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?	1

- ( ) 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 known as; 1

- 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; 1

- 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

E The volume of distribution of chloroquine is high [T]

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?

1

A Allergic reaction to isoniazid

B Allergic reaction to rifampin

C Inherited deficiency of N-acetyltransferase [T]

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?

1

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?

1

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]

A 69-year- old woman was brought to a local hospital emergency department by her son, who reported that his mother was found lethargic, disoriented, and combative a few hours earlier. Additional history revealed that she had ingested a large number of aspirin tablets in a suicide attempt. An appropriate therapy was instituted, which included the administration of sodium bicarbonate to increase the elimination of salicylate. Which of the following best explains the mechanism of this increased elimination?

0

A Decreased tubular active transport of salicylate

B Decreased renal biotransformation of salicylate

C Decreased bioavailability of salicylate

D Increased glomerular filtration of salicylate

E Urinary ion trapping of salicylate [T]

A 51-year old woman suffering from hyperthyroidism was administered an oral

solution of radioactive iodine to destroy her thyroid gland. Which of the following permeation processes most likely accounted for the transfer of the drug across the thyroid cell membrane? 1

- [x] A Active transport [T]
- [ ] B Aqueous diffusion
- [ ] C Endocytosis
- [ ] D Facilitated diffusion
- [ ] E Lipid diffusion

Thiopental is fat soluble drug, hence it is redistributed from the brain to the fat tissues after administration. This property is most likely responsible for which of the following? 0

- [ ] A Increased toxicity
- [ ] B Prolonged action
- [x] C Prolonged half life
- [ ] D Quick clearance
- [ ] E Short action [T]

A patient presented to Northwest General hospital with rigors chills and fever for last 3 days and was diagnosed with malaria. He was prescribed with a loading dose of 4 tablets of choloroquine. The loading dose of a choloroquine is usually based on which of the following? 1

- [x] A Apparent volume of distribution [T]
- [ ] B Area under the curve (AUC)
- [ ] C Fraction of drug excreted unchanged in the urine
- [ ] D Percentage of drug bound to plasma proteins

E Total body clearance of the drug

If the pharmacological effect of a drug is plotted against the dose to construct a dose response curve. Which of the following is the significance of taking the log of the dose?	0

A Assessment of LD50

B Assessment of variability in response

C Calculation of therapeutic index

D Comparative analysis [T]

E Plotting All or None responses

A drug A was administered to a patient who was already taking another drug B for another illness. Drug B was not causing any toxic effects when given alone but upon the administration of drug A, the toxic effects of drug B started appearing. Which of the following mechanisms is most likely responsible for this effect?	1

A Drug A exacerbated the underlying disease

B Drug A is an enzyme inhibitor

C Drug B is an enzyme inducer

D High affinity of drug A for plasma proteins [T]

E High affinity of drug B for plasma proteins

A drug X has a half life of 4 hours. If 500mg of the drug is administered at 0hrs, how many hours would it require for the drug concentration to fall down to 62.5 mg?	1

A 4 hours

B 8 hours

C 12 hours

D 16 hours [T]

E 20 hours

A 6-year-old boy suffering from influenza received an anti-pyretic drug for 4 days. On the fifth day, he lapsed into a coma and died. The autopsy disclosed diffuse microvesicular fatty infiltration of the liver, heart, and kidneys, as w ell as cerebral edema. Which of the following antipyretics most likely caused the patient's death?

0

- A Acetaminophen
- B Aspirin (T)
- C Ibuprofen
- D Indomethacin
- E Piroxicam

A 59-year-old obese woman presented to the emergency department because of severe colicky pain in the right lumbar region. The patient had a long history of osteoarthritis for which she had been taking several different pain killers daily for the past year. Current medications included atorvastatin and ezetimibe for hyperlipidemia and hydrochlorothiazide for mild hypertension. A renal biopsy confirmed the diagnosis of papillary necrosis and tubulointerstitial inflammation of the kidney. Which of the following drugs most likely caused the patient's disease?

0

- A Atorvastatin
- B Celecoxib
- C Diclofenac (T)
- D Hydrochlorothiazide
- E Tramadol

A 65-year-old man had been recently diagnosed with osteoarthritis. Six months

ago, the patient suffered from peptic ulcer disease that healed after triple antiulcer therapy. Which of the following non-steroidal anti-inflammatory drugs would be most appropriate for this patient? 0

- A Celecoxib [T]
- B Ibuprofen
- C Indomethacin
- D Ketorolac
- E Piroxicam

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. Ophthalmoscopic examination revealed retinal damage. Which of the following drugs is most probably responsible for this adverse effect? 1

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

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 of vivax malaria. Which of the following drugs should be used for the treatment of malaria in this patient? 1

- A Atovaquone
- B Chloroquine
- C Lumefantrine

severe pharyngitis that turned out to be due to Streptococcus pyogenes. Past history of the patient was significant for an anaphylactic reaction to ampicillin. Which of the following antibiotics would be most appropriate for this patient? 1

- A Ceftriaxone
- B Ceftazidime
- C Imipenem
- D Erythromycin [T]
- E Aztreonam

A 53-year-old man was admitted to the hospital with the admitting diagnosis of pneumonia. Further exams indicated that the pneumonia was due to Mycoplasma pneumonia, and treatment with an appropriate bacteriostatic antibiotic was started. The given drug most likely belonged to which of the following classes? 1

- A Cephalosporins
- B Aminoglycosides
- C Macrolides [T]
- D Carbapenems
- E Fluoroqinolones

A 65-year-old man complained to his physician of nervousness, insomnia, and palpitations. The man had been suffering from chronic obstructive pulmonary disease for several years and had been receiving therapy that included theophylline. A few days earlier, he had been diagnosed with streptococcal pharyngitis and started an appropriate treatment. The physician thought that the patient's symptoms were most likely due to an antibiotic–theophylline interaction. Which of the following antibiotics was most likely responsible for 1

antibiotics was most likely responsible for this interaction?

- A Penicillin G
- B Streptomycin
- C Doxycycline
- D Erythromycin [T]
- E Rifampin

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?

1

- 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

An antifungal drug that binds to ergosterol forming "pores" that disrupt fungal membrane integrity is; 1

- (●) A Amphotericin B [T]
- ( ) B Caspofungin
- ( ) C Fluconazole
- ( ) D Flucytosine
- ( ) E Terbinafine

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? 1

- (●) A Amoxicillin [T]
- ( ) B Aztreonam
- ( ) C Benzyl Penicillin
- ( ) D Imipenem
- ( ) E Linezolid

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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

The duration of action of Benzathine Penicillin is longer as compared to Penicillin even though both share similar pharmacological characteristics. Which of the following is the reason for the prolongation of action of benzathine Penicillin? | 0

- A Addition of beta lactamase inhibitor
- B Addition of probenecid
- C Decreased renal tubular secretion
- D Increased sensitivity of the receptor
- E Side chain substitution [T]

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D Mefloquine

E Primaquine

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B Chloroquine

C Lumefantrine

D Primaquine [T]

E Quinine

Which of the following drugs acting via DNA gyrase inhibition and would be the drug of choice for gram negative uncomplicated urinary tract infection? 1

A Benzyl Penicillin

B Cefepime

C Ciprofloxacin [T]

D Netlimicin

E Tigecycline

A study of aging shows that senescent cells have accumulated damage from toxic byproducts of metabolism. There is increased intracellular lipofuscin deposition. Prolonged ingestion of which of the following substances is most likely to counteract this aging mechanism? 1

substances is most likely to counteract this aging mechanism?

- [x] A Antioxidants [T]
- [ ] B Analgesics
- [ ] C Antimicrobials
- [ ] D Antineoplastic agents
- [ ] E Glucocorticoids

At autopsy, the heart of a 63 year old man weighs only 250gm (normal 330gm) and has small right and left ventricles. The myocardium has dark chocolate-brown color throughout which on histologic examination reveal yellow brown paranuclear pigment. Which of the following pigments is described in this scenario?

1

- [ ] A Bilirubin
- [ ] B Glycogen
- [ ] C Hemosiderin
- [x] D Lipofuscin [T]
- [ ] E Melanin

A 22 year old woman with leukemia undergoes bone marrow transplantation and receives a partially mismatched donor marrow. One month later she has a scaling skin rash. A skin biopsy is obtained which shows morphological findings of graft versus host disease. This most likely results from which of the following reactions?

1

- [x] A Activation of caspases [T]
- [ ] B Elaboration of lipases
- [ ] C Increase in glycolysis
- [ ] D Peroxidation of lipids

E Reduction of ATP synthesis

A 55 year old man has experienced an episode of chest pain for 6 hours. Histologic section of his left ventricular myocardium shows irreversibly damaged cardiac myocytes with coagulative type necrosis. Which of the following conditions most likely produced these myocardial changes? 1

- A Arterial thrombosis [T]
- B Autoimmunity
- C Blunt chest trauma
- D Protein deficient diet
- E Viral infection

When a bacteriophage is involved in the transfer of genetic material from one bacterium to another it is called 1

- A Apoptosis
- B Conjugation
- C Necrosis
- D Transduction [T]
- E Transformation

A house officer collects sputum from a patient. The doctor is suspecting tuberculosis, on which medium is he going to culture it to confirm the diagnosis? 1

- A Agar
- B broth
- C medium
- D lowenstein jensen medium [T]
- E TSI medium

A patient comes to A & E with history of wound contaminated with soil. At the moment he is having spastic paralysis, doctor is sure that the patient has tetanus and gives a tetanus toxoid vaccine and pre formed antibodies. What sort of immunity is this?

1

- A Active immunity
- B adaptive immunity
- C Active passive immunity [T]
- D Innate immunity
- E passive immunity

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

A 65 year old women presents with 3 months history of transient ischemic attacks. She has an audible bruit on auscultation of the neck. A left carotid endarterectomy is performed. Grossly the atheromatous plaque has yellow-tan and firm appearance. Which of the following material will be found in abundance in the form of crystals within cleft like spaces if you examine the specimen microscopically?

0

A Cholesterol [T]

B Glycogen

C Hemosiderin

D Immunoglobulin

E Lipofuscin

Several bacteria that form spores are important human pathogens. Which one of the following is the most accurate statement about bacterial spores? 1

A They are killed by boiling for 15 minutes.

B They are produced primarily by gram-negative cocci.

C They are formed primarily when the bacterium is exposed to antibiotics.

D They are produced by anaerobes only in the presence of oxygen

E They are metabolically inactive, yet can survive for years in that inactive state. [T]

In a rapidly multiplying bacterial population, cell numbers increase exponentially. This phase of the growth cycle is referred to as which phase; 1

A lag phase

B stationary phase

C decline phase

D log phase [T]

E latent phase

The micrometre (μm) is commonly employed to measure the thickness or diameter of microscopic objects, also called micron. What is the approximate diameter of the bacterial cell? 1

- A 16 μm
- B 8 μm
- C 4 μm
- D 2 μm
- E 0.5 to 1.0 μm [T]

A diabetic lady comes to hospital with history of repeated boils on the body. Using your knowledge of microbiology, which microorganism is involved? 1

- A Bacillus
- B Corynebacterium
- C Cyanobacteria
- D Staph.aureus [T]
- E Strept.pneumoniae

A 30 year old man who works in an abattoir comes to the doctor wit fever on and off. The doctor diagnosed him as having zoonotic infection Brucella. Which type of rod is Brucella? 1

- A Giemsa positive
- B Giemsa negative
- C Gram positive
- D Gram negative [T]
- E Zeil nelson positive

A 6 year old boy comes to OPD with rash on his face and body. He has photophobia

A 6 year old boy comes to OPD with rash on his face and body. He has photophobia, malaise and anorexia. The doctor diagnose it as Measles. Which vaccine is given to children against measles? 1

- A BCG
- B OPV
- C MMR [T]
- D HepB
- E HepC

A child 12 years old came to A&E, he had a lesion on upper lip after fever. The doctor diagnosed it as a viral disease.Which virus is involved in causing this disease? 1

- A Herpes virus [T]
- B MMR
- C Paramyxovirus
- D polio virus
- E Toga virus

Various soluble mediators are added to a cell culture containing epidermal cells to determine which of them might be useful for promoting epidermal cell growth. When epidermal growth factor is added, it binds to cell surface receptors, with subsequent transcription factor translocation and DNA transcription. This effect is mediated through which of the following intracellular pathways? 0

- A Calcium ion channel
- B Cyclic AMP
- C Cyclin dependent kinase
- D JAK/STAT system

through which of the following intracellular pathways?

- A Calcium ion channel
- B Cyclic AMP
- C Cyclin dependent kinase
- D JAK/STAT system
- E Mitogen activated protein (MAP) kinase [T]

An 18-year-old man lacerated his left ear and required sutures. The sutures were removed 1 week later. Wound healing continued, but the site became disfigured over the next 2 months Which of the following terms best describes the process that occurred in this man?

0

- A Dehiscence
- B Keloid formation [T]
- C Organization
- D Resolution
- E Secondary union

A 58-year-old man had chest pain persisting for 4 hours.A radiographic imaging procedure showed an infarction involving a 4-cm area of the posterior left ventricular free wall.Laboratory findings showed serum creatine kinase of 600 U/L. Which of the following pathologic findings would most likely be seen in the left ventricular lesion 1 month later?

0

- A Chronic inflammation
- B Coagulative necrosis
- C Complete resolution
- D Fibrous scar [T]

D Fibrous scar [T]

E Nodular regeneration

A 30-year-old woman undergoes cesarean section to deliver a term infant, and the lower abdominal incision is sutured. The sutures are removed 1 week later. Which of the following statements best describes the wound site at the time of suture removal?	0

A Collagen degradation exceeds synthesis [T]

B Granulation tissue is still present

C No more wound strength will be gained

D Type IV collagen predominates

E Wound strength is 80% of normal tissue

A 41-year-old man has had a severe headache for the past 2 days. On examination, his temperature is 39.2° C. A lumbar puncture is performed, and the cerebrospinal fluid obtained has a WBC count of 910/mm3 with 94% neutrophils and 6% lymphocytes. Which of the following substances is the most likely mediator for the fever observed in this man?	1

A Bradykinin

B Histamine

C Leukotriene B4

D Nitric oxide

E Tumor necrosis factor (TNF) [T]

Two month after an apendisectomy, a 35-year-old woman palpates a small nodule beneath the skin at the site of the healed right lower quadrant sutured incision. The nodule is excised, and microscopic examination shows macrophages, collagen	0

deposition, small lymphocytes, and multinucleated giant cells.Polarizable, refractile material is seen in the nodule. Which of the following complications of the surgery best accounts for these findings?

- A Abscess formation
- B Chronic inflammation
- C Exuberant granulation tissue
- D Granuloma formation [T]
- E Healing by second intention

A 21-year-old woman develops a sore throat and fever during the past day. Physical examination shows pharyngeal erythema and swelling. Laboratory findings shows increased number of leucocytes She is given anti inflammatory drug with the name of naproxen. Which of the following features of the acute inflammatory response is most affected by this drug?

0

- A Chemotaxis
- B Emigration
- C Leukocytosis
- D Phagocytosis
- E Vasodilation [T]

In an experiment, neutrophils collected from peripheral blood are analyzed for a "burst" of oxygen consumption. This respiratory burst is an essential step for which of the following events in an acute inflammatory response?

0

- A Attachment to endothelial cells
- B Generation of microbicidal activity [T]
- C Increased production in bone marrow

C Increased production in bone marrow

D Opsonization of bacteria

E Phagocytosis of bacteria

A 4-year-old child has had a high-volume diarrhea for the past 2 days. On examination she is dehydrated. A stool sample examined by serologic assay is positive for rotavirus.She is treated with intravenous fluids and recovers. Which of the following components is found on intestinal cells and recognizes double-stranded RNA of this virus to signal transcription factors that upregulate interferon production for viral elimination?	0

A Caspase-1

B Complement receptor

C Lectin

D T cell receptor

E Toll-like receptor [T]

An 15 year old boy falls and cuts his forearm. The wound becomes badly infected. Bacteria extend into the extracellular matrix around capillaries. In the inflammatory response to this infection, which of the following cells removes the bacteria?	1

A B lymphocyte

B Fibroblast

C Mast cell

D Macrophage [T]

E T lymphocyte

Majority of members of the enterobacteriacae family are motile. The	1

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

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? 1

- A BCG
- B DTP [T]
- C Hepatitis B
- D MMR
- E OPV

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 vaccination to be done. What do you think this vaccination is against which suspected 1

this vaccination is against which suspected disease?

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

When was the first case of the COVID-19 infection seen in Pakistan? Select from the options below: 0

- A 2010
- B 2013
- C 2016
- D 2019
- E 2020 [T]

A laceration to the left hand of an 18 years old male was sutured and after the sutures were removed a week later healing continued. However, the site of the wound became disfigured by a prominent raised scar that developed over the following 02 months. What process occurred? 1

- A Dehiscence
- B Keloid formation [T]
- C Organization
- D Resolution
- E Secondary union

The process of leukocyte accumulation at the periphery of vessel is; 1

- A Adhesion

B Migration

C Margination [T]

D Rolling

E e.Tumbling

The main event in complement activation is the formation of	1

A MAC [T]

B C5

C C3

D C5a

E C3a

During Cutaneous wound healing by primary intention, neovascularization reaches its peak as granulation tissue fills the incisional space by;	1

A Day 2

B Day 3

C Day 4

D Day 5 [T]

E Day 6

Percentage of people who are secretors of the blood group antigen into their saliva are:	1

A 80% [T]

B 20%

C 100%

D 30%

E 0%

The chromosomal pattern in Klinefelter's

The chromosomal pattern in Klinefelter's syndrome is:	1

- A XO
- B XX
- C XXY [T]
- D XY
- E XYY

Chelating agents are used for poisoning due to:	1

- A Cardiac poisons
- B Corrosive poisons
- C Heavy metals [T]
- D Mechanical poisons
- E Vegetable poisons

Cephalic index has great importance in determination of:	0

- A Age
- B Race [T]
- C Religion
- D Sex
- E Stature

Retraction of gum margins and loosening of teeth refer to:	1

- A Attrition
- B Cementum opposition
- C Periodontitis [T]
- D Root resorption
- E Secondary dentine

E Secondary dentine

Deciduous canine teeth erupt at the age of:	1

A 14 - 15 months

B 15 - 16 months

C 17 - 18 months [T]

D 19 - 20 months

E 20 - 30 months

Any injury, disease or intoxication which finally proves fatal is called:	1

A Cause of death. [T]

B Circumstance of death.

C Manner of death.

D Mechanism of death.

E Mode of death.

In Gustafson method of determination of age through teeth, the most reliable criteria is:	0

A Attrition

B Periodontosis

C Root resorption

D Secondary dentin

E Transparency of the root [T]

Kleptomania means:	1

A Evading problems

B Maiming animals

C Manic-depressive psychoses.

D Setting fire to things

D Setting fire to things

E Stealing minor things [T]

Attempt to apply force to the body of a person in a hostile manner is called:	1

A Assault [T]

B Battery

C Cognizable offence

D Crime

E Physical insult

The medico legal system which is in vogue in Pakistan is:	0

A Coroner system

B Medical examiner system

C Continental system

D Modified continental system [T]

E None of the above

Subpoena" is the other name of:	1

A Evidence

B Exhibit

C Summons [T]

D Testimony

E Warrant

PM & DC gives punishment to RMP in cases of:	0

A Absence from duty

B Breach of duty

C Lack of proper care in treatment

D Lack of proper skill

E Moral turpitude [T]

"Perjury" means: 1

A Authentic evidence given in the court

B Evidence given by expert witness

C Evidence given in criminal litigation

D False judgment given by the court

E Giving false evidence willfully under oath [T]

A 30 years old male presented with complaints of bilateral nasal obstruction from the last 2 years. On examination, he had bilateral nasal polyps. The latest development in treatment of sinus pathology is:

A caldwel luc surgery

B functional endoscopic sinus surgery [T]

C Microscopic surgery

D lewis howarth approach

E laser surgery

A 45 years old female presented with a midline neck swelling from the last 5 years. O/E patient had a large swelling 5x5cm on the right side and 4x4cm on the left side which moved with swallowing. She was diagnosed with a multinodular goiter. The attending surgeon listed her for total thyroidectomy. After the procedure, the patient developed inspiratory stridor in the recovery room and was not maintaining 1

Ringtone

which moved with swallowing. She was diagnosed with a multinodular goiter. The attending surgeon listed her for total thyroidectomy. After the procedure, the patient developed inspiratory stridor in the recovery room and was not maintaining oxygen saturation. Examination revealed both vocal cords in paramedian position. The complication that has occurred during surgery is:

1

- (●) A Bilateral abductor paralysis (T)
- ( ) B hypocalcemia
- ( ) C laryngeal spasm
- ( ) D tension hematoma
- ( ) E tracheomalacia

A 30 years old male was involved in a road traffic accident 2 days back. He received trauma to his right temporal bone and was complaining of pain from the impact. He has now presented with the complaints of decreased hearing on the right side. O/E, tympanic membrane is intact, tuning fork testes show right conductive hearing loss. His PTA shows 50 db of conductive deafness. Which of the following mechanisms has been disrupted, resulting in his hearing loss

0

- ( ) A endolymphatic pressure
- ( ) B eustachian tube obstruction
- ( ) C impedance matching
- (●) D lateral semicircular canal
- ( ) E lever action of ossicles (T)

E lever action of ossicles [T]

A 15 years old female presented to opd with the complaints of right ear discharge fom the last 4 years. She now presented with episodes of vomiting and sensations of head spinning (vertigo) from the last 2 days. O/E patient had a right central perforation in the tympanic membrane with mucopus coming out through the perforation. She also had nystagmus with the fast component towards the right ear and she could not maintain balance. Based on these findings, which structure has been involved by the disease in the middle ear	1

- A facial nerve
- B lateral semicircular canal [T]
- C ossicular chain
- D promontary
- E stapes footplate

A 60-year-old patient comes to Eye OPD with chief complaints of gradual decrease vision for last 1 year. The visual deterioration is painless and progressive. It is not associated with any history of flashes of light, floaters or trauma. On examination, you noticed opacification of the lens. What is the most likely diagnosis?	1

- A A. Corneal ulcer
- B Age-related cataract [T]
- C Retinal detachment
- D corneal ulcer
- E Keratoconus

E Keratoconus

A 2-month-old baby is brought by her parents with complaints of watering and discharge from her eyes since 1 month. Which statement regarding congenital Nasolacrimal duct obstruction is true?	0

A Noncanalization at the lower end of the nasolacrimal duct is the usual cause [T]

B A week course of topical antibiotics results in the complete resolution of the disease

C Initial treatment should be probing of the nasolacrimal duct

D Most of the patients ultimately require Dacryocystorhinostomy surgery

E The spontaneous resolution does not usually occur despite NLD massage

A 7-year young boy is brought by his parents for deviation of eyes. On examination, the patient is having decreased vision and is prescribed glasses for correction. What is the most correct statement regarding Hypermetropia?	0

A In Hypermetropia, the image is formed behind the retina [T]

B Most children are myopic in early childhood

C In hypermetropia, a longer-than-normal axial length is the main pathology

D In hypermetropia, a concave lens will correct the refractive error

E In hypermetropia, a cylindrical lens at a given axis usually corrects the refractive error

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]

Which investigation is performed to calculate the power of intraocular lens before cataract surgery?	0

A Tonometry

B Gonioscopy

C Flourescein angiography

D Biometry [T]

E Optical Coherence Tomography

A competent 30 years old lady who is 38 weeks pregnant refuses to have a cesarean	

delivery despite the fact that without surgery, the fetus could die. Both her surgeon and psychiatrist have failed to convince her to have the surgery. The most appropriate action for her surgeon to take at this time is to:

1

A Get permission from her Husband to do the surgery.

B Get a court order in favour of surgery.

C Tell the patient that she can be criminally prosecuted if the child dies.

D Deliver the child vaginally. [T]

E Refer the patient to another doctor.

Patients are most likely to comply with the medical advice for which of the following reasons:

0

A The illness has serious symptoms.

B The doctor is elderly.

C The illness is chronic.

D The treatment schedule is complex

E The doctor has taken time to provide Informational Care to the patient. [T]

A female patient comes to the doctor's clinic wearing revealing clothes. She comes up very close to the doctor and starts asking him personal questions in a seductive tone. What would be the appropriate response by the doctor?

1

A Refuse to examine her.

B Call in a nurse. [T]

C Use open ended questioning technique.

D Ask about her personal life

E Refer her to another doctor

Daily or weekly supervision is carried out at Primary health care level to access the effectiveness of an ongoing health program. This type of assessment is known as:	1

A Evaluation

B Feedback

C Monitoring [T]

D Impact indicator.

E System analysis

In Pakistan there are three levels of Health care system pertaining to Primary, Secondary and Tertiary hospitals. The Primary Health System comprises which of the following units, components & services: T	1

A Primordial and preventive care.

B Immunization & MCH care services

C Specialized and rehabilitative care hospitals

D Basic Health Unit, Rural Health Center & Lady Health Workers. [T]

E Tehsil Head Quarters, District Head Quarters, Rural Health Centers

An investigator wants to assess the 'Physical Quality of Life Index' (PQLI) also known as "Human Development Index" of a population in a country. For this purpose the investigator should investigate which of the following as the most appropriate indicator for this measure. :	0

- A Level of air pollutants
- B Crude death rate and literacy rate
- C Crude birth rate and crude death rate
- D Infant mortality rate and per capita income
- E Infant mortality rate, life expectancy at age one year and literacy rate [T]

An epidemiologist wants to study the natural course of disease as it evolves without any intervention/ treatment. Among the following choices which one best describes this process:	0

- A Spectrum of disease
- B Natural history of disease [T]
- C Clinical features of disease
- D Epidemiology of disease
- E Surveillance of Disease

An expert makes a plan to limit tuberculosis to such an extent that it is no longer a major health problem. This plan is known as	1

- A Disease control [T]
- B Disease eradication
- C Disease elimination

C Disease elimination

D Disease suppression

E Disease prevention

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. The best and most accurate way to diagnose Covid-19 is:	1

A Rapid antigen test

B Patient travel history to high risk area

C A qualitative Covid polymerase chain reaction (PCR) or molecular test [T]

D Identifying symptoms, such as fever, cough, or sore throat

E There is no best or accurate way to diagnose Covid.

Trachoma is a contagious disease prevalent in many underdeveloped countries. It can result in blindness if not treated on time. Individuals(infected with trachoma) with lid deformities such as trichiasis or entropion are advised to :	0

A Take antibiotic combination therapy

B Antibiotic steroid combination therapy

C Surgical correction of the deformities [T]

D Steroids only

D Steroids only

E Radiotherapy

Case fertility rate of Neonatal Tetanus without quality and timely treatment is:	0

A 20-30 %

B 40-50%

C 50-60%

D 80-90% [T]

E 60-70%

Tetanus bacilli produce a soluble exotoxin. It has an astounding lethal toxicity, exceeded only by botulinum toxin. The lethal dose of tetanus exotoxin for a 70 kg man is:	0

A 1mg

B 10mg

C 0.1mg [T]

D 0.01mg

E 100mg

Diagnostic intradermal test used for Lieshmania is commonly done through	1

A Casaoni's test

B Mantoux test

C Shick's test

D Montenegro test [T]

E Aldehyde test

A young woman suffered from a mild	

generalized illness having fever, headache, flu like symptoms and a mild rash during pregnancy. The new born baby was found to be suffering from a depressed nose and a congenital valvular heart disease. What condition of the mother was the most probable cause of the child abnormality?

1

- A Measles
- B Mumps
- C Rubella [T]
- D Hepatitis C
- E Tuberculosis

Mr. Ahsan is working in for leather to which he supplies animal's skin as raw material for 10 years. Which of the following disease he is more likely to contract:

1

- A Malaria
- B Anthrax [T]
- C Leishmaniasis
- D Histoplasmosis
- E Asbestosis

A veterinary doctor is interested to get himself vaccinated pre-exposure against rabies cell cultured vaccine will be given according to following schedule:

0

- A Day 0,3,7,28
- B Day 0,3,7,21,28
- C Day 3,7,21
- D Day 0,3,7,21,28,90

E Day 0,7,28 [T]

A pregnant lady in first trimester of pregnancy developed mild fever and rash and recovered after few days uneventfully. She gave birth to a baby with heart anomalies, congenital cataract, and defenses. The likely disease she suffered from was:	1

- [x] A Rubella [T]
- [ ] B Measles
- [ ] C Chicken pox
- [ ] D Drug reaction
- [ ] E Typhoid

A 35 year old male presents to the clinic with a 6 months history of low back pain with stiffness.The stiffness lasts about 45 minutes and tends to improve with activity.There is no history of trauma.On examination he has minimal tenderness at the lumbar spine and the left sacroiliac joint. His blood tests show normal CRP and full blood count .X-rays of the lumbosacral spine and sacroiliac joint are normal.Based on his symptoms what is the next best test to asses his symptoms further ?	0

- [ ] A DEXA scan
- [ ] B MRI sacroiliac joint with STIR sequence [T]
- [x] C MRI lumbar spine
- [ ] D Ultrasound of the spine
- [ ] E X-ray thoracolumbar spine

Mrs Kamal 65 year old presents to	

E Day 0,7,28 [T]

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Mrs Kamal 65 year old presents to	

outpatient clinic with history of back pain with height loss.Her Past Medical history includes fracture left distal radius 3 years ago.She also takes steroids on and off for her Asthma. On examination she has got kyphosis with tenderness at the lumbar spine.Her X-ray shows vertebral collapse at L4 . Based on her clinical history , examination and imaging what is the most likely cause of her symptoms ?

0

- A Ankylosing Spondylitis
- B Rheumatoid Arthritis
- C Osteoarthritis
- D Osteomalacia
- E Osteoporosis [T]

Parents of a 3 year old bring their child to your clinic with complaints of her inability to move right leg and fever for last 3 days. The child looks cranky, is febrile to touch. You attempt to examine her leg and she cries out in pain. The knee joint is seollen, red, hot and tender. The child kerps the leg in flexed position. You order lab work and x ray rt knee joint. Cbc shows hb 9.2, tlc 30,000 with 90% neutrophils, CRP is 32 X ray knee shows loss accumulation of synovial fluid. You advise the parents to admit the child. What is the most probable diagnosis

0

- A rheumatoid arthritis
- B osteoarthritis [T]
- C reactive arthritis
- D post infectious arthritis

E achondroplasia

based on ILAR (international league against rheumatism) how do u define polyarticular JIA based on number of joints involved? 0

A 4 or more

B 5 or more [T]

C 2 or more

D 3 or more

E less than 2

Parents of 5 month old bring their baby to opd complaining of his irritability and excessive crying. The child is developmentally delayed with no visual following and hearing.O/E he has hepatosplenomegaly and chest on auscultation shows rhonchi. You order some lab work and CXR. CXR shows typical bone in bone appearance he is a product of consanguinous marriage. What is the diagnosis 0

A osteoporosis

B osteomalacia

C osteomyelitis

D paget's disease

E osteopetrosis [T]

Bacteria, viruses, fungi, and protozoa are important causes of human disease. Which one of the following microbes contains either 1