Personal information

Student

Date Of Birth

Batch No

Academic Session

Subject

Preprof Block I (Foundation II, Infection and Inflammation)

Exam

- (2210-10)

Marks

Total Marks

Marks Obtain

Paper Question & Answers Detail`s

The movement of drug from against the concentration gradient utilizing the energy of another molecule that is moving in the opposite direction is known as;	**1**

- A Antiport [T]
- B Active transport
- C Bulk flow
- D Symport
- E Uniport

Which of the following is the biologically active form of a drug?	**0**

- A Emollient
- B Elixir
- C Linctus
- D Poultice
- E Resin [T]

A patient with infectious mononucleosis presented to the medical OPD with fever and sore throat. He was prescribed ampicillin for 7 days after confirming that the patient was not allergic to penicillin. 3 days later the patient reported back complaining of rash and itching all over the body. This kind of non allergic rash can be classified as which of the following adverse effects?	**1**

- A Dependence
- B Hypersensitivity
- C Idiosyncrasy [T]
- D Tachphylaxis
- E Tolerance

The effect of two drugs give together was higher than the sum of their individual effects. This type of drug-drug interaction is	**1**

known as;	

- A Competitive antagonism
- B Inverse agonism
- C Neutral antagonism
- D Potentiation [T]
- E Summation

A patient suffering from insomnia was taking a sedative since last 2 months. He presented to the OPD complaining that even though he is still taking the drug in the same dose as before it is not effective anymore. Which of the following is the most likely responsible for this condition?	**1**

- A Anaphylaxis
- B Dependence
- C Resistance
- D Tachyphylaxis
- E Tolerance [T]

A sedative is to be administered to a patient suffering from insomnia. You have to choose either drug A with an ED50 of 100 and LD50 of 4000, or drug B with an LD50 of 700. Regarding these two drugs;	**0**

- A A has a narrow therapeutic window
- B A has a large therapeutic index [T]
- C A has low margin of safety
- D B has a small therapeutic index
- E B has a wide therapeutic window

Phenobarbitone was suggested to be prescribed to a neonate suffering from jaundice. Which of the following is the most probable reason for administration of phenobarbitone in neonatal jaundice?	**0**

- A It is an inverse agonist
- B It is a partial agonist
- C It is a physical antagonist
- D It is an enzyme inducer [T]
- E It is an enzyme inhibitor

A dosage of tablet phenytoin was given to a patient suffering from epilepsy. A constant amount of this drug is eliminated per unit time. Regarding the elimination of phenytoin;	**1**

- A Elimination depends on the drug concentration
- B Elimination remains constant [T]
- C Excretion increases with the increasing dose
- D Half life decreases with increasing the dose
- E The half-life remains constant

A patient presented to the medical OPD with the diagnosis of malaria. Chloroquine was administered as 4 tablets stat, 2 tablets after 6 hours and then 1 tablet BD for 2 days. Which of the following is the most likely reason of giving 4 tablets stat initially?	**1**

- A Chloroquine gets quickly redistributed
- B Chloroquine has a high clearance rate
- C Chloroquine has a short half life
- D The patient is in a state of medical emergency
- E The volume of distribution of chloroquine is high [T]

The correct sequence of pharmacokinetic phases a drug may pass through is;	**1**

- A Absorption, distribution, metabolism and excretion [T]
- B Absorption, metabolism, liberation and excretion
- C Administration, inhalation, absorption and excretion
- D Disintegration, absorption, elimination and expiration
- E Formulation, absorption, metabolism and excretion

Which of the following type of drug binds to a receptor site but does not produce any direct pharmacological effect?	0

- A Agonist [T]
- B Antagonist
- C Inverse agonist
- D Inverse partial agonist
- E Partial agonist

A child was brought to the emergency department with signs of anaphylactic reaction to bee sting and was treated with adrenaline. This is an example of which type of antagonism?	0

- A Chemical
- B Competitive
- C Non-competitive
- D Physiological [T]
- E Physical

In the presence of a competitive antagonist, the agonist log concentration effect curve is;	1

- A Not shifted right or left but shows a decreased maximum effect
- B Shifted to the right without a change in slope or maximum effect [T]
- C Shifted to the left without a change in slope or maximum effect
- D Shifted to the right with a decreased slope and maximum effect
- E d) Shifted to the left with a decreased slope and maximum effect

A patient 56 years old was admitted to the hospital with deep venous thrombosis, the consultant advised the anti-coagulant therapy. Which of the following route of drug administration should be avoided in this patient?	0

- A Oral
- B Intramuscular [T]
- C Intravenous
- D Subcutaneous
- E Sublingual

After a person ingests an overdose of an opioid analgesic, the plasma drug concentration is found to be 32 mg/L. How long will it take to reach a safe plasma concentration of 2 mg/L if the drug's half-life is 6 hours?	0

- A 1 week
- B 12 hours
- C 24 hours [T]
- D 48 hours
- E 72 hours

A patient is admitted to the emergency department for treatment of a drug overdose. The identity of the drug is unknown, but it is observed that when the urine pH is alkaline, the renal clearance of the drug is much greater than when the urine pH is acidic. The drug is probably a;	1

- A Nonelectrolyte
- B Strong acid
- C Strong base
- D Weak acid [T]
- E Weak base

A 35-year-old North American man complained to his physician of tingling sensation in his limbs and noted that his arms sometime felt heavy. The man recently diagnosed with pulmonary tuberculosis, had been receiving isoniazid and rifampin for 2 months. He was diagnosed with peripheral neuropathy, a known adverse effect of isoniazid. Which of the following events most likely caused the patient's symptoms and signs?	0

- A Allergic reaction to isoniazid
- B Allergic reaction to rifampin
- C Inherited deficiency of N-acetyltransferase [T]
- D Rifampin-induced inhibition of isoniazid metabolism

D Rifampin-induced inhibition of isoniazid metabolism

E Worsening of the disease, despite the therapy

A 59-year-old Asian man with atrial fibrillation presented to his physician complaining of red urine. The man had been receiving a standard dose of warfarin, which is an anticoagulant drug biotransformed by CYP2C9 isozyme. Which of the following was the most likely cause of the patient's disorder? — **0**

- A Decreased metabolism of CYP2C9
- B Decreased renal excretion of warfarin
- C Genetic polymorphism of CYP2C9 [T]
- D Increased CYP2C9 synthesis in a person of Asian origin.
- E Increased protein binding of warfarin

A 30- year old woman took a large dose of acetaminophen in aqueous solution to treat a severe headache. Two hours later, the pain was not diminished. Because acetaminophen should be effective in about 30 minutes after its oral administration, which of the following conditions most likely delayed the oral absorption of the drug in this patient? — **0**

- A A large volume of distribution of the drug
- B A very low clearance of the drug
- C Increase in the plasma half life of the drug
- D The administration of the drug in aqueous solution
- E The decrease in the intestinal peristalsis [T]

Streptococcus pneumoniae is a major pathogen of humans causing community acquired diseases and meningitis worldwide. Which one of the following is the immunogen in the vaccine against Streptococcus pneumoniae? — **0**

- A Capsular polysaccharide [T]
- B Endotoxin
- C Formaldehyde-killed organisms
- D Pilus protein
- E Toxoi d

Vaccines contain an active component (the antigen) which induces the immune response in the human body. Disease caused by which one of the following bacteria is prevented by a toxoid vaccine? — **0**

- A Bacteroides fragilis
- B Corynebacterium diphtheriae [T]
- C Neisseria meningitidis
- D Salmonella typhi
- E Vibrio cholerae

The amount of a pathogen that is required to establish an infection is called the "infectious dose". Pathogen A has an ID50 of 50 particles, pathogen B has an ID50 of 100 particles, pathogen C has an ID50 of 1,000 particles, pathogen D has an ID50 of 10,000 particles and pathogen E has an ID50 of 100,000 particles. of the given values, which pathogen is most virulent. — **1**

- A Pathogen A [T]
- B Pathogen B
- C Pathogen C
- D Pathogen D
- E Pathogen E

The degree of hemolysis on blood agar plate in laboratory is used to differente members of the genera Staphylococcus, Streptococcus and Enterococcus. Partial haemolysis of red blood cells due to bacterial enzyme "haemolysin" is called as; — **0**

- A Alpha haemolysis [T]
- B Beta haemolysis
- C Delta haemolysis
- D Gamma haemolysis
- E Theta haemolysis

Bacteria can be classified based on how they use oxygen.The organisms which can grow both in presence and absence of oxygen are termed as: — **1**

A Aerobes

B Anaerobes

C Facultative anaerobes [T]

D Strict aerobes

E Strict anaerobe

Bacteria divide asexually through a process of binary fission passing through four phases of growth. Phase of bacterial growth in which bacterial parent cell does not divide but there is vigorous metabolic activity is called as; **1**

A Continuous phase

B Death phase

C Lag phase [T]

D Log phase

E Stationary phase

Pathogenesis refers to the sequence of events during the course of an infection within the host, and the mechanisms giving rise to these events. Which of the following choices lists the steps of pathogenesis in the correct order? **1**

A adhesion, exposure, infection, invasion

B disease, infection, exposure, invasion

C exposure, adhesion, invasion, infection [T]

D infection, invasion, adhesion, exposure

E invasion, infection, adhesion, exposure

Some vectors such as mosquitoes and ticks may carry pathogens that can multiply within the bodies of vectors and be delivered to new hosts, usually by biting are called: **1**

A Biological vector [T]

B Mechanical vector

C Non-biological vector

D Plasmid vector

E Viral vectors

A genetic structure in a cell that can replicate independently of the chromosomes, typically a small circular DNA strand in the cytoplasm of a bacterium or protozoan. These self-replicating small circular DNA molecules present in bacterial cytoplasm are known as: **1**

A Chromatids

B Cosmids

C Plasmids [T]

D Plasmomeros

E Plastids

The bacterial cell wall is a complex, mesh-like structure essential for maintenance of cell shape and structural integrity. Cell wall projections from the cell surfaces of infectious agents which help in attachment to host cells are known as: **1**

A attachers

B enzymes

C ligands [T]

D receptors

E toxins

A CT scan of a 43-year-old woman with a parathyroid adenoma and hyperparathyroidism reveals extensive calcium deposits in the lungs and kidney parenchyma. These radiologic fi ndings are best explained by which of the following mechanisms of disease? **1**

A Arteriosclerosis

B Dystrophic calcification

C granulomatous inflammation

D metastatic inflammation [T]

E Tumor embolism

A 68-year-old man with a history of gastro esophageal reflux disease suffers a massive stroke and expires. The esophagus at autopsy shows red velvety appearance. Histologic examination shows intestine-like epithelium composed of goblet cells and surface cells. There is no evidence of nuclear atypia. Which of the following terms best describes this morphologic response to persistent injury in the esophagus of this patient?	**0**

- A Atypical hyperplasia
- B Complex hyperplasia
- C Glandular metaplasia [T]
- D Simple hyperplasia
- E Squamous metaplasia

Third party negligence refers to:	**1**

- A Negligence in which death of the patient occurs
- B Negligence of consultant doctor
- C Negligence of employers of hospital
- D Negligence of paramedical staff [T]
- E Negligence of patient

“Dichotomy” means	**0**

- A Criminal abortion
- B Criminal negligence
- C Fee sharing or fee splitting [T]
- D Issuing fake medical certificates
- E Writing medicines in a secret formula

“Casper Dictum” is pertaining to:	**0**

- A Electrocution
- B Essence of the crime
- C Identification of dead body
- D Primary flaccidity
- E Rate of decomposition of dead body in air, water and soil [T]

Medical examiner system for death investigations is prevalent in:	**0**

- A England
- B France
- C India
- D Pakistan
- E United states [T]

criminal responsibility with plea of insanity comes under:	**0**

- A Section 82PPC
- B Section 83PPC
- C Section 84PPC [T]
- D Section 85PPC
- E Section 44 PPC

“Perjury” means	**0**

- A Authentic evidence given in the court
- B Evidence given in criminal litigation
- C Evidence given by expert witness
- D False judgment given by the court
- E Giving false evidence willfully under oath [T]

A 30 years old male underwent septoplasty for a deviated nasal septum. During the surgery, the attending surgeon while removing the deviated portion of nasal septum inadvertently damaged the perpendicular plate of ethmoid behind the	

removing the deviated portion of nasal septum inadvertently damaged the perpendicular plate of ethmoid behind the cartilaginous septum which resulted in fracture of the cribriform plate. Post op, which complication has high chances of occurring	**0**

- A Anosmia
- B CSF rhinorrhea [T]
- C Decreased visual acuity
- D Orbital hematoma
- E Saddle nose deformity

A 5 years old male presented with complaints of nasal bleeding from the left side of the nose for the last 3 months. The bleed is mild, starts spontaneously, and stops by pinching the nose. He has no history of nasal surgery or nasal trauma. O/E there are dilated vessels seen on the anterior end of nasal septum on the left side. The cause for bleeding in this case is:	**0**

- A dry and warm environment
- B digital manipulation
- C foreign body nose
- D Little's area [T]
- E sinusitis

A 20 years old male was involved in a road traffic accident 3 days. He received trauma to the right temporal bone. He has now presented with complaints of decreased hearing right side. O/E the tympanic membrane appears intact, the tuning fork tests show a right conductive hearing loss which was confirmed by PTA showing a conductive element of 50db in the right ear. The likely cause for his hearing loss is:	**0**

- A cochlear damage
- B Eustachian tube dysfunction
- C hemotympanum
- D ossicular dislocation [T]
- E stapes fixation

A 45 years old female presented with complaints of hoarseness of voice from the last 2 years. She is a teacher by profession and has a history of voice abuse. O/E patient had bilateral vocal cord nodules at the junction of anterior one-third and posterior two-thirds of the vocal cords. micro laryngoscopy was done and nodules removed. At the time of discharge, what advice should be given to the patient:	**1**

- A avoid cold beverages and dry environment
- B change profession
- C take regular antacids
- D speech therapy sessions
- E voice hygiene and voice rest [T]

Emmetropia is defined as	**0**

- A A. The ability to see near objects clearly as image focuses behind the retina
- B B. The ability to see near objects clearly as image focuses in front of the retina
- C C. The ability to see both near and far objects clearly as image forms on the retina [T]
- D D. The ability to see far objects clearly as image focuses behind the retina
- E E. The ability to see far objects clearly as image focuses in front of the retina

Histologically which layer of the cornea is the thickest?	**0**

- A Epithelium
- B Stroma [T]
- C Bowman's membrane
- D Descemet's membrane
- E Endothelium

A mother brings her 2 month old male infant to eye OPD complaining of constant watering from his left eye since birth. He is diagnosed with congenital nasolacrimal duct obstruction. What is the best treatment option at this stage?	**0**

- A Probing and syringing
- B Lacrimal massage with topical antibiotic [T]

C Dacryocystorhinostomy

D Dacryocystorhinostomy with intubation

E Lacrimal massage with systemic antibiotic

A 35 year old lady presents to Eye OPD with a complaint of watery left eye for last few days. Examination shows a swollen red area of skin near medial canthus which is very tender to touch. What is your diagnosis?	**1**

A Bacterial keratitis

B Anterior uveitis

C Acute dacryocystitis [T]

D Acute dacryoadenitis

E Chronic conjunctivitis

A 62 year old man presents 2 days after right eye cataract surgery with severe pain and reduced vision in the same eye. On examination there is lid swelling,hypopyon and loss of red reflex. What is the most likely diagnosis?	**1**

A Corneal ulcer

B Chronic post op Endophthalmitis

C Acute anterior uveitis

D Allergic conjunctivitis

E Acute post op Endophthalmitis [T]

The chest X-rays and sputum analysis for the early detection of tuberculosis constitute:	**0**

A Primary prevention

B Secondary prevention [T]

C Tertiary prevention

D Medical treatment

E Primordial prevention

To control the rising incidence of non-communicable diseases, legislation based on tobacco control will be adopted to prevent onset of the risk behaviour. This prevention will be	**1**

A Primordial [T]

B Health promotion

C Specific protection

D Disability limitation

E Rehabilitation

If a child presents with protein energy malnutrition showing signs of loss of subcutaneous fat and weight reduction. The level of prevention suggested at this point is:	**0**

A Primordial prevention

B Health promotion

C Specific protection

D Early diagnosis and prompt treatment

E Disability limitation & rehabilitation [T]

Iodized salt is recommended instead of common salt in population living in hilly areas where there is a deficiency of iodine in the soil. This kind of advocacy pertains to:	**0**

A Health promotion

B Prompt treatment

C Specific protection [T]

D Disability limitation

E Rehabilitation

A high prevalence of carcinoma cervix was found to be there in one of the tribal areas of Pakistan. It was planned to provide free facility of pap smear at a rural health center in order to screen the local population for cervical cancer. The program faced a lot of resistance as it lacked:	**1**

A Accessibility

- B Affordability
- C Acceptability [T]
- D Effectiveness
- E Equity

A female of 30 years was receiving a drug for the treatment of malaria. A few weeks later she presented to medical OPD with blurred vision. Opthamlmoscopic examination revealed retinal damage. Which of the following drugs is most probably responsible for this adverse effect?	**1**

- A Amodiaquine
- B Artemesnin
- C Chloroquine [T]
- D Mefloquine
- E Primaquine

A 28-year-old office worker suffers from intense migraine headaches. Which of the following is a serotonin agonist useful for aborting an acute migraine headache?	**1**

- A Bromocriptine
- B Ephedrine
- C Ketanserin
- D Loratadine
- E Sumatriptan [T]

A 54-year-old woman presented with signs and symptoms consistent with an early stage of rheumatoid arthritis. Which of the following patient characteristics is the most compelling reason for avoiding celecoxib in the treatment of her arthritis?	**1**

- A History of alcohol abuse
- B History of gout
- C History of myocardial infarction [T]
- D History of osteoporosis
- E History of peptic ulcer disease

A 70-year-old man has a history of ulcer disease. He has recently experienced swelling and pain in the joints of his hands. His physician wants to begin therapy with an NSAID. Which one of the following drugs might also be prescribed along with the NSAID to reduce the risk of activating this patient's ulcer disease?	**1**

- A Allopurinol
- B Colchicine
- C Misoprostol [T]
- D Probenecid
- E Sulindac

A patient presents to the medical OPD with complaints of oral discharge and white lesions. The examination reveals whitish patches over the tongue and the oral mucosa. The patient reports of taking a broad spectrum antibiotic for 2 months before the appearance of these lesions. Which of the following is the most appropriate drug for the treatment of this patient?	**0**

- A Amphotericin B
- B Erythromycin
- C Isotretinoin
- D Metronidazole
- E Nystatin [T]

An 8-year-old child presented with brownish discoloured and deformed anterior teeth. History of having received an antibiotic about 4 years earlier was obtained. Which antibiotic could be responsible for the condition:	**1**

- A Chloramphenicol
- B Erythromicin
- C Tetracycline [T]
- D Trimethoprim
- E Sulfamethoxazole

Select the sulfonamide drug which is active against Pseudomonas and is used by topical application for prophylaxis of infection in burn cases:	1

- A Silver sulfadiazine [T]
- B Sulfadiazine
- C Sulfadoxine
- D Sulfamethoxazole
- E Trimethoprim

In the management of patients with AIDS, trimethoprim-sulfamethoxazole is commonly used to prevent infection resulting from?	1

- A Campylobacter jejuni
- B Mycobacterium avium-intracellulare
- C Neisseria gonorrhea
- D Pneumocystis jiroveci [T]
- E Treponema pallidum

If an aerobic gram-negative rod causing bacteremia proves to be resistant to aminoglycosides, the mechanism of resistance is most likely due to;	1

- A Changed pathway of bacterial folate synthesis
- B Decreased intracellular accumulation of the drug
- C Changed pathway of bacterial folate synthesis Formation of drug-trapping thiol compounds
- D Inactivation by bacterial group transferase [T]
- E Induced synthesis of beta-lactamases

Beta-lactamase production by strains of Haemophilus influenza and N gonorrhoeae confers resistance against penicillin G. Which of the following drugs is most likely to be effective against resistant strains of these organisms?	0

- A Amoxicillin
- B Ceftriaxone [T]
- C Clindamycin
- D Gentamicin
- E Vancomycin

Although it does not act at any histamine receptor and has no effect on histamine's metabolism, epinephrine reverses many effects of histamine. Epinephrine is a;	1

- A Chemical antagonist of histamine
- B Competitive inhibitor of histamine
- C Metabolic inhibitor of histamine
- D Noncompetitive antagonist of histamine
- E Physiologic antagonist of histamine [T]

A 55-year-old surgeon has developed symmetric early morning stiffness in her hands. She wishes to take a nonsteroidal anti-inflammatory drug to relieve these symptoms. Which drug is an NSAID that is appropriate for chronic therapy of her arthritis?	1

- A Acetaminophen
- B Hydroxychloroquine
- C Indomethacin
- D Naproxen [T]
- E Sumatriptan

A 37-year-old woman with urinary frequency, urgency, and pelvic pain presents to her primary care physician. She has an allergy to quinolones and penicillin. Urinalysis reveals nitrates, leukocytes, and blood. What is the most appropriate treatment for this patient?	0

- A Azithromycin
- B Cefazolin
- C Clarithromycin [T]
- D Erythromycin

◯ E Levofloxacin

A driver taking students of Northwest School of Medicine for an excursion trip to Kaghan Valley is complaining of severe sneezing and rhinorrhea. Which of the following drug is most appropriate to treat this patient?	**1**

- A Chlorpheniramine
- B Cyclizine
- C Diphenhydramine
- ◯ D Fexofenadine [T]
- E Promethazine

A 55-year-old woman is hospitalized for treatment of osteomyelitis. The infectious organism is found to be susceptible to gentamicin so she is started on a once-daily dose of intravenous gentamicin. Which of the following symptoms may be a signal to the physician to stop gentamicin therapy?	**1**

- A Eosinophilia
- B Headache
- C Nausea
- D Salivation
- ◯ E Tinnitus [T]

A 32-year-old woman in her third trimester presents with dysuria and urgency. The physician is reluctant to use trimethoprim–sulfamethoxazole. What risk is the physician worried about?	**1**

- A Gray baby syndrome
- ◯ B Kernicterus [T]
- C Limb defects
- D Premature labor
- E Trimethoprim–sulfamethoxazole is the best drug to use in this case

Which of the following drugs, administered orally, is most likely to be effective in the treatment of colitis caused by Clostridium difficile?	**1**

- A Ampicillin
- B Cefazolin
- C Tetracycline
- D Trimethoprim
- ◯ E Vancomycin [T]

An antifungal drug that binds to ergosterol forming “pores” that disrupt fungal membrane integrity is;	**0**

- A Amphotericin B [T]
- B Caspofungin
- ◯ C Fluconazole
- D Flucytosine
- E Terbinafine

A 30 year old man comes to a doctor complaining of fever and lymphadenopathy. He tells the doctor that he works in a farm. What type of infection has he got?	**1**

- A Fungal
- B Herpetic
- C Immunological
- D Viral
- ◯ E Zoonotic [T]

A child comes to a pediatrician with fever and a gray white membrane on the pharynx on examination. The doctor inquires from the mother about which vaccination has been done?	**0**

- A BCG
- B DTP [T]
- C Hepatitis B

D MMR

E OPV

The mechanism of action of activated charcoal is: **1**

A Absorbs poison

B Adsorbs poison [T]

C Causes purgation

D Increase elimination of absorbed poison

E Makes protective layer on gastric mucosa

Obturator foramen of pelvic bone in female is: **0**

A Large and hexagonal

B Large and oval

C Small and rectangular

D Small and rounded

E Small and triangular [T]

The Orbit of male skull is: **1**

A Hexagonal shaped

B Oral shaped

C Rectangular shaped

D Rounded in shape

E Square shaped [T]

Chromosomal pattern in Klinefelter syndrome is: **0**

A XX

B XY

C XXY [T]

D XO

E XYY

The least common pattern of finger prints is: **1**

A Accidental

B Ach

C Composite [T]

D Loop

E Whorl

Galton system of identification means: **1**

A Anthropometry

B DNA profiling

C Finger printing [T]

D Identification through congenital anomalies

E Superimposed photometry

Choose from the following items that can be labeled as fomite, provided it is contaminated from the secretions of patient suffering from an infectious disease: **1**

A Fish

B Meat

C Milk

D Towel [T]

E water

Rabies does not exist in England. Suppose by accident this disease is imported into the country and there was one case of this disease. Then this disease is classified as:	**0**

- A Endemic of disease
- B Exotic disease [T]
- C Hyper endemic disease
- D Pandemic disease
- E Sporadic disease

The time interval between invasions by an infectious agent into the host and the appearance of the first sign and symptom of disease in question. This time interval is known as:	**1**

- A Communicable period
- B Generation time
- C Incubation period [T]
- D Infectious period
- E Latent period

In a community typhoid fever was constantly present among children. Choose the most appropriate term from the following that indicates this situation:	**1**

- A Endemic [T]
- B Epidemic
- C Pandemic
- D Sporadic
- E Zoonotic

A high frequency of nosocomial infection or hospital acquired infection is an evidence of poor quality of health service delivery in a hospital. The most common cause of hospital acquired infection is:	**1**

- A Contaminated food
- B Contaminated hands of healthcare workers [T]
- C Wrong prescriptions by the doctors
- D Vertical transmission
- E Contaminated water

What is the single most important means of preventing transmission of infective pathogens?	**1**

- A Inadequate sterilization
- B Effective hand washing technique [T]
- C Personal protective equipment (PPE)
- D Cleaning the toilets
- E Sneezing, coughing or talking

What is the usual order of events in the chain of infection?	**0**

- A Portal of exit → portal of entry → reservoir of infection → organism → susceptible host → mode of transmission
- B Infectious organism → reservoir of infection → portal of exit → mode of transmission → portal of entry → susceptible host [T]
- C Infectious organism → mode of transmission → susceptible host → portal of exit → reservoir of infection → portal of entry
- D Portal of entry → infectious organism → susceptible host → reservoir of infection → portal of exit → mode of transmission
- E Reservoir of infection → portal of exit → mode of transmission → susceptible host → portal of entry → infectious organism

A child is born with cataract, cardiac malformation and deafness. The pediatrician advised serological testing to find the cause of these congenital malformations. This immunoglobulin that most probably will be detected is :	**1**

- A IgA toxoplasmosis antibodies
- B IgM toxoplasmosis antibodies
- C IgG measles antibodies
- D IgM measles antibodies
- E IgM rubella antibodies [T]

For the prevention of measles, various preventive measures are recommended. Choose from following that is the most cost

For the prevention of measles, various preventive measures are recommended. Choose from following that is the most cost effective	1

- A Improved nutrition
- B Improved sanitation
- C Isolation of cases
- D Measles immunization [T]
- E Prophylactic antibodies

Rabies can be prevented in human beings by giving anti rabies vaccine even after post exposure situation i.e. immunization is carried out after person is bitten by a rabid dog. Choose from the following situations that warrant contraindication for ant-rabies vaccine in category 3 (high risk) post exposure cases	0

- A Infants
- B HIV/AIDS patients
- C Patients who have renal transplant
- D There is no contraindication [T]
- E Women in first trimester of pregnancy

While formulating your research question on PICO format, the “O” denotes	0

- A Observation
- B Obtainable
- C Open-ended
- D Optimum
- E Outcome [T]

Your research supervisor has asked you to develop a research proposal on the topic “Medical students’ perception and satisfaction regarding online learning amid COVID-19 pandemic”. What will be your next step?	0

- A Identifying the problem [T]
- B Literature review
- C Research design
- D Setting objectives and hypothesis
- E Topic selection

You are conducting a longitudinal study to answer the research question “in adolescent population with clinically diagnosed depression, what is the likelihood of committing suicide in the 12 months after first diagnosis?" what will be the most likely purpose of this research question:	1

- A Descriptive
- B Diagnostic
- C Explanatory
- D Exploratory
- E Predictive [T]

A 50-year-old woman with history of QT prolongation is to be treated with an antibiotic for urinary tract infection. Which of the following antibiotic is contraindicated in this patient?	0

- A Amoxicillin
- B Ceftriaxone
- C Ciprofloxacin
- D Co-trimoxazole
- E Levofloxacin [T]

A patient suffering from a respiratory tract infection was started on a broad spectrum antibiotic. A few days later he presented with severe abdominal pain and gastrointestinal distress. Examination revealed pseudomembranes and treatment was initiated wit Vancomycin. Which of the following drugs is the most likely cause of this condition?	0

- A Amoxicillin [T]
- B Aztreonam
- C Benzyl Penicillin

D Imipenem

E Linezolid

A male of 25 years presented to medical emergency with chills and rigors. The lab investigations confirmed the diagnosis of malaria and treatment was given. A few months later he again presented with malaria which was considered to be a reactivation of a dormant form. Which of the following drugs should be used for the radical cure of the disease?	**1**

A Atovaquone

B Chloroquine

C Lumefantrine

D Primaquine [T]

E Quinine

A 30 year old man from Afghanistan comes to A & E with a history of intermittent fever and weight loss. He has skin pigmentation and hepatosplenomegaly. On investigation he has anemia and leucopenia. There are amastigotes on bone marrow biopsy. What is the most probable diagnosis?	**0**

A Hepatitis

B Herpes

C Malaria

D Leishmania [T]

E Tuberculosis

A 16 year old girl comes to emergency with a cat bite on her hand. She says it was a stray cat. On Gram stain of scrapings from the bite, it reveals small gram negative rods. Which microorganism is involved?	**0**

A Acinetobacter

B Brucella

C Francisella

D Pasteurella [T]

E Yersinia

A ten year old boy had high grade fever and sore throat. After that he developed light brown vesicles on the upper lip. The lesions are painful and recurrent but subside spontaneously. What is your most probable diagnosis?	**1**

A Acne

B Boil

C Carbuncle

D Furuncle

E Herpes [T]

A 15 year old boy comes to A & E complaining of rashes on the hands. The rash consists of hyperemic borders with vesicles. The boy also has broken nails. He gives a history that he is a dish washer in the nearby restraint. What is the most probable diagnosis?	**0**

A Bacterial infection

B Fungal infection

C Helminthic infection

D parasitic infection

E Viral infection [T]

6-year-old child has a history of recurrent infections with pyogenic bacteria, including Staphylococcus aureus and Streptococcus pneumoniae.The infections are accompanied by a neutrophilic leukocytosis. Microscopic examination of a biopsy specimen obtained from an area of soft tissue necrosis shows microbial organisms, but very few neutrophils. An analysis of neutrophil function shows a defect in rolling. This child's increased susceptibility to infection is most likely caused by a defect involving which of the following molecules?	**0**

A Complement C3b

B Integrins

C Leukotriene B4

D NADPH oxidase

E Selectins [T]

While shaving one morning, 23 years old male nicks his upper lip with the razor. Within a second after this injury, blood loss from a small dermal arteriole is reduced through;	**0**

- A Activated protein C
- B Fibrin polymerization
- C Neutrophil chemotaxis
- D Platelet aggregation
- E Vasoconstriction [T]

A 20-year-old male presents to OPD with 1 month history of chronic cough and fever. Bilateral pulmonary nodular interstitial infiltrates and enlargement of hilar lymph nodes are seen on chest radiograph. Acid fast bacilli are identified in sputum sample. Transbronchial biopsy reveal collections of epithelioid histiocytes and langhans giant cells. Which of the following mediators is most likely to contribute to giant cell formation?	**0**

- A Complement C3b
- B Interferon-gamma [T]
- C Interleukin-1
- D Leukotriene-B4
- E Tumor necrosis factor

Escherichia coil can be classified by their characteristic virulence properties and different mechanisms that cause disease. To which group does the verotoxin producing E.coli 0157:H7 serotype belong?	**0**

- A Enteroaggregative E.coli (EAEC)
- B Enterohaemorrhagic E.coli (EHEC) [T]
- C Enteroinvasive E.coli (EIEC)
- D Enteropathogenic E.coli (EPEC)
- E Enterotoxogenic E.coli (ETEC)

Majority of members of the enterobacteriacae family are motile. The organ of locomotion of bacteria is called:	**1**

- A capsule
- B flagella [T]
- C slime
- D fimbriae
- E outer membrane proteins

Enteric bacteria are mainly classified based on their ability to ferment various sugars including lactose. Which of the following bacteria is a non-lactose fermenter?	**1**

- A Klebsiella spp
- B Salmonella spp [T]
- C Enterobacter spp
- D Citrobacter spp
- E Escherichia coli

One of the following bacteria is a rapid lactose fermenter and is motile with flagella. It is one of the major pathogens that causes a broad range of hospital-acquired infections such as urinary tract infections, pneumonia, and wound infections. Name the possible pathogen.	**1**

- A Streptococcus pyogenes
- B Pseudomonas aeruginosa
- C Mycobacterium tuberculosis
- D Enterobacter aerogenes
- E Escherchia coli [T]

A 42-year-old man presented to a Gastroenterologist with pain epigastrium for the last 3 months. Endoscopic biopsy taken showed a 2-cm, sharply demarked, shallow ulceration of the gastric antrum. On microscopy, the specimen showed angiogenesis, fibrosis, and infiltration of mononuclear cells like lymphocytes, macrophages, and plasma cells. Which of the following term best describes this pathologic process?	**1**

- A Acute inflammation
- B Acute on chronic inflammation

- C Chronic inflammation [T]
- D Granulomatous inflammation
- E Serous inflammation

A 27-year-old man from Peshawar city presented with fever and chills for the last 3 days. On physical examination, he is oriented with a temperature of 103 F, pulse 90/minutes, blood pressure, and respiratory rate normal. No lymphadenopathy and organomegaly on systemic examination. His laboratory investigation showed CBC with Hb: 11g/dL, TLC: 5500/μL , and Platelets count 120,000/μL. Report of thick blood smear showed positivity for the malarial parasite. What further investigation will you advise?	**1**

- A Culture and sensitivity
- B ICT for malaria
- C Malaria antibodies level
- D PCR
- E Peripheral smear [T]

A 46-year-old lady was diagnosed with hepatocellular carcinoma and was limited to one segment of the liver. Partial hepatectomy was done by a surgical oncologist. Which process will take place in the remaining liver?	**1**

- A Angiogenesis
- B Apoptosis
- C Fibrosis
- D Granuloma formation
- E Regeneration [T]

A 32 year old man is infected with Taenia saginata after eating semi cooked beef. Who is the definitive host in this parasite?	**0**

- A Cow
- B Lamb
- C Man [T]
- D Pig
- E Vector

A 20 year old man comes to the physician with bilateral parotid gland swelling and fever. The doctor suspects mumps and he is worried about a complication. What is the complication?	**0**

- A Encephalitis
- B Pharyngitis
- C Meningitis
- D Orchitis [T]
- E Lymphangitis.

A 30 year old man comes to OPD with vesicles on the abdomen and gives history of chicken pox in childhood. What is the diagnosis?	**0**

- A Herpes
- B Latency
- C Neoplasia
- D Varicella
- E Zoster [T]

A 40 year old man is admitted in the hospital and is on I/V antibiotics. He develops blood in diarrheal stools. What is the most probable diagnosis?	**0**

- A Enteritis
- B Enteric fever
- C Diarrhea
- D Dysentery
- E Pseudomembranous colitis. [T]

A 10 year old boy falls in the park while playing, he sustains a wound on his leg contaminated by soil. The doctor orders a	**1**

vaccination to be done. What do you think this vaccination is against which suspected disease?	

- A Botulism
- B Diphtheria
- C Meningitis
- D Pharyngitis
- E Tetanus [T]

A 15 year old boy comes to a physician with history of sore throat a week back, now he has fever and pain in his right knee. What is your most probable diagnosis?	**1**

- A Herpes
- B Neoplasm
- C Pharyngitis
- D Rheumatic fever [T]
- E Tumor.

A 20 year old patient comes to A & E complaining of fever and repeated boils in the nose. The physician suspects Staphylococcus aureus as the culprit. What is the gold standard laboratory test that confirms his diagnosis?	**1**

- A Catalase test
- B Coagulase test [T]
- C Monospot test
- D Oxidase test
- E TSI test

Which one of the following fungi is capable of colonizing preexisting cavities in the lung and forming a compact ball of mycelium which is later surrounded by dense fibrous wall?	**1**

- A Penicillium
- B Aspergillus [T]
- C Mucor
- D Rhizopus
- E Cryptococcus

Which of the following Human Papilloma viruses (HPV) are known to cause cervical cancer?	**0**

- A Types 1, 2, 5
- B Types 14, 16, 18 [T]
- C Types 20, 24, 26
- D Types 30-100
- E Types 101-180

Neutralization of transforming growth (TGF) is most likely to affect which of the following steps in the inflammatory-repair response?	**0**

- A Chemotaxis of lymphocytes
- B Increased vascular permeability
- C Leukocyte extravasation
- D Migration of epithelial cells
- E Production of collagen [T]

Acquired hypersensitivity to a substance is called:	**1**

- A Addiction
- B Allergy [T]
- C Idiosyncrasy
- D Synergism
- E Tolerance

Quetelete's rule refers to:	**0**

A Cause of death

B Electrocution

C Fracture of skull

D Identity of criminal [T]

E Putrefaction

Yellow Oleander is:	**0**

A A deliriant poison

B An inebriant poison

C Asphyxiant poison

D Cardiac poison [T]

E Opium alkaloid