Time Allowed: 120 Min

Note: Attempt ALL MCQ's.

- Use only blue / black pen. Use of mobile phones and other electronic accessories are strictly prohibited.
- Carefully shade paper type and your correct roll no in response sheet
- Student's result will be declared "Under Report "if (i) MCQ question paper is not returned back along with response sheet or is tempered by the student (ii) The roll number is not written on the said paper

PHARMACOLOGY

1 A 53-year-old female patient is diagnosed as a case of myasthenia Gravis. She has been taking Neostigmine for the last 06 years to control her symptoms. What is the mechanism of action of Neostigmine?

A	Adrenergic agonist	B	Anti-cholinesterase	C	Cholinergic agonist
D	Muscarinic antagonist	E	Nicotine agonist		

2 A 22-year-old woman was evaluated for dysmenorrhea, which has worsened over the past 3 years. Ibuprofen and Naproxen failed to resolve her symptoms and upset her stomach. Which anti-cholinergic is useful as a spasmolytic agent?

A	Dicyclomine	B	Neostigmine	C	Phentolamine
D	Rivastigmine	E	Tropicamide		

3 A 60-year-old male patient of COPD and coronary artery disease presented with complaints of shortness of breath and chronic coughing. Which drug would be safe to relieve his symptoms?

A	Albuterol	B	Ipratropium	C	Metoprolol
D	Prazosin	E	Propranolol		

4 A 60-year-old farmer exposed to insecticide spray was admitted in Neuro ICU with episode of seizure and altered sensorium. On examination, he had pin-point pupils and bradycardia. Which of the following is the most appropriate treatment option?

A	Adrenaline	B	Atropine	C	Atropine and adrenaline
D	Atropine and Pralidoxime	E	Edrophonium		

5 A 47-year-old asthmatic male patient presented to OPD with complaints of difficulty in urination. Examination revealed slightly enlarged prostate and BP of 110/80mmHg. Which of the following medication is useful to control his symptoms?

A	Carvedilol	B	Isoproterenol	C	Phenoxybenzamine
D	Prazosin	E	Tamsulosin		

6 A 53-year-old patient developed post-operative urinary retention after an abdominal surgery. Which of the following drugs could be given orally to treat this condition?

A	Atropine	B	Bethanechol	C	Clonidine
D	Pilocarpine	E	Scopolamine		

7 A young boy of 5 years was brought to ER with initial complaints of odd behavior, confusion, and delusion. Physical examination revealed increased heart rate, dilated pupil, blurry vision, and flushed face. Based on these signs and symptoms, what has he taken?

A	Atropine	B	Physostigmine	C	Pilocarpine
D	Reserpine	E	Tyramine		

A 60-year-old male patient with Hypertension and coronary artery disease was on Metoprolol for the la 2 years. Examination revealed BP of 120/80mmHg and pulse rate 50/min. Which of the following be blockers would be most suitable as an alternative drug?

A	Atenolol	B	Bisoprolol	C	Pindolol
D	Propranolol	E	Sotalol		

A 56-year-old woman complained to her physician about frequent heartburn and pain in the sub-s region. She was recently diagnosed with postmenopausal osteoporosis, started an appropriate th two weeks ago. Which of the following drugs most likely caused the patient's symptoms?

A	Calcitonin	B	Ibandronate	C	Prednisone
D	Raloxifene	E	Teriparatide		

10	A taxi driver with a 10-year history of alcoholism presented with jaundice, recent seizure activity, deranged liver function tests. In addition, his serum calcium is abnormally low. You choose to use vitamin D derivative to correct his calcium level. Which of the following would be the most appropriate agent for this patient?				
	A	Alfa-calcidol	B	Calcitriol	C Cholecalciferol
	D	Dihydrotachysterol	E	Ergosterol	
11	A 57-year-old woman presented to her physician for a check-up who is recovering from a wrist fracture after a fall. Dexa scan revealed osteoporosis. She became menopausal at the age of 50 but did not start hormone replacement therapy because of strong family history of breast cancer. To prevent fractures in future she would like to begin a bone loss prevention therapy. Which of the following drugs is most appropriate for this patient?				
	A	Calcitonin nasal spray	B	Oral conjugated estrogen	C Raloxifene
	D	Tamoxifen	E	Teriparatide	
12	A 26-year-old male came to physician for evaluation of his rash on both knees. On examination, rash was sharply demarcated, salmon colored, rounded plaques covered with loosely adherent silvery white scales. Physician prescribed a drug which acts by activating a nuclear transcription factor. Which of the following is most likely prescribed?				
	A	Calcipotriene	B	Cyclosporine	C Etanercept
	D	Methotrexate	E	Ustekinumab	
13	A 43 years old man, who is a diagnosed case of brain cancer and now he is on chemotherapy. Which one of the following alkylating agents with excellent passage through Blood brain barrier must be included in the chemotherapeutic regimen for this patient?				
	A	Busulfan	B	Carmustine	C Cisplatin
	D	Dacarbazine	E	Procarbazine	
14	A 45-years-old lady, who is a diagnosed case of Rheumatoid arthritis and now presented with anemia. She has been using Methotrexate (DMARDs) for the last 6 months. Which type of anemia can be suspected in this patient and what will be the best drug for her treatment?				
	A	Macrocytic anemia and Vit. B12	B	Macrocytic Anemia and folic acid	C Macrocytic Anemia and Iron
	D	Microcytic Anemia and erythropoietin	E	Microcytic Anemia and Iron	
15	A 55 years old lady, having peptic ulcer disease, presented with severe pain in the knee joints. You diagnosed her as a case of Osteoarthritis. She may need to use NSAIDs for longer period of time. Which one of the following NSAIDs is the best option for this patient?				
	A	Aceclofenac	B	Etoricoxib	C Indomethacin
	D	Nimesulide	E	Piroxicam	
5	A 35-year-old woman at 24 weeks gestation was admitted to the obstetrical unit because of signs of severe fetal distress. Fetal death was diagnosed on admission, and induction of labor was planned. An oxytocin drip was initiated, and a vaginal suppository was inserted. Which of the following drugs was most likely given intravaginally?				
	A	Albuterol	B	Bethanechol	C Dinoprostone
	D	Estradiol	E	Progesterone	

A 3-year-old boy was brought to OPD with complaints of repeated episodes of epistaxis and easy bruising on the body. Upon workup, he was diagnosed as a patient of Hemophilia A and was prescribed Desmopressin. What is the rationale for using Desmopressin in this case?

A	Acts as a co-factor for factor IX to activate factor X	B	Brings factors IX and X together	C	Increases the release of vitamin k dependent clotting factors
	Stimulates the release of factor VIII from vascular endothelial cells	E	Prevents binding of plasmin with fibrin		

57-year-old woman was admitted semiconscious to the emergency department after a road traffic cident. Artificial ventilation was needed, and a drug was given to facilitate intubation. This drug ha rtest duration of action among skeletal muscle relaxants. Which of the following drugs was mos inistered?

	Cisatracurium	B	Dantrolene	C	Succinylcholine
	Tubocurarine	E	Vecuronium		

19 A 49-year-old man diagnosed with inguinal hernia was prepared for surgery. Shortly after general anesthesia with halothane and succinylcholine, the patient developed malignant hyperthermia. The anesthesia was discontinued at once, and a drug was administered by rapid intravenous push. Which of the following was most likely the mechanism of action of the administered drug?

A Activation of GABA B receptors in the spinal cord	B Blockade of excitatory neurotransmitter release in the brain	C Blockade of Ca 2+ channels in the skeletal muscle membrane
D Blockade of Ca 2+ channels in the sarcoplasmic reticulum	E Increased K + conductance in the skeletal muscle membrane	

20 A 59-year-old woman was undergoing surgery for breast cancer. General anesthesia was supplemented with a non-depolarizing neuromuscular blocker that has a short duration of action and is metabolized by plasma pseudocholinesterase. Which of the following drugs was most likely administered?

A Cisatracurium	B Mivacurium	C Succinylcholine
D Tubocurarine	E Vecuronium	

PATHOLOGY

21 Initially, all B cells carry an IgM specific for an antigen and produce IgM antibody in response to exposure to that antigen. Later, gene rearrangement permits the elaboration of antibodies of the same antigenic specificity but of different immunoglobulin classes. After binding to its specific antigen, which of the following regions of B lymphocyte undergoes class switching?

A) Constant region of the immunoglobulin light chain	B) Immunoglobulin heavy-chain class	C) Variable region of the immunoglobulin heavy chain
D) Immunoglobulin light-chain isotype	E) Variable region of immunoglobulin light chain	

22 Idiotypes are antigenic determinants formed by specific amino acid sequences allowing antibodies to respond to a diverse range of antigens. What is the most common region(s) in an antibody structure that define the idiotypes?

A) Constant regions of light and heavy chains	B) Constant region of light chains	C) Constant region of heavy chains
D) Hinge region	E) Hypervariable regions of heavy and light chains	

23 Antibodies are globulin proteins that can exist as dimers and pentamers. If an individual was genetically unable to make J chains, which immunoglobulin(s) would be affected?

A) IgA	B) IgG	C) IgM
D) IgG & IgM	E) IgM & IgA	

24 There are receptors for the heavy chain of IgG on the surface of neutrophils that mediate a host defense process called opsonization. Microbes, such as bacteria and viruses are phagocytized much better in the presence of which one of the complement components?

A C1	B C3a	C C3b
D C5a	E C5b	

25 When viruses infect a cell, they cause downregulation of the major histocompatibility complex (MHC) class I molecules. This is a mechanism to evade cytotoxic T cells, which recognize infected cells displaying virus-derived peptides bound to MHC. However, downregulation of MHC class I molecules makes the virally infected cell a target for which one of the following cell types?

A) B cells	B) Dendritic cells	C) Macrophages
D) Natural killer cells	E) Neutrophils	

26 A 60-years-old female patient presents with fatigue and weight loss. On examination, there are enlarged lymph nodes in left axilla and right cervical area. Lymph node biopsy revealed centrocytes with angular cleaved nuclei and prominent indentations and centroblasts. The genetic studies revealed (14;18) translocation. What is the most likely diagnosis in this patient?

A) Chronic myeloid leukemia	B) Mantle cell lymphoma	C) Chronic lymphocytic leukemia
D) Follicular lymphoma	E) Infectious mononucleosis	

IgE antibodies bind to the Fc receptor present on the basophils and tissue mast cells, and releases variou chemical mediators involved in anaphylaxis. Which one of the following is the most likely explanation fo the increased production of IgE?

A) Large amounts of IL-1 are produced by dendritic cells	B) Large amounts of IL-2 are produced by macrophages	C) Large amounts of IL4 a produced by TH-2 cell
D) Large amounts of gamma interferon are produced by TH-1 cells	E) Large amounts of C3a are produced by the alternative pathway of complement	

28	Most B cell responses to an antigen [illegible] dependent activation]. Which one of the following sets of cells can present antigen to the helper T cells?				
A)	B cells and cytotoxic T cells	B)	B cells and dendritic cells	C)	Macrophages and [illegible]
D)	Neutrophils and cytotoxic T cells	E)	Neutrophils and plasma cells		

29	The cytotoxic T cells (CD8-positive) response is concerned primarily with destroying virus-infected cells and tumor cells. In response to virus-infected cells, the CD8 positive T lymphocytes must recognize both viral antigens and class I MHC molecules on the surface of infected cells. Which of the following interleukin produced by helper T cells (CD-4 positive) is required for activation of CD8 Positive T cells?				
A)	IL-2	B)	IL-4	C)	IL-5
D)	IL-1	E)	IL-8		

30	A leukemia patient after receiving bone marrow transplant developed rash on the skin after 1 day. The patient has no past history of any kind of allergy. What is the most probable cause for his condition?				
A)	Acute hypersensitivity reaction	B)	Allergy	C)	Graft versus host disease
D)	Type III hypersensitivity	E)	Urticaria		

31	A 22-yrs-old woman with acute myeloblastic leukemia receives an allogenic bone marrow transplant with apparent successful engraftment. Three weeks later, early jaundice as well as generalized maculopapular rash is noticed. Skin biopsy revealed vacuolar changes, necrotic epidermal cells and a lymphocytic infiltrate. What would be the most appropriate mechanism underlying patients' condition?				
A)	Antibody- dependent cellular toxicity	B)	Attack on host epithelial cells by donor CD8 +T-cells	C)	Contamination of the donor transplant cells with hepatitis C virus
D)	IgE and mast cell mediated anaphylactic hypersensitivity	E)	Secretion of IL-2 and interferon–gamma by TH-I cells		

32	Certain bacteria e. g Staphylococcus aureus cause severe infection in patients with C3 deficiency but not in those with C5 deficiency. On the basis of these observations which one of the following is most likely to be a critical mechanism for defense against this bacterium?				
A)	The ability of the complement mediated membrane attack complex to make holes in bacterial membranes.	B)	The ability of neutrophils and macrophages to ingest bacteria Coated with C3b	C)	The ability of C3b to attract phagocytic cells from blood to the site of bacterial infection
D)	The ability of helper T cells to enhance bactericidal potential of macrophages	E)	The ability of leucocytes to perform pinocytosis		

3	A 20-years-old woman had sudden onset of fever (104F) and severe headache. Physical examination revealed neck stiffness with high suspicion of meningitis. Gram stain and culture of the spinal fluid yielded many neutrophils and *Neisseria meningitides*. Further history revealed that she had infections with this organism previously. What is the most likely predisposing factor associated with her condition?				
A)	She is deficient in CD8- positive T cells.	B)	She is deficient in antigen presentation by her macrophages	C)	She is HIV antibody positive
D)	She is deficient in one of the late acting complement components	E)	She is having malnutrition		

	A 20-years-old woman presents with malar rash, low grade fever, high titer antibodies to double stranded DNA and the Sm (smith) antigen. Which of the following form of hypersensitivity is the primary mechanism of the abnormalities found in his disorder?				
A)	Secretion of IL-2 and Gamma interferons.	B)	Type 1 Hypersensitivity	C)	Type2 hypersensitivity
)	Type 3 hypersensitivity	E)	Type 4 Hypersensitivity		

	3-year-old toddler was rushed to the emergency department after consuming peanut butter crackers daycare. The daycare staff reported that the patient had severe allergy to peanut butter, and he ered the crackers by mistake. The patient is in acute distress with blood pressure of 60/40 mm piratory rate of pulse rate of 110/min. Upon examination, there is audible inspiratory stridor, ar t is covered with a maculopapular rash. Which of the following is involved in the sensitization rlying reaction?				
	C5a production	B)	C3b interaction	C)	Deposition of antigen-antibody complexe
	IL-2 secretion	E)	Release of IL-4		

		C)	IgE-mediated immune responses only
		C)	Blood for hepatitis
		C)	Deficiency of DAF
		C)	Sickle cell trait

40 A 30 years old male came to OPD with complaints of fever, weight loss and lethargy. Blood smear showed myeloblasts with a high probability of having acute myeloid leukemia. Which of the following is the WHO criteria (cut off value) to label him as a case of acute myeloid leukemia?

A)	Abnormally raised white cell count >100 x109/mm3	B)	Low platelet count below 100x106/mm3	C)	Presence of >20% myeloblasts in peripheral blood smear and bone marrow
D	Presence of >30 lymphoblasts in peripheral blood smear and bone marrow	E	Small to medium sized lymphocytes on peripheral blood smear		

41 A hematologist is examining a peripheral blood smear of a case suspected of having acute leukemia. He finds cells that are large to medium size, have voluminous cytoplasm and Auer rods. What is the most common cell type that display the above-mentioned features?

A)	Basophils	B)	Lymphoblasts	C)	Lymphocytes
D)	Myeloblasts	E)	Neutrophils		

42 A hematologist is examining bone marrow aspirate smears which shows blast cells. He will be diagnosing it as a case of acute leukemia as per WHO guidelines only if the percentage of blasts in bone marrow aspirate smears is?

A)	1%	B)	5-19%	C)	10%
D)	20% & above	E)	30%		

43 A 69-years-old male is admitted for likely gastrointestinal bleed. He underwent transfusion with 2 units Packed Red Blood Cells 1 hour ago and reports shortness of breath. He is febrile (38.5C) with pulse rate of 120/min, BP 70/40mmHg and SpO2 is 85%. New bibasilar crackles are heard on pulmonary examination. Post-transfusion Chest X-ray revealed pulmonary edema. What is the likely diagnosis in this case?

A)	Acute hemolytic transfusion reaction	B)	Cor pulmonale	C)	Hypokalemia
D)	Myocardial ischemia	E)	Transfusion related acute lung injury		

4 A hematologist is examining the blood and bone marrow aspirate smears of a patient. He finds abnorm large cells with plenty of Auer rods in the cell cytoplasm. On the basis of the presence of Auer rods, w of the following will be the most likely diagnosis in this patient?

A)	Acute lymphoblastic leukemia	B)	Acute myeloid leukemia	C)	Chronic lymphocytic leukemia
D)	Iron deficiency anemia	E)	Megaloblastic anemia		

An 80-years-old male patient presents with recurrent chest infections and fever. There is gen lymphadenopathy. Blood smear examination showed increased abnormal neoplastic mature lym and presence of numerous smudge cells. What is the most likely diagnosis for his condition?

A)	Acute Myeloid Leukemia	B)	Acute Lymphoblastic Leukemia	C)	Chronic Myeloi Leukemia
D)	Chronic Lymphocytic Leukemia	E)	Infectious mononucleosis		

46 Based on a FISH report, there is reciprocal translocation between chromosome 9 and 22 with subsequent formation of BCR-ABL fusion oncogene. Which one of the following conditions is associated with this characteristic translocation?

A) Acute Myeloid Leukemia | B) Acute Lymphoblastic Leukemia | C) Chronic Myeloid Leukemia
D) Chronic Lymphocytic Leukemia | E) Hodgkin lymphoma

47 A 3-months old male child is brought to pediatric OPD with complaint of prolonged bleeding from nose and bruises on his body. There was also a history of profuse bleeding during circumcision in the childhood. There is no history of weight loss and fever. APTT is prolonged but BT is normal. Based on this history, which of the following is the most likely diagnosis in this child?

A) Acute Leukemia | B) Hemophilia | C) Idiopathic thrombocytopenia
D) Infection induced thrombocytopenia | E) Von Willebrand disease

48 A 13-years-old child presented to OPD with sudden onset of anemia and jaundice after taking antimalarial which were prescribed for malaria. The child was otherwise normal before taking antimalarial drugs and had similar episode of anemia in the past after taking certain antibiotics. The blood count shows a low hemoglobin and raised reticulocyte count. Based on history, which of the following is the most likely diagnosis in this child?

A) Aplastic anemia | B) Anemia of chronic disorder | C) G6PD deficiency anemia
D) Megaloblastic anemia | E) Iron deficiency anemia

49 A 10-years-old child came to OPD with complaint of bleeding from the gums. On examination, it is observed that there are petechiae and bruises on the forearms. It is suspected that the patient may have immune thrombocytopenic purpura. What will be the cut off value of platelet counts for making the diagnosis of thrombocytopenia?

A) Less than 150,000/mm³ | B) Less than 100,000/mm³ | C) Less than 20,000/mm³
D) Less than 400,000/mm³ | E) Less than 40,000/mm³

50 A 4-years-old child was brought to the Peads OPD for developmental delay. He had a flattened face, short neck, small hands and feet, A single line across the palm of the hand (palmar crease). Which of the following Karyotypes fits best for this disease?

A) 47 XXY | B) 44 A+X | C) 47XX+21
D) 22q11.2 del | E) 45X

51 A 25-years-old woman came to Gynae OPD with primary amenorrhea, infertility, short stature and webbed neck. On genetic testing, karyotyping revealed; 45X or 45 X0. What is your most likely diagnosis?

A) CRI- DU –CHAT syndrome | B) Down's syndrome | C) Edwards syndrome
D) Klinefelter syndrome | E) Turner Syndrome

52 A 5-year-old female patient is brought to the OPD by her parents. The parents complain that she is mentally unwell and does not behave the same as children of her age. On examination, she has abundan neck skin, Epicanthic folds and flat facial profile and simian's crease. What do you think is the mos probable diagnosis?

A) Cru- di- chat syndrome | B) Down's syndrome | C) Klinefelter's syndrome
D) Patau's Syndrome | E) Turner Syndrome

53 A 19-year-old man falls and strikes his leg. He feels intense pain. On physical examination there is swel in his lower leg. Biopsy of the lesion shows atypical cells with enlarged spindled hyperchromatic nu and high nuclear/cytoplasmic ratio. Prominent osteoid and bone formation is seen. Which of following is the most likely diagnosis?

A) Chondrosarcoma | B) Ewing sarcoma | C) Giant cell tumor
D) Metastatic seminoma | E) Osteosarcoma

4 A 33-year-old woman has been bothered by a bump on the dorsum of her left wrist for the past 4 m On physical examination there is 1 cm firm but fluctuant subcutaneous nodule over an extensor te her left wrist. The nodule was painful on palpation and movement and mucoid fluid was aspirat the nodule. What is the most likely diagnosis?

A) Ganglion cyst | B) Giant cell tumor | C) Lipoma
D) Nodular fasciitis | E) Rheumatoid nodule

Infectious arthritis, also known as septic arthritis, represents an invasion of a joint space by a v of microorganisms, most commonly bacteria. What investigation would be of help in iden underlying cause of this condition?

A) Erythrocyte Sedimentation Rate | B) HLA B27 status
) X-ray Knee

	A) ASO titer	B)	Blood complete picture	C)	ESR
	D) Serum albumin	E)	Serum rheumatoid factor		

59	A) Osteomyelitis	B)	Periapical granuloma	C)	Osteosclerosis
	D) Condensing osteitis	E)	Osteoarthritis		

60	A) Adenosine biphosphate	B)	Carbonic anhydrase	C)	Creatinine phosphokinase
	D) Dystrophin kinase	E)	Lactate dehydrogenase		

61	A) Actin	B)	Dystrophin	C)	Leucovorin
	D) Myosin	E)	Myotropin		

62	A) Enchondroma	B)	Fibrous dysplasia	C)	Giant cell tumor
	D) Osteoblastoma	E)	Osteochondroma		

63	A) Metaphysis	B)	Rarely spread to joints	C)	Epiphysis
	D) Vertebral bodies	E)	Spread to joints.		

	A) Osteopetrosis	B)	Osteoarthritis	C)	Osteosclerosis
	D) Paget's Disease of Bone	E)	Sickle cell Disease		

	A) Osteosarcoma	B)	Osteoarthritis	C)	Osteopetrosis
	D) Osteoporosis	E)	Osteochondroma		

66	A 30-year-old male patient presented with fever, chills, [illegible]				
	A) [illegible]	B) [illegible]		C) [illegible]	
	D) [illegible]	E) [illegible]			
67	A 16-year-old boy noted pain in his left knee after each hockey practice session for the past month. On examination there was tenderness in his left knee, with reduced range of motion. A plain radiograph of the left leg reveals a mass of the proximal tibial metaphysis that erodes bone cortex, lifting up the periosteum where reactive new bone is apparent. A bone biopsy was performed, and microscopic examination showed atypical, elongated cells with hyperchromatic nuclei in an osteoid stroma. Which of the following neoplasms is he most likely to have?				
	A Giant cell Tumor of Bone	B Osteoblastoma		C Osteosarcoma	
	D Osteochondroma	E Paget's Disease of Bone			
68	A 70-year-old man presented with a complaint of a change in bowel habits, alternating constipation and diarrhea. A stool sample reveals occult blood. Digital rectal examination revealed a palpable mass. A biopsy was performed. Of the following microscopic findings, which of the following is most likely to indicate that the neoplasm is malignant?				
	A Atypia	B Increased nucleus to cytoplasmic ratio		C Invasion of the surrounding tissue	
	D Necrosis	E Pleomorphism			
69	An epidemiologic study investigates health care benefits of cancer screening techniques applied to a population. Which of the following diagnostics screening techniques is most likely to have the greatest impact on reduction in cancer deaths in developed nations?				
	A Chest X-Ray (Lung Carcinoma)	B Stool analysis for occult blood (Gastrointestinal Malignancies)		C Pap smear (Cervical Carcinoma)	
	D Serum carcinoembryonic antigen (Colonic Carcinoma)	E Prostate specific antigen (prostate carcinoma)			
70	A patient of adenocarcinoma of prostate is treated by oncologist and is under regular follow up. Which of the following serum tumor marker would be helpful in determining tumor recurrence?				
	A CA 125	B CEA		C HCG	
	D PSA	E Prolactin			
71	A 73-year-old man has had a chronic cough for the past 08 years. He has a long cigarette smoking history and has begun to lose weight during the past year. Chest radiograph revealed a right hilar mass. Sputum cytology shows atypical, hyperchromatic squamous cells. Which of the following is the most common pathway by which this neoplasm will metastasize?				
	A Blood Stream	B Bronchi		C Contagious spread to pleura	
	D Lymphatics	E Pleura to peritoneum			
72	Many cancers have Biological or non-Biological causes. Which of the following pair does not correctly match the tumor with its causative agent?				
	A Anogenital carcinoma; (HPV Type 16 &18)	B Burkitt's lymphoma; EBV		C Carcinoma stomach; Helicobacter Pylori	
	D Hepatocellular carcinoma; Hepatitis A virus	E Squamous cell carcinoma; Ultraviolet radiations			

FORENSIC MEDICINE

3	You have received a dead body in forensic medicine department KMC which is having A ligature ma around the neck due to suicide by hanging, the mark on neck is a classic example of?		
	A) Avulsion	B) Friction moving abrasions	C) Gravitational bruise
	D) Graze	E) Hilt bruise	
	A young man presents to emergency department of a hospital with history of wound on left side c after a fight with his friend. There is a characteristic tailing of the wound which is found in:		
	A) Imprint abrasion	B) Incised wound	C) Moving abrasion
	D) Split laceration	E) Stab wound	
	A person brought to forensic medicine department of KMC with history of physical assa medicolegal examination the medical officer found a bruise on his right thigh which is yellowi his discoloration of the bruise is caused by?		
	) Biliverdin	B) Bilirubin	C) Deoxy hemo
	Hematoidin	E) Hemosiderin	

A)	Abrasions	B)	Bruises	C)	Contusions
D)	Incised wounds	E)	Lacerations		

81 A person was hit with a baseball bat in a fight with his neighbors. His parents went to police to file an FIR (First Information Report). The police brought the victim to the authorized Medical Officer. The on-duty doctor noted that he had a deep muscular injury that appeared blue in color with a slight rupture of skin. The victim was well oriented in time, place and person. As per Qisas and Diyat Act 1997, what opinion will be framed in respect of this victim?

A)	Jurh Ghayr Jaifah Badiah	B)	Jurh Ghayr Jaifah Damiyah	C)	Jurh Ghayr Jaifah Hashimah
D)	Jurh Ghayr Jaifah Mutalahimah	E)	Jurh Jaifah		

82 Preserving dead body for few days in cases where it has to shift abroad for funeral is usually accomplished by embalming for embalming the chemicals are injected in:

A)	Abdominal cavity	B)	Chest cavity	C)	Femoral artery
D)	Popliteal vein	E)	Radial artery		

83 A mother after her delivery of a dead child has blamed the doctor on duty to be held responsible for the death of her child due to negligence. Police has brought the body of the child to the medical officer in forensic department. External examination in autopsy shows all the signs of maceration. The infant was:

A)	Alive before delivery	B)	Dead born	C)	Live born
D)	Macerated	E)	Still born		

84 In a village it was reported that a husband has killed his wife and buried her two days ago. The relatives o the deceased wanted to know the cause of death, so they approached the Police. The police decided t exhume the body and submitted an application to on-duty Magistrate for exhumation. Under whi section of CrPC, does exhumation is ordered?

A)	174 CrPC.	B)	176 CrPC	C)	178 CrPC
D)	Pakistan Penal Code i.e., PPC	E)	Sec-4 enforcement of Hadood Ordinance.		

A young boy suddenly fainted and died while playing a football game. Autopsy was conducted to the cause of death, wherein after performing all examinations i.e physical, histopathological, toxicol radiological and other relevant examinations no cause for the death could be determined. What such autopsy be called?

A)	Anatomical Autopsy	B)	Clinical Autopsy	C)	Fake autopsy
D)	Obscure autopsy	E)	Virtual autopsy		

A young woman's dead body was found by a passerby on the side of a road. She had multiple b lacerations on her body. Rigor mortis had developed in her face and jaw, but her limbs were q How much time has passed since her death?

A)	1-2 hours	B)	3-4 hours	C)	8-10 hours
D)	12-15 hours	E)	20-24 hours		

87	A 10 years old child presented with excessive salivation, lacrimation difficult, and pupils were constricted. The most likely poison involved is:		
	A) Arsenic	B) Opium	C) Organophosphorus compounds
	D) Phosphorus	E) Paraquat	
88	A dead body is brought by police to mortuary for postmortem examination in month of July. The deceased disappeared from his home some 1 week back. Maggots are present on natural orifices of dead body. How much time has elapsed since his death occurred?		
	A) 8-12 hours	B) 12-24 hours	C) 24-36 hours
	D) 36-48 hours	E) 48-72 hours	
89	A woman aged 70 years have died of a long debilitating illness. Her family wants to know the cause and course of her illness, so they have requested the doctors to perform an autopsy. This kind of autopsy is known as?		
	A) Academic autopsy	B) Medical autopsy	C) Medicolegal autopsy
	D) Negative autopsy	E) Necropsy	
90	An autopsy was performed with no obvious injuries. The conducting doctor wanted to exclude the poisoning. Samples were taken for toxicological examination. Which medium will be used to preserve the samples for toxicological examination?		
	A) 10% formalin	B) Alcohol	C) Normal saline
	D) Rectified spirit	E) Saturated common salt	
91	While examining a suspected case of rape, medical examiner found some lose hairs on the examination sheet. What will be the appropriate method to collect this evidence?		
	A) Collect by using hands wearing gloves	B) Collect by sticking them to scotch tape	C) Collect by picking them with forceps
	D) Collect with a comb	E) Fold the entire sheet	
92	A dead body was recovered far away in a jungle. Forensic expert team examined the crime scene. The experts examined each and every item of the place. What element is being studied by the experts under the domain of trichology?		
	A) Blood	B) Fiber	C) Hair
	D) Saliva	E) Semen	
93	Upon investigation of a murder followed by rape police has found some yellowish white stains from the crime scene suspecting it to be semen. How it will appear under UV light?		
	A) Black	B) Bluish white	C) Pinkish white
	D) Reddish	E) Yellowish white	

VERTICAL INTEGRATION

94	In a local community in Africa hookworm infection was very common. The people were very illiterate and compliance for regular medication was poor. However, they can be advised to adopt one of the following conditions which can prevent chronic infection and lead to natural Cure of hookworm infection. Which one is this?				
	A	High carbohydrate diet	B	High fat diet	C High protein diet
	D	High Hemoglobin level	E	Low serum cholesterol	
95	Anaemia is currently a big health problem accounting for approximately 2 billion of world population. What could be the ratio of Iron deficiency anaemia in that?				
	A	10 %	B	30 %	C 50%
	D	80%	E	90%	
96	A boy fell while riding a horse; he was taken to the hospital where he was provided with active immunization against tetanus. What is the best choice for this type of immunization?				
	A	Specific human immunoglobulins	B	Tetanus antitoxin	C Tetanus toxoid
	D	Tetanus immunoglobulins	E	Anti-tetanus serum	
7	One of the key areas for workers welfare in the occupational Health is the field of Ergonomics. Whic the following best defines ergonomics?				
	A	Identification of disease of occupational origin	B	Identification of cause of occupational disease	C Checking effectiven control measures.
	D	Establishing environmental hygiene.	E	Design of working environment best suited for the workers	
	A 5-year-old boy came to immunization center without BCG scar on his arm. It is advised to give which one of the following vaccines?				
A	BCG vaccine only		B	BCG + Pentavalent + OPV	C Measles vacci
D	Rotavirus vaccine + DPT		E	Rubella vaccine + TT	

	A 15 months child was being treated in a hospital. A polio case had been detected in his residential locality. Pediatrician decided to protect him against poliomyelitis by giving which one of the following vaccines?		
	A Chemoprophylaxis with antiviral drugs	B Human normal immunoglobulin	C Human specific immunoglobulin
	D Oral polio vaccine	E Inactivated polio vaccine	
100	A student at a Medical College got an accidental prick while drawing blood of hepatitis B positive patient. He had completed his course of immunization against hepatitis B last year. What would you recommend for him?		
	A Booster dose of HB vaccine	B Single dose of passive immunization	C Both active and passive immunization
	D Two doses of immunoglobulins 01 days a part	E Reassurance	
101	Road traffic injuries are amongst the leading causes of death in the world. To prevention of traffic accidents main effective measure is		
	A Licensing of drivers	B Provision of seat belts	C Inspection of vehicles periodically
	D Enforcement of traffic laws	E Medical fitness of drivers every six months	
102	A 45 years old male patient presented to OPD with complaints of persistent and progressive difficulty in swallowing for the last 2 years. Indirect laryngoscopy showed normal oropharynx. She is from low socioeconomic group and barium swallow shows shelf like defect in post cricoid area. What would be the most likely diagnosis?		
	A Peritonsillar abscess	B Pure pharyngeal anemia	C Plummer Vinson syndrome
	D Hypopharyngeal tumor	E Upper esophageal stricture	
103	The four rectus muscles of the eyeball arise from?		
	A) Annulus tendineus ring	B) Medial wall of the orbit	C) Roof and adjoining walls of the orbit
	D) Optic foramen	E) Superior wall of the orbit	
104	A doctor with a BMI of 35 teaches a patient about cardiac diet, besides being a doctor, he is also nutritionist. However, the patient has doubts about what he is teaching. What could be the reason?		
	A Doctor has an accent	B Physical appearance	C Too academic
	D Trying to give advice	E Use of jargon	
105	Third year MBBS students started research on Prevalence of obesity among medical students. What should be the first step to conduct health system research?		
	A Problem identification	B Statement of the problem	C Setting of aim and objectives
	D Literature review	E Writing hypothesis	
106	Diarrhoea is a common emergency during floods. There was an outbreak of diarrhoea among flood affected people near Nowshera in August 2022 What is the best study design to find the prevalence of diarrhoea?		
	A Case control study	B Cohort study	C Cross sectional study
	D Case series	E Ecological study	
107	Third year medical students were engaged in a research study to find the co-relation between smoking and lung cancer. While setting objectives for their study, which of the following characteristic of objectives should be kept in mind?		
	A Complex	B Costly	C Independent of time
	D Measurable	E Over-ambitious	
108	In a study, the hypothesis was stated as "Increased levels of glycosylated hemoglobin levels for prolonged periods of time in diabetic individuals increase the risk for myocardial infarction". In this study, which one of the following statements fits the above-mentioned hypothesis?		
	A It is an assumption made before the start of research	B It is a conclusion drawn before start of research	C It shows that this hypothesis and nul hypothesis are identical in this stud
	D It shows significance level	E It shows that the above statement is a tested theory	
109	A researcher conducted research on Insomnia among medical students. He will describe rese participants in detail in which section of research plan?		
	A Introduction	B Rationale	C Methodology
	D Data analysis	E Discussion	
110	A 17 years old boy was brought to the accident and emergency with unknown substance overdose was hemodynamically stable. The emergency team has decided to give him activated charcoal. All of the following substances bind well to activated charcoal except:		
	A) Atenolol	B) Benztropine	C) Cyanide
	D) Tetrahydrocannabinol	E) Thioridazine	

111	A 15 years old girl who is known to have Sickle cell disease, presented with acute pain in the chest and limbs. Her clinical assessment is unremarkable, and her initial investigations are normal. What is the best management plan?		
	A) Admit her to cardiology unit	B) Give her intravenous fluids, analgesics, oxygen and if evidence of infection then antibiotics	C) Give her paracetamol, reassure and send her home
	D) Refer her to chest physician	E) She needs to have orthopaedics consultation	
112	A 65 years old gentleman has recently been diagnosed with Polycythemia Rubra Vera. He was told about the increased risk of thrombosis. Thrombosis in polycythemia vera is due to?		
	A) Hypercoagulable state	B) Increased RBC induced vascular clogging	C) Increased erythropoietin levels
	D) Associated thrombocythemia	E) Leukostasis	
113	Which of the following is the most common area affected by rheumatoid arthritis?		
	A) Knee joints	B) Metacarpophalangeal (MCP) and proximal interphalangeal (PIP) joints	C) Metatarsophalangeal (MTP) joints
	D) Temporomandibular joints (TMJ)	E) Wrist joints (radiocarpal, ulnocarpal, and distal radioulnar joints)	
114	A 35-years old tailor is giving history of 2 years of backache and restricted neck movements. He was suspected by a physician to be having a spondyloarthropathy. What investigations will be suggestive of this diagnosis?		
	A) HLA-B27	B) Anticentromere antibodies	C) Anti-CCP antibodies
	D) Anti-SCL 70	E) Antinuclear Factor	
115	A 18 years old male patient presents with pain right distal femur for the last 3 months. There is history of weight loss and anorexia. X-rays show lytic lesion in distal femur with periosteal reaction in form of Codman triangle. What is the most likely diagnosis?		
	A) Bone cyst	B) Osteosarcoma	C) Osteoid osteoma
	D) Osteoblastoma	E) Giant cell tumor	
116	25 years old motor cyclist presents with fracture left tibia. There is a bleeding wound communicating with fracture. What is the diagnosis?		
	A) Burst tibial fracture	B) Closed tibial fracture	C) Open tibial fracture
	D) Simple tibial	E) Fracture Torus tibial fracture	
117	A 4-years-old boy is seen with history of gross motor developmental delay and difficulty in climbing stairs. His maternal uncle had suffered from similar condition and he died at 18 years of age. On examination he has calf muscle hypertrophy and a positive Gower sign. Rest of the systemic examination is unremarkable. Which one of the following investigations will you order next?		
	A CPK level	B CT scan Brain	C Electromyography (EMG)
	D LDH level	E Nerve Conduction Studies	
118	A 9-year-old female child presented with an 8-month history of erythema and swelling of the periorbital Region and papules and plaques over the dorsolateral aspect of forearms and knuckles with ragged Cuticles. She also has proximal muscle weakness. What is the most likely diagnosis?		
	A Systemic Lupus Erythematosus	B Juvenile Dermatomyositis	C systemic sclerosis
	D Mixed connective tissue disorder	E Systemic onset Juvenile Idiopathic Arthritis	
119	A 9-month-old boy presented to OPD with progressive pallor for the last 3 months. He is developmentally normal, fully vaccinated till date, breast fed, complementary feeding started at 6 months and has received blood transfusion at the age of 6 month for same problem. On examination this child is afebrile, severe anemia, mildly icteric and has splenomegaly. The most likely diagnosis of this child is?		
	A) Iron deficiency anemia	B) Hereditary spherocytosis	C) Sickle cell anemia
	D) Thalassemia	E) Megaloblastic anemia	
	Diagnostic test for thalassemia is?		
	A) Peripheral smear	B) Retic count	C) Hb electrophoresis
	D) Serum ferritin	E) Complete blood count (CBC)	