) March 2023**	**Max. Marks:**	**20 Marks**
Subject :	**Pathology Paper-II, QP Code: A010**	**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. Constrictive pericarditis is most likely to produce which histologic finding in liver
   (A) Mallory hyaline (B) Sinusoidal dilatation
   (C) Macronodular cirrhosis (D) Bile duct proliferation

2. Cor pulmonale can be caused by
   (A) COPD (B) Pulmonary embolism
   (C) Polyarteritis nodosa (D) Wegener's granulomatosis

3. The risk of Bronchogenic carcinoma in heavy smokers, as compared to non-smokers is
   (A) 30 fold (B) 45 fold
   (C) 60 fold (D) 100 fold

4. In Mallory Weiss Syndrome the site of tear is
   (A) Distal oesophagus (B) Proximal stomach
   (C) Oesophago gastric junction (D) All of the above

5. The earliest lesion in Crohn's disease is
   (A) Neutrophils infiltrating crypt (B) Crypt abscess
   (C) Focal neutrophilic infilteration in epithelial layer (D) Linear ulceration

6. Necrotizing papillitis is seen in all of the following **EXCEPT**
   (A) Acute glomerulonephritis (B) Analgesic nephropathy
   (C) Diabetes Mellitus (D) Sickle cell disease

7. Complications of Diabetes include all **EXCEPT**
   (A) Neuropathy (B) Nephropathy
   (C) Retinopathy (D) Myopathy

8. Which is the precancerous condition of the skin
   (A) Erythroplasia (B) Psoriasis
   (C) Leprosy (D) Seborrhic keratosis

9. Alkaline phosphatase levels are increased in all **EXCEPT**
   (A) Multiple Myeloma (B) Paget's disease of bone
   (C) Hyperparathyroidism (D) Obstructive jaundice

10. Commonest site for medulloblastoma is
    (A) Cerebellum (B) Thalamus
    (C) Parietal lobe (D) Hippocampus

11. All are true about Autoimmune Hepatits **EXCEPT**
    (A) Female predominance (B) Elevated levels of antismooth muscle antibodies
    (C) Elevated levels of serum IgM anti HDV (D) An increased frequency of HLA-B_8

12. Which is not a feature of Paterson-Kelly syndrome
    (A) Anemia
    (B) Females > males
    (C) 40-years of age
    (D) Webs in lower oesophagus

13. In Zollinger Ellison syndrome peptic ulceration may be seen in
    (A) Ileum
    (B) Jejunum
    (C) Appendix
    (D) Caecum

14. The deciding histological facter for Glioblastoma multiforme is
    (A) Haemorrhage
    (B) Necrosis
    (C) Endothelial proliferation
    (D) Cystic changes

15. Majority of lymphomas arising in lymph node are
    (A) B. cell origin
    (B) Hodgkin's cell
    (C) NK cell origin
    (D) T cell origin

16. Combined germ cell sex cord stromal tumour is
    (A) Seminoma
    (B) Teratoma
    (C) Choriocarcinoma
    (D) Gynandroblastoma

17. All the following features are chacteristic of cirrhosis of liver **EXCEPT**
    (A) Disorganised hepatic architecture
    (B) Focal scarring
    (C) Involvement of entire liver
    (D) Formation of regenerative nodules

18. Hodgkin's disease with best prognosis is
    (A) Lymphocytic depletion
    (B) Nodular sclerosis
    (C) Lymphocytic predominant
    (D) Mixed cellularity

19. **COMMONEST** cause of raised serum Calcium is
    (A) Parathyroid hyperplasia
    (B) Ectopic hormone secretion
    (C) Parathyroid adenoma
    (D) Parathyroid carcinoma

20. The basic defect in neonatal hyaline membrane disease is
    (A) Shock due to sepsis
    (B) Deficient production of surfactant
    (C) Inhalation of toxins
    (D) Aspiration pneumonitis

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MBBS PHASE – II
(CBME)
DEGREE EXAMINATION – MARCH 2023

Time: 3 Hours **Max. Marks: 100**

MICROBIOLOGY
PAPER – I

Q.P. Code: A011

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. **20 X 1 = 20**

LONG ESSAY QUESTIONS: **2 X 10 = 20**

2. There is an epidemic of diarrhea that has occurred in a remote village and all the sufferers are presented with passing of Rice water stool since 2-3 hours. As a medical officer how are you going to **a)** refer the clinical samples **b)** What is your diagnosis and describe the pathogenesis **c)** Write in detail about the lab diagnosis **d)** Enumerate the causes for diarrhea.
3. Define and classify Hypersensitivity. Discuss in detail Type I Hypersensitivity.

SHORT ESSAY QUESTIONS: **9 X 5 = 45**

4. Write a note on Bacterial growth curve with the help of a diagram.
5. Describe the factors predisposing to microbial pathogenicity.
6. Illustrate the sequence of appearance of HBV antigens and antibodies in a chronic active Hepatitis case.
7. Enumerate Herpes viruses and add a note on laboratory diagnosis of the cutaneous manifestations of Herpes simplex.
8. Write a short note on cutaneous filariasis.
9. Describe the structure of IgG with a neat labeled diagram and write its functions.
10. Describe NACO (National AIDS Control Organization) strategies for HIV testing.
11. Describe the laboratory diagnosis of Malaria.
12. In an elderly male the blood smear showed Hypochromic microcytic anemia. On urine microscopy, pus cells more than 10/HPF, RBCs present, eggs measuring 110-170 µ long by 40-70 µ wide and bearing a conspicuous terminal spine was observed.
    a) What is the probable parasite responsible for anemia?
    b) Describe the life cycle of the parasite.

SHORT ANSWER QUESTIONS: **5 X 3 = 15**

13. Define selective media with two examples.
14. Vaccines for Typhoid fever.
15. Draw the colored and labeled diagram of Trichuris trichura ova.
16. Ground itch.
17. Define atopy and give two examples for the same.

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Accredited A+ Grade by NAAC (3rd Cycle) **Placed in 'A' Category by MoE (GoI)**

MULTIPLE CHOICE QUESTIONS

Course:	**MBBS Phase-II (CBME), March 2023**	**Max. Marks:**	**25 Marks**
Subject :	**Microbiology Paper-I, QP Code: A011**	**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. Who is known as father of Chemo therapy
   (A) Alexander Fleming (B) Paul Ehrlich
   (C) Robert Koch (D) Joseph Lister

2. Most common stain used for identifying mould is
   (A) Lactophenol cotton blue (B) Grams Stain
   (C) Albert Stain (D) ZN stain

3. Under the Spaulding system, which of the following is classified as a semi-critical item when considering methods for sterilization/disinfection?
   (A) Surgical instrument (B) Syringe
   (C) Endoscope (D) Blood pressure cuff

4. An animal host in which pathogenic organism multiplies exponentially is termed as
   (A) Reservoir (B) Transmitting
   (C) Amplifier (D) Definitive

5. Gaffky-Eberth bacillus is
   (A) E. coli (B) Proteus
   (C) Salmonella (D) Shigella

6. The gene coding for core of HIV is
   (A) Gag (B) Pol
   (C) Env (D) Tat

7. During the period of clinical latency
   (A) HIV is not detectable (B) CD_4 cell count remains unchanged
   (C) Virus cannot be transmitted to others (D) Virus is present in lymphoid organs

8. You have taken up a research project to screen a village for Malaria. Recently there is an upsurge in cases of confirmed Malaria in that area. Ideal investigation would be
   (A) Peripheral smear examination (B) Rapid antigen detection
   (C) Polymerase chain reaction (D) Quantitative buffy-coat examination

9. Rotavirus vaccine is given by which route
   (A) Intramuscular (B) Intravenous
   (C) Oral (D) Subcutaneous

10. Which of the following parasitic eggs is bile stained and operculated?
    (A) A. duodenale (B) N. americans
    (C) S. stercoralis (D) D. latum

11. All are transport media for Cholera stools **EXCEPT**
    (A) Cary-Blair (B) Fluid thioglycollate
    (C) Venkatraman Ramakrishnan (D) Alkaline peptone water

12. Which of the following bacterium is associated with food poisoning after consumption of fried rice
    (A) S. aureus
    (B) C. perfringens
    (C) E. fecalis
    (D) B. cereus

13. Black dot tinea capitis is mainly caused by
    (A) E. floccosum
    (B) T. tonsurans
    (C) M. canis
    (D) T. rubrum

14. Germ tube test is diagnostic for
    (A) Candida glabrata
    (B) Candida albicans
    (C) Cryptococuus
    (D) Coccidioides immitis

15. A 7 month old baby was brought to pediatrics OPD with slapped cheek appearance rash. What is the most probable diagnosis?
    (A) Measels
    (B) Rubella
    (C) Molluscum contagiosum
    (D) Erythema infectiousum

16. Chiclero ulcer is caused by
    (A) Leishmania Mexicana complex
    (B) Leishmania braziliensis complex
    (C) Leishmania peruviana
    (D) Leishmania chagasi

17. Which of the following confer(s) artificial passive immunity?
    (A) Hepatitis B vaccine
    (B) MMR vaccine
    (C) Hepatitis B immunoglobulin
    (D) Cross placental transfer of maternal antibodies

18. DiGeorge syndrome is due to defect in
    (A) T cell
    (B) B cell
    (C) Phagocyte
    (D) Complement

19. An outbreak of Jaundice occurs in several young children who attend the same day care centre. If the outbreak was caused by a virus, which one of the following is the most likely cause?
    (A) Hepatitis A Virus
    (B) Hepatitis B Virus
    (C) Hepatitis C Virus
    (D) Hepatitis D Virus

20. All are sporicidal **EXCEPT**
    (A) Lysol
    (B) Gluteraldehyde
    (C) Ethylene oxide
    (D) Methanol

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MBBS PHASE – II
(CBME)
DEGREE EXAMINATION – MARCH 2023

Time: 3 Hours **Max. Marks: 100**

MICROBIOLOGY
PAPER – II

Q.P. Code: A012

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. **20 X 1 = 20**

LONG ESSAY QUESTIONS: 2 X 10 = 20

2. Enumerate viral respiratory tract infections. a) Describe the genotypic variations seen in influenza viruses. b) Discuss the laboratory diagnosis of Covid-19. (2+3+5)
3. A 52 year old, male was brought to the hospital for fever, stiff neck, headache and vomiting for two days. On admission, his CSF examination showed low glucose, high protein and polymorphonuclear leucocytes counts <300/mm3. Indian ink preparation of CSF showed capsulated, budding yeast cells. (2+3+5)
   a) What is the etiological diagnosis?
   b) Describe the pathogenesis of this condition.
   c) Discuss its laboratory diagnosis.

SHORT ESSAY QUESTIONS: 9 X 5 = 45

4. Discuss the specific (treponemal) tests for the diagnosis of Syphilis.
5. Discuss the pathogenesis of UTI (Urinary Tract Infection).
6. What is CAUTI? How do you collect the sample in suspected CAUTI and prevent this infection?
7. A 60 yr old male patient underwent abdominal surgery. After 5 days of surgery patient started having yellowish discharge from abdominal suture. Explain how you could have prevented the infection?
8. Describe the role of Clinical Microbiologist in HICC (Hospital Infection Control Committee).
9. Write a brief note on micro-organisms causing opportunistic infection in malignancy.
10. Describe the tests to investigate a suspected case of Diphtheria.
11. Compare the Wild Virus types (WPV) and Vaccine Derived Polio Virus (VDPV).
12. Describe the pathogenesis and laboratory diagnosis of Weil's disease.

SHORT ANSWER QUESTIONS: 5 X 3 = 15

13. A patient with tuberculosis comes to OPD, what is the mode of transmission of infection to others from this patient? How to prevent the transmission?
14. Draw neat labelled diagram of Trichomonas vaginalis.
15. Newly built Tertiary care hospital of a metro city is in the process of undergoing NABH developing hospital infection control policies. Write the guidelines to prevent Needle prick injuries.
16. Describe Mc Farlands reaction and its significance.
17. Name three organism causing Encephalitis.

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MULTIPLE CHOICE QUESTIONS

Course:	**MBBS Phase-II (CBME), March 2023**	**Max. Marks:**	**20 Marks**
Subject :	**Microbiology Paper-II, QP Code: A012**	**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. Rabies is identified by
   (A) Guarneri bodies (B) Negri bodies
   (C) Cowdry A bodies (D) Paschen body

2. A case of cystic fibrosis, developed exacerbation of bouts of cough. The sputum submitted grew a greenish blue pigment producing gram negative bacilli. The organism is,
   (A) Staphylcoccus aureus (B) Chromobacterium violaceum
   (C) Pseudomonas aeruginosa (D) Serratia marcescens

3. A patient with complaints of fever and dry cough, sore throat swab grew throat commensals on culture. The condition of the patient worsened with elevated C-reactive protein, D-dimer. Now that you are suspecting SARS-CoV-2, which of the following is true,
   (A) A nasopharyngeal swab for antigen detection (B) Serum testing for presence of antibody
   (C) An oro-nasopharyngeal swab for RT-PCR (D) Quarantine him for two weeks without investigating

4. Functional receptor for SARS-CoV 2 is
   (A) ACE 2 (B) CD_{26}
   (C) Both A & B (D) CD_4

5. How much bacillary load in sputum is required for an effective transmission of M. tuberculosis
   (A) 10 bacilli per ml (B) 100 bacilli/ml
   (C) 1000 bacilli/ml (D) 10000 bacilli/ ml

6. Characteristics of primary chancre
   (A) Painless punched out ulcer (B) Painless ulcers with over hanging edges
   (C) Painless ulcers with irregular raised edges (D) Painful punched out ulcer

7. Most Common cause of community-acquired urinary tract infection is
   (A) E.coli (B) Proteus
   (C) Pseudomonas (D) Klebsiella

8. In VAP (Ventilator Associated Pneumonia) patient as maintenance bundle care what is standard angle of degree to which head end of the bed should be elevated
   (A) 10 to 25 degrees (B) 30 to 45 degrees
   (C) 40 to 55 degrees (D) 60 to 75 degrees

9. Following are ESKAPE pathogen **EXCEPT**
   (A) Enterococcus faecium (B) Staphylococcus aureus
   (C) Klebsiella pnuemoniae (D) Proteus vulgaris

10. Multiple painful ulcer is feature of
    (A) Syphillis (B) Herpes
    (C) Chancroid (D) Donovanosis

11. Which of the following STD is preventable by vaccine
    (A) Hepatitis B infection (B) HIV
    (C) Herpes genitalis (D) Chancroid

12. How many moments of hand hygiene have been laid down by **WHO**
    (A) 5 (B) 6
    (C) 7 (D) 8

13. Most common manifestation of Toxoplasma gondii in Immuno compromised adult
    (A) lymphadenopathy (B) Chorioretinitis
    (C) Myocarditis (D) Encephalitis

14. The risk of acquiring hepatitis C from blood transfusion in India is currently
    (A) 0.1% (B) 0.02%
    (C) 0.05% (D) 0.07%

15. The most common oppurtunistic infection that occurs in HIV-infected people is
    Which of the following is not an ESKAPE pathogen (A) Staphylococcal infection
    (B) Enterococcus faecium (C) Staphylococcus aureus
    (D) Streptococus (E) Proteus mirabilis

16. Which of the following is a superficial fungal infection
    (A) Favus (B) Pityriasis versicolor
    (C) Tinea capitis (D) Chromomycosis

17. A middle aged woman, a regular swimmer was admitted with diminished vision and neck stiffness. On examination she was found to have keratitis and meningitis. She gave the history of using semisoft contact lenses. Her CSF culture on axenic media showed microbial growth. Which organisms are commonly associated in such condition
    (A) S. pneumoniae (B) M. tuberculosis
    (C) T. gondii. (D) Acanthamoeba sp.

18. A child aged one year presented with signs of meningitis, the CSF showed pleomorphic gram negative bacilli. On blood agar culture the organisms showed enhanced growth in presence of X and V factors. What is the likely organism associated with this case?
    (A) H.influenzae (B) E.coli
    (C) B. pertusis (D) M.tuberculosis

19. Which of the following tests confirms the diagnosis of Leptospirosis?
    (A) Culture of urine on EMJH media, Testing serum by darkfield examination for the presence of Leptospira.
    (B) Testing serum by darkfield examination for the presence of Leptospires.
    (C) Testing acute and convalescent phase sera for Anti-Leptospiral antibodies by microscopic agglutination test.
    (D) Culture of CSF on blood and chocolate agar.

20. Plague is transmitted by
    (A) Rat flea (B) Soft tick
    (C) Hard tick (D) Louse

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