Pathology

An inflammatory process that has continued for 3 months includes the transformation of tissue macrophages to epithelioid cells. There are also lymphocytes present. Over time, fibroblasts lay down collagen as the focus of inflammation heals. These events are most likely to occur as an inflammatory response to which of the following infectious agents?

A	Cytomegalovirus	B	Giardia Lamblia	C	Mycobacterium tuberculosis
D	Pseudomonas aeruginosa	E	Treponema pallidium		

Certain drugs have the capability of inhibiting P450 enzymes thus leading to many important clinical consequences. Which of the following statements is the most appropriate regarding enzyme inhibition?

A	Enzyme inhibition generally results in treatment failure	B	Enzyme inhibition generally results in toxicity	C	Enzyme inhibition occurs at the level of gene expression
D	Enzyme inhibition takes a couple of days to begin	E	Peak effects of enzyme inhibition are seen in a couple of weeks		

The Nurse-on-duty in a Medical unit was calculating the dose of Benzylpenicillin written in the chart-order of a patient admitted with pneumonia. Which of the following conversion factors would be the correct one for converting milligrams of Benzylpenicillin to the units of Benzylpenicillin?

A	One milligram of Benzylpenicillin = 16 units of Benzylpenicillin	B	One milligram of Benzylpenicillin = 160 units of Benzylpenicillin	C	One milligram of Benzylpenicillin = 1600 units of Benzylpenicillin
D	One milligram of Benzylpenicillin = 16000 units of Benzylpenicillin	E	One milligram of Benzylpenicillin = 160000 units of Benzylpenicillin		

A young adult male patient was brought in a critically ill condition to the Casualty department with difficulty in breathing and severe hypotension. He was diagnosed as a case of anaphylaxis. The Physician wrote Injection Adrenaline (Epinephrine) in his chart order with a view to induce bronchodilation in the patient. Which of the following types of drug antagonism was exploited by the Physician in this case?

A	Chemical antagonism	B	Equilibrium-competitive antagonism	C	Non-competitive antagonism
D	Non-equilibrium-competitive antagonism	E	Physiological antagonism		

A small piece of wood becomes embedded in the finger of a 25-year-old man. He does not remove it, and over the next 3 days the area around the piece becomes red, swollen, and tender. Neutrophils migrate into the injured tissue. Expression of which of the following substances on endothelial cells is most instrumental in promoting this inflammatory reaction?

A	E Selectin	B	Hageman factor	C	Interferon gamma
D	Lysozyme	E	Prostacyclin		

A 50-years old male patient, admitted in Orthopaedic unit of a tertiary care hospital, was successfully treated for osteomyelitis due to methicillin-resistant Staphylococcus aureus (MRSA). High doses of the antibiotic that was most probably used in this patient may cause which of the following adverse effects?

A	Alopecia	B	Blurred vision	C	Hallucinations
D	Hepatitis	E	Impaired hearing		

A 45-years old man working in a poultry farm came to the Medical OPD with 3-days history of cough, fever and body aches. Some of his other working colleagues had the same problem. He was provisionally diagnosed as a case of bird flu. What will be the best drug for the treatment of this patient and for the prophylaxis of attending physician?

A	Acyclovir	B	Famciclovir	C	Maraviroc
D	Oseltamivir	E	Ganciclovir		

The Federal Health Ministry decided to check the drug inventory of the Pharmacy shops throughout the country by making surprise visits to the drug market. It was during such a visit when the Federal Drug Inspector found outdated preparations of Tetracycline in one of the shops. Which of the following adverse effects might be caused by the expired preparations of Tetracycline?

A	Fanconi syndrome	B	Irritable Bowel Syndrome	C	Lambert-Eaton syndrome
D	Polycystic ovary syndrome	E	Sjogren's syndrome		

Plasma half-life of a drug is an important pharmacokinetic parameter that can be calculated if its Clearance and Volume of distribution are known. What will be the half-life of a drug if its Clearance is 7 L/h and has a Volume of distribution of 10 L?

A	01 hour	B	02 hours	C	03 hours
D	04 hours	E	05 hours		

A Pharmacist working in a tertiary care hospital was asked to identify a route of drug administration for drug X which could avoid completely the hepatic first-pass effect. Which of the following routes of drug administration might have been suggested by the pharmacist?

A	Oral route for the tablets of drug X	B	Oral route for the syrup of drug X	C	Rectal route for the enema of drug X
D	Rectal route for the suppository of drug X	E	Sublingual route for the tablets of drug X		

A drug addict male patient was diagnosed as a case of gonorrhea. The Physician prescribed some penicillin. Being aware of the fact that drug addicts are notorious regarding drug compliance, the Physician intended to prolong the duration of action of the penicillin thus decreasing the frequency of dosing to improve compliance. He added Probenecid to the penicillin in order to exploit the therapeutic drug interaction between the two drugs. At which of the following sites this drug interaction does take place?

A	At the site of absorption	B	At the site of distribution	C	At the site of drug metabolism
D	At the site of excretion	E	At the target site of drug action		

A child touches a lit candle and within several hours there is marked erythema of skin of the fingers of child left hand and small blisters appear on finger pads. Which of the following term best describes the process?

A	Abscess formation	B	Fibrinous Inflammation	C	Keloid formation
D	Serous inflammation	E	Ulceration		

On day 28 of her menstrual cycle, a 27 year old woman experiences the onset of menstrual bleeding that lasts for 5 days. She has had regular cycles since menarche. Which of the following processes most likely occurs in her endometrial cells to initiate the onset of menstrual bleeding?

A	Apoptosis	B	Atrophy	C	Caseous necrosis
D	Hypertrophy	E	Liquefactive necrosis		

An inspector charged a factory owner for exploiting child labor. The owner however says that labor isn't a Child. In view of Factory Act 1948, being a Forensic Specialist if you have to justify or nullify the point of owner then what X-rays would be beneficial for you?

A	Lower end of Radius and Ulna	B	Skull	C	Upper end of humerus
D	Upper end of radius and ulna	E	Xiphisternum		

A 24-year-old primary gravida woman develops a positive IgM titre to Toxoplasma gondii in her eighth month. She should be advised by her physician that:

A	This child and all future fetuses are likely to be infected	B	Newborn with a positive anti-toxoplasma IgG response should be treated with anti-parasitics	C	Future infection be avoided by vaccination
D	Retinochoroiditis can be prevented by drug treatment of an infant with positive IgM response	E	Major organ damage be reversed by prompt treatment of the newborn		

A 39-year-old premenopausal woman had a screening mammogram which revealed an abnormality in the right breast. She had no palpable masses on the breast exam. A mammographically localized surgical biopsy was done and revealed a small (0.9 cm) grade III infiltrating ductal carcinoma. Which tumor suppressor gene is mutated in breast carcinomas?

A	p33	B	p43	C	p53
D	p55	E	p63		

A patient with a non-healing skin lesion has that lesion biopsied to determine its cause. The Laboratory reports that the region has the characteristics of a stellate granuloma. Which of the following is most likely to be true of the causal agent?

A	It has lipopolysaccharide	B	It has pili	C	It has an exotoxin producer
D	It is a superantigen	E	It is intracellular		

A patient with a chronic cough was unresponsive to antibiotics. On lab exam of sputum fungal hyphae were seen. The doctor prescribed Ketoconazole because it inhibits the synthesis of an essential component of fungal cell membranes.					
A	Chitin	B	Carbohydrates	C	Ergosterol
D	Polysaccharide	E	Peptidoglycan		
A 40 years male patient is admitted in the hospital with fever and increased frequency of micturition. His urine was collected and sent for culture. Based on your knowledge of bacterial growth, what is the generation time of Escherichia coli?					
A	10 minutes	B	15 minutes	C	20 minutes
D	1 hour	E	24 hours		
A man presented with lesions having an inflamed circular border containing papules and vesicles surrounding a clear area of relatively normal skin; on the back. What is the most probable cause?					
A	Dermatophytes infection	B	Bacterial skin infections	C	Tinea Capitis
D	Tinea Versicolor	E	Viral infection		
A 24-year -old boy presents to the hospital with blood in his urine. Microscopic examination of his urine reveals the presence of eggs with terminal spines. In the interview, he admits that he has been working on his family's rice field occasionally since his early childhood. The most likely causal agent of his complaint is?					
A	Entamoeba Histolytica	B	Fasciolopsisbuski	C	Schistosoma haematobium
D	Schistosoma japonicum	E	Schistosoma mansoni		
A9-year-old girl sustains a small 0.5 cm long laceration to her right index finger while cutting a cucumber with a knife. Which of the following substances, on contact with the injured vascular basement membrane, activates both the coagulation sequence and the kinin system as an initial response to this injury?					
A	Thromboxane	B	Hageman factor	C	Histamine
D	Plasmin	E	Platelet activating factor		
A 50-year-old man is having fever of 101 oF and generalized body aches with cough and loss of taste as well. He had no breathing problem and his oxygen saturation is also within normal range. What will be the most desirable management in this case?					
A	He should be hospitalized	B	Should be put on oxygen at home	C	Start symptomatic treatment at home
D	Tested for COVID-19, if positive and with no complication he should be isolated at home with symptomatic treatment	E	Use of oral antibiotics and no need of isolation		
Bacillus anthracis is a principal pathogen of a disease known as "anthrax" which primarily infects animals like goats and cattle and is transmitted to humans through ingestion or inhalation of spores. What are the two important virulence factors of this organism?					
A	Capsule & Enterotoxins	B	Capsule & Exotoxins	C	Exotoxins & Enterotoxins
D	Endotoxins & Capsule	E	Endotoxin & Exotoxin		
A culture isolate from a patient with subacute endocarditis is reported to be gram-positive and possess a complex carbohydrate cell wall. What is the most likely taxonomic group of the causal agent?					
A	Fungus	B	Parasite	C	Prion
D	Prokaryote	E	Virus		
A man with a throat infection was treated with Clindamycin. After receiving 7 days of treatment of the antibiotic he developed severe diarrhea. What could be the most probable cause?					
A	Clostridium difficile overgrowth	B	Clostridium Tetani overgrowth	C	Disturbance in normal flora
D	Multiple bacterial overgrowth	E	Staphylococcus aureus to overgrowth.		
An obese diabetic woman presents with a complaint of red and painful skin in her abdominal skin folds. Examination reveals a creamy white material in the skin folds. Microscopic examination of the exudate reveals oval budding structures mixed with more budding elongated forms. The most likely causal agent is					
A	Aspergillus fumigatus	B	Candida albicans	C	Epidermophyton

D	Microsporumcanis	E	Sporothrixschenckii		

A 43-year-old woman has had a chronic cough with fever and weight loss for the past one month. A chest radiograph reveals multiple nodules from 1 to 4 cm in size, some of which demonstrate cavitation in the upper lobes. A sputum sample reveals the presence of acid fast bacilli. Which of the following cells is the most important in the development of her lung lesions?

A	Fibroblasts	B	Mast cells	C	Macrophages
D	Neutrophils	E	Platelets		

For many of the antigenic changes seen in Neisseria gonorrhoeae and Borrelia recurrentis, the cause of relapsing fever was not transposons. What could be the cause for these antigenic changes?

A	Phages	B	Plasmids	C	Programmed rearrangements
D	Transduction	E	Transformation		

Your patient is a 25-year-old man with a urethral discharge. Gram stain of the pus reveals many neutrophils but no bacteria. Which of the following organisms is the most likely cause?

A	Candida Albican	B	Clostridium perfringens	C	Chlamydia trachomatis
D	Haemophilus ducreyi	E	Treponema pallidum		

A young man detected positive for HIV by ELISA was sent to a specialist for confirmation of the disease and treatment. The specialist advised PCR for confirmation. What does PCR detect?

A	PCR detects antibodies in the specimen	B	PCR determines body immunity against AIDS	C	PCR amplifies tiny quantities of the HIV DNA present, than detect it.
D	PCR measure antibodies against the HIV DNA present	E	PCR directly measure antigens of the HIV present.		

A 19-year-old man incurs a stab wound to the chest. The wound is treated in the emergency room. Two months later there is a firm, 3 x 2 cm nodular mass with intact overlying epithelium in the region of the wound. On examination, the scaris firm, but not tender, with no erythema. This mass is excised and microscopically shows fibroblasts with abundant collagen. Which of the following mechanisms has most likely produced this series of events?

A	Development of a fibrosarcoma	B	Foreign body response from suturing	C	Keloid formation
D	Poor wound healing from diabetes mellitus	E	Staphylococcal wound infection		

A health facility in the rural area faced an increased number of AIDS cases. The doctors decided to provide the facility with a cheap reliable screening test. Which one of the below-mentioned tests will be best?

A	Culture	B	ELISA	C	PCR
D	Viral nucleic acid testing	E	Western blot		

A36-year-old woman has been taking acetylsalicylic acid (aspirin) for arthritis for the past 4 years. Her joint pain is temporarily reduced via this therapy. However, she now has occult blood identified in her stool. Which of the following substances is most likely inhibited by aspirin to cause this complication?

A	Bradykinin	B	Hageman factor	C	Interleukin-1
D	Leukotriene B4	E	Thromboxane		

Year 4 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 characteristics of objectives should be kept in mind?

A	Complex	B	Costly	C	Independent of time
D	Measurable	E	Over-ambitious		

A 04 year-old child was brought to the Ophthalmology by his parents with the complaints of Right eye deviation towards the nose. On examination/Cycloplegic Refraction, the eye becomes straight with +6D. What is the most probable diagnosis?

A	Accommodative esotropia	B	Amblyopia	C	Hypermetropia	
D	Myopia	E	Presbyopia			

A convict whose family or relations weren't known and no biological samples were available with jail authorities escaped from the jail. A dead body reassembling him was found in the nearby forest, but the face was mutilated. His positive identity can be determined established by:

A	Anthropometry	B	Blood group	C	DNA Profiling	
D	Fingerprinting	E	HLA typing			

Malaria is a life-threatening disease caused by parasites that are transmitted to people through the bites of infected female Anopheles mosquitoes. A person is travelling to an area where malaria is highly prevalent in the month of July. WHO recommends protection for all people at risk of malaria with effective malaria prevention. What will be the best form of malaria preventive measure?

A	Antimalarial drugs	B	Fumigation	C	Indoor residual spraying (IRS)	
D	Insecticide-treated mosquito nets	E	Vaccines against malaria			

A 10-year-old girl was brought to the emergency with a prolapse. Per rectal examination revealed small worms that resemble whips attached to the mucosa. A stool sample reveals eggs that are barrel-shaped with bipolar plugs. Which of the following is the most likely cause?

A	Ascarislumbricoides	B	Echinococcusgranulosus	C	Entamoeba histolytica	
D	Enterobiusvermicularis	E	Trichuristrichuria			

Government has started vaccination for COVID-19 at mass level. Which of the following examples of prevention can be most suitably coined to vaccination against COVID-19?

A	Primal prevention	B	Primodial prevention	C	Primary prevention	
D	Secondary prevention	E	Tertiary prevention			

An episode of marked chest pain lasting 4 hours brings a 51-year-old man to the emergency room. He is found to have an elevated serum creatine kinase. An angiogram reveals a complete blockage of the left circumflex artery 2 cm from its origin. Which of the following substances would you most expect to be elaborated around the region of tissue damage in the next 3 days as an initial response to promote healing?

A	Complement component C3b	B	Histamine	C	Immunoglobulin G	
D	Leukotriene B4	E	Vascular endothelial growth factor			

88 A two-years-old boy is brought to the OPD with the complaints of coryza and fever for the last four days. Today the mother noticed a rash on his forehead, along the hairline and behind the ear. On examination the child also had conjunctivitis. The rash is maculopapular. This child is unvaccinated. There are many children suffering from the same illness in the neighborhood. What specific sign will you look for before the appearance of rash?

A	Koplik spots	B	Membrane on tonsils	C	Oral ulcers.	
D	Strawberry tongue	E	Cracked lips			

89 A 40-year-old man underwent kidney transplantation. Two months after transplantation, he developed a fever and feature suggestive of bilateral diffuse interstitial pneumonia. Which of the following is the most likely etiologic agent?

A	Herpes Simplex Virus	B	Cytomegalovirus	C	Epstein-Barr virus	
D	Varicella-zoster virus	E	Human Herpes Virus 8			

79 Year 4 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 characteristics of objectives should be kept in mind?

A	Complex	B	Costly	C	Independent of time	
D	Measurable	E	Over-ambitious			

80 A 04 year-old child was brought to the Ophthalmology by his parents with the complaints of Right eye deviation towards the nose. On examination/Cycloplegic Refraction, the eye becomes straight with +6D. What is the most probable diagnosis?

A	Accommodative esotropia	B	Amblyopia	C	Hypermetropia	
D	Myopia	E	Presbyopia			

81	A convict whose family or relations weren't known and no biological samples were available with jail authorities escaped from the jail. A dead body reassembling him was found in the nearby forest, but the face was mutilated. His positive identity can be determined established by:						
	A	Anthropometry	B	Blood group	C	DNA Profiling	
	D	Fingerprinting	E	HLA typing			
82	Malaria is a life-threatening disease caused by parasites that are transmitted to people through the bites of infected female Anopheles mosquitoes. A person is travelling to an area where malaria is highly prevalent in the month of July. WHO recommends protection for all people at risk of malaria with effective malaria prevention. What will be the best form of malaria preventive measure?						
	A	Antimalarial drugs	B	Fumigation	C	Indoor residual spraying (IRS)	
	D	Insecticide-treated mosquito nets	E	Vaccines against malaria			
83	A 10-year-old girl was brought to the emergency with a prolapse. Per rectal examination revealed small worms that resemble whips attached to the mucosa. A stool sample reveals eggs that are barrel-shaped with bipolar plugs. Which of the following is the most likely cause?						
	A	Ascarislumbricoides	B	Echinococcusgranulosus	C	Entamoeba histolytica	
	D	Enterobiusvermicularis	E	Trichuristrichuria			
84	Government has started vaccination for COVID-19 at mass level. Which of the following examples of prevention can be most suitably coined to vaccination against COVID-19?						
	A	Primal prevention	B	Primodial prevention	C	Primary prevention	
	D	Secondary prevention	E	Tertiary prevention			
85	An episode of marked chest pain lasting 4 hours brings a 51-year-old man to the emergency room. He is found to have an elevated serum creatine kinase. An angiogram reveals a complete blockage of the left circumflex artery 2 cm from its origin. Which of the following substances would you most expect to be elaborated around the region of tissue damage in the next 3 days as an initial response to promote healing?						
	A	Complement component C3b	B	Histamine	C	Immunoglobulin G	
	D	Leukotriene B4	E	Vascular endothelial growth factor			
86	A 22 year old woman with excessive vaginal bleeding comes to the hospital after an illegal abortion at a private clinic. According to the attending doctor, the fetus organs were formed. Which section of the Pakistan Penal Code will be applied in this case?						
	A	337 A	B	337 B	C	338 A	
	D	338 B	E	339			
87	In a Primary Healthcare Center, a critical suicidal poisoning case was brought in for management. What is the foremost duty of a Registered Medical Practitioner?						
	A	Call the girlfriend and inquire history	B	Inform magistrate	C	Inform police	
	D	Not required to inform authority	E	Emergency treatment			
88	A two-years-old boy is brought to the OPD with the complaints of coryza and fever for the last four days. Today the mother noticed a rash on his forehead, along the hairline and behind the ear. On examination the child also had conjunctivitis. The rash is maculopapular. This child is unvaccinated. There are many children suffering from the same illness in the neighborhood. What specific sign will you look for before the appearance of rash?						
	A	Koplik spots	B	Membrane on tonsils	C	Oral ulcers.	
	D	Strawberry tongue	E	Cracked lips			
89	A 40-year-old man underwent kidney transplantation. Two months after transplantation, he developed a fever and feature suggestive of bilateral diffuse interstitial pneumonia. Which of the following is the most likely etiologic agent?						
	A	Herpes Simplex Virus	B	Cytomegalovirus	C	Epstein-Barr virus	
	D	Varicella-zoster virus	E	Human Herpes Virus 8			
90	The SPIKES model is used for 'Breaking Bad News' in heath care settings. What do the two 'Ss' in the SPIKES model stand for?						

	A	'Seeing the patient with Empathy' and 'Strategy'	B	'Setting up the interview' and 'Strategy and summary'	C	'Setting up the interview' and 'Suspending medical jargon'	
	D	'Sitting the patient down' and 'strategy and summary'	E	'Sitting the patient down' and 'Suspending medical jargon'			
91	A 40-year-old woman presented with diplopia and other signs of cranial nerve weakness. History reveals she grows her own vegetables and likes to preserve them in jars that she prepares at home. She is fond of her preserved string beans, which is what she ate uncooked in a salad for dinner last night. Which one of the following is the most likely cause of this clinical picture?						
	A	Bacillus anthracis	B	Clostridium botulinum	C	Clostridium perfringens	
	D	Clostridium tetani	E	Listeria monocytogenes			
92	A 40 years old man, generally fit and healthy underwent a right inguinal hernia repair. The surgery was clean and uneventful. What is the expected rate of infection of the surgical wounds?						
	A	0%	B	1-2%	C	5-6%	
	D	>10%	E	>15%			
93	A young man presented in hospital with chronic ill health. Doctors suspected AIDS. The presumptive diagnosis of HIV infection is often made by the detection of antibodies in the patient's serum to the protein of HIV using the enzyme-linked immunosorbent assay (ELISA) test. The protein is						
	A	gp122	B	gp162	C	gp42	
	D	p24	E	p30			
94	A man in late thirties presented to the Dermatology OPD of a tertiary care hospital with complaint of crusted ulcers on his hands and forehead since 3 months. After laboratory confirmation he was diagnosed with Cutaneous Leishmaniasis. Which of the following statements about Cutaneous Leishmaniasis is the most appropriate?						
	A	Biologically transmitted vector borne disease	B	Mechanically transmitted vector borne disease	C	Transmitted by direct Contact	
	D	Transmitted by in direct contact	E	Vehicle borne infectious disease			
95	A case of suicidal poisoning was brought to the emergency department of a tertiary care hospital. The on duty doctor decided to do Gastric Lavage. In which of the following poisoning Gastric Lavage is indicated?						
	A	Carbolic Acid	B	Convulsant Poisoning	C	Hydrocholic Acid	
	D	Oxalic Acid	E	Sulphuric Acid			
96	A mother takes her 6 year old son to her general practitioner (GP) extremely anxious because the child has that morning stabbed himself with a needle he found in a park frequently used by drug users. Apart from a minor scratch to the right hand the child is otherwise well and has no past medical history of note. What will be the most appropriate action for the GP at this consultation?						
	A	CD 4 count will be effected initially	B	First test to be performed is western blot test	C	Perform complete blood count and ESR	
	D	Reassure the mother and suggest an accelerated course of Hepatitis B vaccine	E	Test the child for Hepatitis C, HIV, Hepatitis B surface antigen			
97	A 44 year old man was found dead at his residence with two gunshot wounds on his chest. Which inquest system will be used to investigate this case?						
	A	Coroner's Inquest	B	Magistrate's Inquest	C	Medical Examiner's System	
	D	Police Inquest	E	Procurator Fiscal			
98	A boy has been referred to the department for age determination. After dental examination, it was found that his 2nd permanent molar has erupted. What is the probable age?						
	A	6 years	B	8 years	C	10 years	
	D	12 years	E	14 years			

99	Measles viruses are transmitted through airborne droplets, and is one of the leading causes of respiratory infections mostly seen in children of the developing countries. Which of the following statements is the most suitable regarding measles?						
	A	Animals are the reservoirs	B	Humans are the only reservoir	C	Infection confers immunity only for first few years of life	
	D	Only one serotypes of the virus has been identified	E	The infected mother cannot transmit infection to child during communicability period			
100	A 09-months-old infant was brought by his mother with the complaints of lacrimation and sticking of lids in the right eye since birth off and on. The condition improves with antibiotics drops but recurs when topical drops are stopped. What is the most probable diagnosis in this patient?						
	A	Infantile glaucoma	B	Keratitis	C	Nasolacrimal duct obstruction	
	D	Viral kerato-conjunctivitis	E	Xerophthalmia			
101	Mrs Irfan delivered a healthy male baby at home 04 days back and now presents to OPD with fever (101° F), heavy vaginal bleeding and lower abdominal pain. She feels very weak and cannot take care of her baby. On examination she is tender in the hypogastric area. Ultrasound pelvis shows retained products of conception. What is the definitive treatment of this condition?						
	A	Antibiotics and NSAIDs	B	Antibiotics and misoprostol	C	Analgesics and reassurance	
	D	Analgesics and reassurance	E	Examination under anaesthesia			
102	A 40 year old male patient visited the Ophthalmology OPD with the complaints of decreased vision while driving at night. The same problem was also felt while reading and on exposure to sun light. On examination, his visual acuity was 6/6, IOP 15 mm of Hg with clear cornea. What is the most likely diagnosis in this patient?						
	A	Christmas tree cataract	B	Cortical cataract	C	Nuclear cataract	
	D	Posterior subcapsular cataract	E	Radiation cataract			
103	Natural history of disease is the way a disease unfold itself in the absence of treatment and prevention. The interaction of which of the following make the natural history of disease in the pathogenesis phase?						
	A	Agent and man	B	Agent, man and pre-pathogenesis	C	Agent, man and environment	
	D	Pre-pathogenesis and post pathogenesis	E	Post pathogenesis phase only			
104	In an incident reported to Pakistan Medical Commission (PMC), wherein a surgeon was reported to operate on a major surgery without specialist anesthetist. The disciplinary board at PMC awarded Professional death sentence to the concerned surgeon. Which of the following is true regarding professional death sentence?						
	A	Death by hanging	B	Erasing of name from the medical register	C	Imprisonment for life	
	D	Monetary fine	E	Rigorous Imprisonment			
105	A 15 years old male patient presents to emergency with complaints of left sided nasal obstruction, headache and left sided nasal bleed for the last 1 year. The bleeding is profuse, recurrent and stops itself. On examination, the patient is pale looking, afebrile and there are mucoid discharges in the left nasal cavity. Posterior rhinoscopy shows fleshy mass in the nasopharynx obstructing the left choane. The neck of the patient does not show any lymph node. What's the most probable diagnosis?						
	A	Angiofibroma	B	Antro-choanal Polyp	C	Chronic sinusitis	
	D	Foreign Body Nose	E	Malignancy Nose			
106	During laparotomy of a 20 year old girl, a pair of scissors were left in the abdominal cavity of the patient. Who among the following is responsible for this type of negligence?						
	A	Anesthetist	B	House Resident	C	Surgeon	
	D	Surgical Nurse	E	Surgical Technician			

107	A group of 3rd year medical students were asked to formulate a health-related research synopsis. What will be the first step in the conduction of Health System Research?					
	A	Affordability	B	Literature search	C	Problem identification
	D	Setting of aim and objectives	E	Statement of the problem		
108	The students of third professional MBBS were discussing the medicolegal aspects of HIV disease. A student asked his fellows, which of the following body fluid has more Viral Load for HIV?					
	A	Breast Milk	B	Sebaceous Fluid	C	Saliva
	D	Sweat	E	Urine		
109	A 23 years old lady, married few months ago has presented to the emergency department with sudden onset, severe, right iliac fossa pain and vomiting for the past 24 hours. O/E: She looks pale and is cold and clammy, with a pulse of 120/minute and a BP of 80/40. Which of the following diagnosis you must immediately exclude?					
	A	Acute hepatitis	B	Acute appendicitis	C	Ruptured Ectopic pregnancy
	D	Acute Cholecystitis	E	Pyelonephritis		
110	A group of hikers came across the skeletal remain of a human. The same was shifted to Department of Forensic Medicine for examination. Which of following will help the examiner to study the gender most accurately?					
	A	By doing radiological studies	B	By examining height and width of nose	C	By examining the muscle attachments of pelvis
	D	By studying pelvis, base of skull, forehead and jaw	E	By using certain formulas		
111	A 20-year-old man is complaining of sore throat for the past 3 days. On physical examination, his temperature is 38oC, the pharynx is red, and several tender submaxillary nodes are palpable. Of the following, which one the most likely organism to cause this infection?					
	A	Epstein-Barr Virus	B	Haemophilus influenza	C	Parvovirus B19
	D	Streptococcus pneumoniae	E	Streptococcus sanguis		
112	In a Health care facility in Orakzai agency, hospital waste disposal is a major problem as incineration facility is not available. Which of the following will be the most appropriate method of hospital waste disposal?					
	A	Dumping	B	Encapsulation	C	Inertization
	D	Safe burying	E	Segregation		
113	A case of poisoning was brought to a tertiary care Hospital. On duty doctor is a Junior House Officer. A detailed history for the case was presented to the on call doctor and he advised the JHO to start with hydration and Universal Antidote. Talking about Universal Antidote, which of the following is found to be in highest concentration?					
	A	Ground mustard	B	Magnesium oxide	C	Powdered charcoal
	D	Tannic acid	E	Water		
114	A child presents to ENT OPD with complaints of high grade fever, pain throat, difficulty swallowing. On examination, the child is running high grade fever 102`F with congested throat and symmetrical exudates over both the tonsils. The neck shows palpable and tendered level 2 nodes on both sides. What's the most probable diagnosis?					
	A	Diphtheria	B	Epiglottitis	C	Pharyngitis
	D	Quincy	E	Tonsillitis		
115	A 20 years old male came to the Ophthalmology OPD with redness and foreign body sensation in the eyes since 48 hours. He had common cold-like symptoms. Two members of his family had similar complaints. On examination, his Visual Acuity, IOP and pupils were found normal. Pre-auricular lymphadenopathy was noticed by the consultant. What is the most probable diagnosis?					
	A	Adeno Viral conjunctivitis	B	Bacterial conjunctivitis	C	COVID-19 related Conjunctivitis
	D	Trachoma	E	Vernal conjunctivitis		
116	A 10 years old female child presents with the complaints of sore throat, fever and pain during swallowing for the last 4 years that is recurrent and intermittent with a frequency of 1 episode per year. On examination, the throat is congested; neck does not show any palpable node. Blood picture shows high TLC. What's the best line of treatment for this child?					

	A	Antacids	B	Penicillin & NSAIDs	C	Pharngectomy	
	D	Reassurance	E	Tonsillectomy			
117	A young doctor conducted an autopsy a year ago. The honorable court summoned him for evidence recording. Which of the following in court proceedings is called as double edged sword?						
	A	Arguments by the counsel of the deceased	B	Cross examination	C	Police investigation	
	D	Re-examination	E	Statement of medicolegal officer			
118	While teaching the topic of PUO, a physician explained the most common causes of this condition to year 3 MBBS students. Which of the following conditions is considered to be the most common cause of PUO in a developing country (once called a third world country)?						
	A	Brucellosis	B	Herpes simplex Virus infection	C	Malaria	
	D	Syphilis	E	Tuberculosis			
119	A 20 year-old female came to the OPD with the complaints of redness in the right eye, grittiness and watery discharge. On examination Regurgitation test was negative, cornea clear, conjunctival redness observed only in the temporal side. Which of the following treatments will be more appropriate in this patient?						
	A	Antiviral drugs	B	Broad spectrum antibiotics	C	Oral antibiotics	
	D	Strong steroid only	E	Topical artificial tears along with weak steroid			
120	An adult patient presents with complaints of nasal obstruction and headache for the last 1 year. On examination the nasal mucosa is congested with thick mucopurulent discharges in both the nasal cavities and post nasal dripping. Nasal septum is deviated and both the turbinates are enlarged. Patient has history of nasal trauma. What's the most probable diagnosis?						
	A	Allergic Rhinitis	B	Chronic Rhinosinusitis	C	Fungal Rhinosinusitis	
	D	Nasal Polyposis	E	Vasomotor Rhinitis			

	A cancer patient with chemotherapy has to have her intravenous port revised after it becomes blocked and the catheter is found to contain bacterial contaminants. Which of the following is most likely to be a factor in this pathogenesis?					
	A	Biofilm production	B	Ergosterol containing membrane	C	Peptidoglycan layer
	D	Possession of IgA protease	E	Possession of Pilli		
	Resistance to antibiotics in bacteria especially in animals is mainly due to the injudicious use of antibiotics. This is mainly due to genetic information transfer between viable bacteria. The genetic transfer between viable bacteria occurs by					
	A	Conjugation	B	Cell fusion	C	Recombination
	D	Transformation	E	Transduction		
	An adult female patient was admitted in the CCU (Coronary Care Unit) with CCF (Congestive Cardiac Failure). The Doctor-on-duty while intending to give her a loading dose of Digoxin, wrote in the chart-order "Digitalize rapidly". Which of the following pharmacokinetic parameters of Digoxin most probably led the Doctor to go for rapid digitalization (by giving loading dose of Digoxin)?					
	Plasma Clearance		B	Plasma Half-life	C	Protective index
	Therapeutic index		E	Therapeutic window		
	A pharmacologist was performing experiments on large number of guinea pigs in his laboratory using drug X. His experiments had multiple goals but he was principally interested in finding the dose of drug X causing specific toxic effect in relation to its effective dose. Which of the following parameters might describe the best his major focus of interest?					
	Median Effective dose		B	Median Toxic dose	C	Protective index
	Therapeutic index		E	Therapeutic window		

	A 40-years old lady, suffering from myasthenia gravis, was prescribed an antibiotic to treat some concurrent infection. Which of the following antibiotics may interfere with cholinergic transmission and thus can lead to serious consequences in this myasthenic patient?				
	Benzylpenicillin	B	Ceftriaxone	C	Ciprofloxacin
	Erythromycin	E	Gentamicin		
	A Pharmaceutical Chemist working in an international pharmaceutical company was making a batch of Co-trimoxazole. At which of the following ratios, the Chemist shall mix the raw materials of trimethoprim and sulfamethoxazole to make Co-trimoxazole?				
	1 : 1	B	1 : 2	C	1 : 3
	1 : 4	E	1 : 5		
	A middle-aged male intended to have a business tour to an area known to be endemic for malaria. His family doctor advised him in detail about the protective measures against malaria. Which of the following drugs will be a good choice for chemoprophylaxis against malaria?				
	Artemether	B	Fansidar (Sulfadoxine + Pyrimethamine)	C	Halofantrine
	Mefloquine	E	Quinine		
	An athlete develops acute throat infection. In addition to local acute inflammatory changes, he develops fever and malaise. These constitutional symptoms are mediated by:				
	C3a	B	Histamine	C	IL-1 & TNF
	Prostacyclin	E	Thromboxane A2		
	A child aged 5 years was brought to the Otorhinolaryngology OPD with fever, sore throat and painful swallowing. Throat examination revealed a thick, gray coating. Vaccination history disclosed that the child was not vaccinated. Which of the following drugs might be a good choice as empirical therapy for the child?				
	Ampicillin	B	Cephradine	C	Ciprofloxacin
	Erythromycin	E	Gentamicin		
	A Traffic Sergeant while patrolling on a highway in the UK, convicted a truck driver of drunk driving after doing breathalyzer test, although the driver argued repeatedly of having drunk only moderate quantities of alcohol last night. Blood samples were taken and sent to the laboratory. The results confirmed blood alcohol concentrations higher than the legal limits of safe driving. Which of the following properties of Alcohol led to the controversy between the driver's statement and the blood sample report?				
A	Alcohol has a long plasma half-life	B	Alcohol has narrow therapeutic index	C	Alcohol is an enzyme inducing drug
D	Alcohol is subject to zero-order kinetics	E	Alcohol takes a long time to reach its steady-state concentration		
	A 40-years old male hypertensive patient was prescribed Propranolol. He re-visited the physician after 03 weeks with the complaints of disturbed sleep and nightmares. His blood pressure was well-controlled. The physician switched over from Propranolol to another β-blocker, Atenolol, with the logic that the later drug would not be able to cross the blood-brain barrier and thus would not cause the CNS side effects. Which of the following properties of Atenolol led the Physician to go for this therapeutic strategy?				
A	Atenolol molecules are lipid soluble	B	Atenolol molecules are lipid soluble and ionized	C	Atenolol molecules are lipid soluble and un-ionized
D	Atenolol molecules are water soluble	E	Atenolol molecules are water soluble and ionized		
	A middle-age truck driver came to the BHU (Basic Health Unit) of his village with mild upper respiratory symptoms. Keeping in mind the profession of the patient, the Medical Officer intended to prescribe an anti-histaminic drug having negligible sedative properties. Which of the following anti-histamines has the desired properties?				
A	Chlorpheniramine	B	Cyclizine	C	Cyproheptadine
D	Loratidine	E	Promethazine		
	A child age 12 years was brought to the Emergency Department with overdose toxicity due to Aspirin. The Medical Officer on-duty directed his staff to make arrangements for haemodialysis. Which of the following pharmacokinetic parameters of Aspirin led the Medical Officer to go for the decision?				

A	Clearance	B	Plasma half-life	C	Steady-state concentration
D	Therapeutic index	E	Volume of distribution		

A Physician, while prescribing long-term Chloroquine for a 60-years old patient suffering from Rheumatoid arthritis, advised him to have regular eye check-ups every 03 months. Which of the following factors on the part of the patient or the drug might have made the Physician worry about the patient's vision?

A	Old age of the patient	B	Re-distribution of Chloroquine to some indifferent tissues	C	Selective distribution of Chloroquine to some specific tissues
D	Very large Volume of distribution of Chloroquine (13000 Liters)	E	Very long plasma half-life of Chloroquine (214 hours)		

A female patient age 50 years was admitted to the Nephrology unit of a tertiary care hospital with chronic renal failure. She was on multiple dugs. The Professor incharge of the unit was worried about the plasma protein binding of these drugs. He discussed the case during the morning round with the TMOs (Trainee Medical Officers). Which of the following statements regarding plasma protein binding of drugs is NOT correct?

A	Acidic drugs are attached loosely to the plasma albumin	B	Drugs circulate partly free in the plasma and partly bound to the plasma proteins	C	Hypoalbuminaemia that occurs in chronic renal disease may adversely affect the plasma protein binding of drugs
D	On every molecule of plasma albumin, there are many sites for the attachment of basic drugs	E	On every molecule of plasma albumin, there are only two sites for the attachment of acidic drugs		