Personal information

Student

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Date Of Birth

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Batch No

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Academic Session

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Subject

Preprof Block II (Multi [redacted] Blood, II, MSK II)

Exam

- (2210-11)

Marks

Total Marks

[redacted]

Marks Obtain

[redacted]

Paper Question & Answers Detail`s

A male of 55 years was started on an anticancer drug. The physician decided to add leucovorin to the therapy. Leucovorin was started in order to prevent which of the following conditions?	**1**

- A Cystic fibrosis
- B Hemorrhagic cystitis
- C Megaloblastic anemia [T]
- D Myelosuppression
- E Pulmonary edema

Hereditary deficiency of which of the following enzymes can lead to prolonged effects of succinylcholine?	**0**

- A Cytochrome oxidase
- B Glucose-6-phosphate dehydrogenase
- C Heme oxygenase
- D Liver transaminase
- E Plasma cholinesterase [T]

Administration of a moderately high dose of epinephrine to a patient results in a severe decrease in blood pressure. Which of the following drugs might the patient have previously taken that could account for this unexpected effect?	**0**

- A Atropine
- B Cocaine
- C Guanethidine
- D Prazosin [T]
- E Tropicamide

In a teaching institute, physician discussing about autonomic pharmacology to house officer, asked when given to man, a drug causes bradycardia, increase gastrointestinal motility, pupillary constriction, which of following drug produces these effects?	**1**

A Cyclopentolate

B Phenylephrine [T]

C Pilocarpine

D Prazosin

E Tropicamide

A 12 year old boy admitted in hospital ,His history revealed that he has taken 2 bottles of drug which was used by his mother for nasal decongestion. Which of the following effects do you expect to see in this patient? **1**

A Bronchodilation

B Mydrasis

C Tachycaria

D Urinary retention

E Vasodilation [T]

Antimuscarinic drugs have limited usefulness in preventing bronchospasm. This limited efficacy is because of which of the following reasons? **0**

A Antagonism induced enhanced bronchial edema

B Non-specific binding to muscarinic receptors

C Non-muscarinic stimulation of the airways [T]

D Rapid dissociation from the receptors

E Reversible binding to the M3 receptors

A male of 50 years was diagnosed with Myasthenia Gravis 6 months ago and started on treatment. He presented to the medical OPD with complaints of increased fatigue, weakness, drooping of eyelids and difficulty in breathing since 2 days. The doctor injected 0.2mg of Edrophonium and observed the patient. He noticed that the symptoms of the patient got a little better. What is the most appropriate strategy to proceed with the management? **1**

A Add on another drug to the treatment

B Decrease the dose of drugs used for treatment [T]

C Increase the dose of drugs used for treatment

D Stop the drugs being given immediately

E Use alternate group of drugs for treatment

A cancer cell that is resistant to the effects of both vincristine and methotrexate probably has developed the resistance as a result of which of the following mechanisms? **1**

A Changes in the properties of a target enzyme

B Decreased activity of an activating enzyme

C Increased expression of a P-glycoprotein transporter [T]

D Increased production of drug-trapping molecules

E Increase in proteins that are involved in DNA repair

Which of the following is a cell cycle-specific anticancer drug that acts mainly in the M phase of the cell cycle? **1**

A Bleomycin

B Cisplatin

C Etoposide

D Methotrexate

E Paclitaxel [T]

The beta adrenergic blocker having beta-1 selectivity, intrinsic sympathomimetic activity and membrane stabilizing property is: **1**

A Acebutolol [T]

B Atenolol

C Carvedilol

D Metoprolol

E Propranolol

Which of the following is a selective alpha-1A receptor blocker that affords symptomatic relief in benign prostatic hypertrophy

Which of the following is a selective alpha-1A receptor blocker that affords symptomatic relief in benign prostatic hypertrophy without producing significant fall in blood pressure?	**1**

- A Doxazosin
- B Phentolamine
- C Prazosin
- D Tamsulosin [T]
- E Terazosin

Vasomotor reversal phenomenon after administration of an alpha adrenergic blocker is seen with:	**1**

- A Adrenaline [T]
- B Phenylephrine
- C Propranolol
- D Terbutaline
- E Timolol

A study is performed to analyze characteristics of malignant neoplasms in biopsy specimens. The biopsies were performed on patients who had palpable mass lesions on digital rectal examination. Of the following microscopic findings, which is most likely to indicate that the neoplasm is malignant?	**0**

- A Atypia
- B invasion
- C Increased nuclear/cytoplasmic ratio [T]
- D Necrosis
- E Pleomorphism

A 22-year-old man has a sudden loss of vision in the right eye. On physical examination, there is a subluxation of the crystalline lens of the right eye. On auscultation of the chest, a midsystolic click is audible. An echocardiogram shows a floppy mitral valve and dilated aortic arch. The patient's brother and his cousin are similarly affected. A genetic defect involving which of the following substances is most likely to be present in this patient?	**1**

- A collagen
- B Dystrophin
- C Fibrillin [T]
- D NF-1 protein
- E Spectrin

Mental retardation has affected several generations of a family, and most of the affected individuals have been males.The severity of mental retardation has increased with each passing generation. Genetic testing is performed, and about 20% of the males who have the genetic abnormality are unaffected. Which of the following mechanisms is most likely to produce this genetic condition?	**0**

- A Trinucleotide repeat mutation [T]
- B Frameshift mutation
- C Missense mutation
- D Point mutation
- E Mitochondrial DNA mutation

In type 2 Hypersensitivity antigen is fixed to human cell, antibodies are formed against it and something is activated. What is it?	**1**

- A . Allergy.
- B anaphylaxis
- C bacteria
- D complement [T]
- E virus

. A patient whose blood group is A positive is transfused with B positive blood by mistake the patient develops a generalized rash and breathlessness. What is this type of hypersensitivity?	**0**

- A Hypersensitivity 1.
- B hypersensitivity 2 [T]
- C hypersensitivity 3

D hypersensitivity 4

E hypersensitivity 5

A 20 year old girl is allergic to flowers, on exposure in spring she experiences sneezing, breathlessness and rash. What is the diagnosis?	**1**

A Atopy.

B anaphylaxis [T]

C COPD

D Carditis

E pancarditis

A 10 year old boy comes to A&E with runny nose, sneezing and rash after going in the fields. What is your diagnosis?	**1**

A Allergy. [T]

B asphyxia

C carditis

D pericarditis

E syncope

A 49-year-old man experiences an episode of hemoptysis. On physical examination, he has puffiness of the face, pedal edema, and systolic hypertension. A chest radiograph shows an irregular perihilar 5-cm mass of the right lung. Laboratory studies show normal serum electrolytes. A transbronchial biopsy specimen showed small cell carcinoma on microscopy. A bone scan shows no metastases. Immunohistochemical staining of the tumor cells is most likely to be positive for which of the following	**1**

A Antidiuretic hormone

B Corticotropin [T]

C Erythropoietin

D Insulin

E Parathyroid hormone-related peptide

A clinical study involves patients diagnosed with carcinoma whose tumor stage is T4N1M1. The patients' survival rate 5 years from the time of diagnosis is less than 50%, regardless of therapy. Which of the following clinical findings is most likely to be characteristic of this group of patients	**1**

A Cachexia [T]

B Loss of sensation

C Cardiac murmur

D Icterus

E Splenomegaly

A 40-year-old man has a history of intravenous drug use. Physical examination shows needle tracks in his left antecubital fossa. He has mild scleral icterus. Serologic studies for HBsAg and anti-HCV are positive. He develops hepatocellular carcinoma 15 years later. Which of the following viral characteristics best explains why this patient developed hepatocellular carcinoma?	**0**

A Viral integration in the vicinity of proto-oncogenes

B Viral capture of proto-oncogenes from host cellular DNA

C Viral inflammatory changes with genomic damage [T]

D Viral inactivation of RB and p53 gene expression

E Viral infection with host immunosuppression

56-year-old woman has had vaginal bleeding for1 week. Her last menstrual period was 10 years ago. On physical examination, a lower abdominal mass is palpated. An endometrial biopsy is performed and shows endometrial carcinoma. An abdominal CT scan shows a 6-cm mass in the left ovary. A total abdominal hysterectomy is performed. Microscopically, the ovarian mass is a granulosa-theca cell tumor producing estrogen. Which of the following best describes the relationship between these two neoplasms?	**0**

A Genetic susceptibility to tumorigenesis

B Mutational inactivation of a tumor suppressor gene

C Paraneoplastic syndrome

D Promotion of carcinogenesis [T]

E Tumor heterogeneity

A 30-year-old man has a pheochromocytoma of the left adrenal gland; a sibling had a cerebellar hemangioblastoma. He undergoes adrenalectomy, and on microscopic examina- tion there is extensive vascularity of the neoplasm. Mutational analysis of the neoplastic cells shows that both allelic copies of a gene have been lost, so that a protein that binds to hypoxia-inducible factor 1-alpha is no longer ubiquitinated, but instead translocates to the nucleus and activates transcription of VEGF. Which of the following genes is most likely mutated in this man?	**0**

- A APC
- B BCL2
- C HER2Neu
- D MYC
- E VHL [T]

An investigational study reviews cells harvested from patients 30 to 50 years of age who had right-sided colon cancer with multiple polyps present. These patients typically devel- op multiple malignant lesions of the colon during middle age. Molecular analysis of the cells from the lesions shows changes in hPMS1, hPMS2, and hMLH1 genes. Which of the following principles of carcinogenesis is best illustrated by this study?	**0**

- A Carcinogenesis is a multistep process
- B Inability to repair DNA is carcinogenic [T]
- C Tumor initiators are mutagenic
- D Tumor promoters induce proliferation
- E Many oncogenes are activated by translocations

A 54-year-old woman notes a lump in her right breast. Physical examination shows a 2-cm mass fixed to the under- lying tissues beneath the areola and three firm, nontender, lymph nodes palpable in the right axilla. There is no family history of cancer. An excisional breast biopsy is performed, and microscopic examination shows Invasive ductal carcinoma Over the next 6 months, additional lymph nodes become enlarged, and CT scans show nodules in the lung, liver, and brain. Which of the following molecular abnormalities is most likely to be found in her carcinoma cells?	**1**

- A Amplification of the ERBB2 (HER2) gene [T]
- B Fusion of BCR and C-ABL genes
- C Inactivation of one BRCA1 gene copy
- D Deletion of one RB gene copy
- E Mutation of one p53 gene copy

A 38-year-old woman has abdominal distention worsening for the past 6 weeks. An abdominal CT scan shows bowel obstruction caused by a 6-cm mass in the jejunum. At laparotomy, a portion of the small bowel is resected. Flow cytometric analysis of a portion of the tumor shows a clonal population of B lymphocytes with high S phase. Translocation with activation of which of the following nuclear oncogenes is most likely to be present in this tumor?	**1**

- A APC
- B EGF
- C MYC [T]
- D RAS
- E P53

based on ILAR (international league against rheumatism) how do u define polyarticular JIA based on number of joints involved?	**1**

- A 4 or more
- B 5 or more [T]
- C 2 or more
- D 3 or more
- E less than 2

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

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 ?	**1**

A DEXA scan

B MRI sacroiliac joint with STIR sequence [T]

C MRI lumbar spine

D Ultrasound of the spine

E X-ray thoracolumbar spine

A young man has sustained abrasion on the forehead during a fight, what is the nature of injury according to Q&D ACT?	**1**

A Shajjah-I-khafifah [T]

B Shajjah-I-Mudihah

C Shajjah-I-Hashimah

D Shajjah-I-Munaqqillah

E JURH JAIFAH

A through and through fire arm injury to the thigh in which femur has been broken into many pieces, the nature of injury is?	**1**

A A. Damiyah

B B. Badiah

C C. Mudihah

D D. Hashimah

E E. Munaqqillah [T]

Punishment by causing similar hurt at the same of the body of convict as he has caused to the victim or by causing his death if he has committed Qatl-I-Amd, refers to ?	**1**

A A. ARSH

B B. DAMAN

C C. DIYAT

D D. TAZIR

E E. QISAS [T]

Bone and joint infections include septic arthritis, prosthetic joint infections, osteomyelitis, spinal infections (discitis, vertebral osteomyelitis and epidural abscess) and diabetic foot osteomyelitis. What is the most common source of bone and joint infection?	**1**

A Direct spread

B Haematogenous [T]

C Lymphatic

D Percutaneous

E Surgical procedure

Osteomyelitis is an infection of the bones, a rare but serious condition. Bones can become infected by a number of micro-organism. Acute osteomyelitis is most commonly caused by?	**1**

A Actinomyces bovis

B Borrelia Vincentii

C Haemophilus influenzae

D Nocardia asteroids

E Staphylococcus aureus [T]

Septic arthritis is spread of infection to the joint fluid and joint tissues and can be caused by many different types of bacteria, viruses or fungi. Name the most likely organism responsible for causing Septic arthritis in a 2-year-old child.	**1**

A Escherichia coli

- B Hemophilus influenzae
- C Neisseria gonorrhoeae
- D Pseudomonas
- E Staphylococcus aureus [T]

A 65-year-old woman presents to the physician with a 2-cm ulcerated lesion on the palm of her hand that has been gradually getting bigger during the past month. The lesion is only slightly tender and is not red, hot, or painful. An aspirate of the lesion was obtained, doctor suspecting a fungal skin infection. On which agar is she going to put the aspirate?	**1**

- A Blood agar.
- B Chocolate agar
- C CLED agar
- D Lowenstein Jensen agar
- E Sabouraud's agar [T]

A 10-year-old boy with tinea pedis (athlete's feet) presents to the doctor. What type of infection is this?	**1**

- A Autoimmune
- B Bacterial
- C Fungal [T]
- D Parasitic
- E Viral

A 15 year old girl presents with fluid filled lesions on face along with honey colored crusts. Which microorganism is involved?	**1**

- A Ascaris lumbricoides
- B Bacillus anthracis
- C Giardia lamblia
- D Listeria monocytogenes
- E Streptococcus pyogenes [T]

A 30 year old diabetic patient presents with carbuncle on the back of head. Pus is sent for diagnosis to the laboratory. What is the first test that should be done on this sample of pus?	**1**

- A Congo red stain
- B Giemsa stain
- C Gram stain [T]
- D Orange stain
- E Zeil- Nelson stain

25 year old female present an osteolytic lesion in distal epiphysis of right femur. Tumor is resected. Gross shows multiple cysts and brown deposits .Histologically, it is composed of sheets of monotonous cells, uniformly scattered multinucleated giant cells and deposits of hemosiderin. Features are most consistent with:	**0**

- A brown tumor of hyperparathyroidism
- B Chondroblastoma
- C Giant cell reparative granuloma
- D Giant cell tumor [T]
- E Pigmented villo nodular tenosynovitis

A 25-year-old man presents with a 1-month history of fatigue, mild fever, and an erythematous scaling rash. His major concern is related to the scaling plaques distributed on his knees, buttocks, elbows, scalp, and feet. He also notes some joint pain and swelling, primarily involving the small bones of his fingers. Physical examination reveals erythematous plaques with adherent silvery scales that induce punctate bleeding points when removed. Biopsy of lesional skin would most likely show an accumulation of which of the following cells in the epidermis?	**0**

- A B lymphocytes
- B Melanocytes
- C Mast cells
- D Neutrophils [T]
- E T lymphocytes

Septic arthritis is a painful infection in a joint that can come from microorganism that travel through the bloodstream from another part of the body. Septic arthritis can be caused by many different types of bacteria, viruses or fungi. Name the most likely organism responsible for causing Septic arthritis in a 5-year-old child.	**0**

- A Staphylococcus aureus [T]
- B Staphylococcus epidermidis
- C Streptococcus pneumoniae
- D Streptococcus pyogenes
- E Streptococcus viridans

A 48-year-old man was admitted to the emergency department with the chief complaint of an excruciating pain in his left ankle. The pain had started the previous night and increased over several hours. The patient reported that he sprained his ankle 1 week ago. On physical examination, the ankle appeared warm and tender, and the entire area was red and swollen. A synovial fluid analysis showed crystals engulfed by phagocytes. A diagnosis was made, and a pharmacotherapy was prescribed. Which of the following drugs would be most appropriate to treat the patient's pain?	**0**

- A Allopurinol
- B Aspirin
- C Codeine
- D Indomethacin [T]
- E Methotrexate

A 55-year-old man complained to his physician that a rash had appeared the previous day on his thorax and legs. The patient was recently diagnosed with hyperuricemia and had been receiving allopurinol for 2 weeks. The physician suspected the rash was due to the ongoing pharmacotherapy and decided to discontinue allopurinol and to start a treatment with probenecid. The physician should advise the patient not to concurrently use which of the following drugs?	**1**

- A Acetaminophen
- B Aspirin [T]
- C Ibuprofen
- D Loratidine
- E Phenylephrine

A 43-year-old man suffering from rheumatoid arthritis complained to his physician that his joint pain had increased recently despite current naproxen and hydroxychloroquine therapy. The patient was otherwise healthy, and his past medical history was unremarkable. Which of the following drugs would be appropriate to add to the patient's therapy at this time?	**1**

- A Acetaminophen
- B Amitriptyline
- C Diclofenac
- D Fentanyl
- E Methotrexate [T]

A 49-year-old man diagnosed with inguinal hernia was prepared for surgery. Shortly after the initiation of general anesthesia with halothane and succinylcholine, the patient developed muscle rigidity, tachycardia, labile blood pressure, profuse diaphoresis, and high fever (104.2°F, 40.1°C). The anesthesia was discontinued at once, and a drug was administered by rapid intravenous push. Which of the following was most likely the mechanism of action of the administered drug?	**1**

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

Anemia is a common health problem in poor communities. The most common reason of high prevalence of this condition is	**1**

- A Hookworm infestation
- B Insufficient iron intake
- C Malaria
- D Poor bioavailability of dietary iron [T]
- E Roundworm infestation

A 2 month old child was brought for BCG vaccination. What should be dose of BCG at this age?	**1**

- A 0.01ml
- B 0.05ml [T]
- C 0.1ml
- D 0.2ml
- E 1.5ml

parents of a 1 year old come to your clinic with the complaints of child being pale, lethargic and weak. the child has history of 4 times blood transfusion. he is a product of a consanguinous marriage. O/E the child looks pale, has hepatosplenomegaly with weight of 7 kg. you order Hb electrophoresis and the diagnosis of thalassemia major is confirmed. You decide to councel the parents regarding the condition. what is the mode of inheritance	**1**

- A autosomal dominant
- B autosomal recessive [T]
- C x linked dominant
- D x linked recessive
- E mitochondrial

A 38 year old female was admitted in medical ward after she developed some pin head rash on her body. Rash started initially on lower limbs two weeks back but has now involved her thighs and abdomen. She also complains of one episode of epistaxis. She is alert, oriented and vitally stable. Her systemic examination is unremarkable except petechiae and bruises on her body. Labs requested are all with in normal range except platelet count of 32000/cmm. Her coagulation profile is with in normal range as well. What is the next best step in her management?	**1**

- A Corticosteroids [T]
- B Low dose heparin
- C Intravenous immunoglobulin
- D Platelet transfusion
- E Splenectomy

A 60-year-old man presented with fatigue, progressive pallor, and left upper abdominal discomfort for 6 months. On examination, he had huge splenomegaly. His blood CBC shows Hemoglobin 10.5 gm/dL, platelet count of 550000/μL WBC count of 122000 with 55% neutrophils, 30% Myelocytes, 10% Metamyelocytes, 2% basophils, 3% eosinophils and occasional blast cells. Bone marrow examination shows hypercellular marrow with mature neutrophils and myelocytes peaks and 4 % blasts. What is the most probable diagnosis?	**1**

- A Acute Lymphoblastic Leukemia
- B Acute Myeloid Leukemia
- C Acute Promyelocytic Leukemia
- D Chronic Lymphocytic Leukemia
- E Chronic Myeloid Leukemia [T]

A 10 year old boy is suffering from sore throat. On examination of blood he has IgM antibodies formed. What sort of infection is this?	**1**

- A Chronic infection
- B Granulomatous infection
- C Acute infection [T]
- D caseous infection
- E Gangrenous infection

A 13 year old boy is suffering from mouth ulcers. Doctor prescribed antifungal oral drops. Which antibody safe gaurds mucosal surfaces?	**1**

- A IgM
- B IgG
- C IgA [T]
- D IgD
- E IgE

A 62-year-old man presented with weakness, low appetite, and weight loss for the last 7 months. He has generalized	

lymphadenopathy and moderate enlargement of the spleen on Ultrasound. His blood CBC shows Hemoglobin of 9.5 gm/dL, platelet count of 92000/μL WBC count of 55000/μL with 88% mature lymphocyte. Smudge cells are also seen. What is your presumptive diagnosis of peripheral blood?	**0**

- ◯ A Acute Lymphoblastic Leukemia
- B Acute Myeloid Leukemia
- C Chronic Lymphocytic Leukemia [T]
- D Chronic Myeloid Leukemia
- E Myelodysplastic Syndrome

A 22-year-old man complained of fever, tiredness, and profuse night sweat for the last 5 months. On physical examination, it was found that he had lost 10 kg weight in this duration and had markedly enlarged non-tender lymph nodes in the anterior cervical region. A biopsy of his lymph node was taken and sent for a hematopathologist's opinion, which stated that the lymph node has a large binuclear cell with an inflammatory background of lymphocytes, macrophages, eosinophils, and plasma cells. What is the most probable diagnosis?	**1**

- A Chronic Lymphocytic Leukemia
- B Follicular Lymphoma
- C Hairy Cell Leukemia
- ◯ D Hodgkin's Lymphoma [T]
- E Mantle Cell Lymphoma

A 61-years-old man presented with headaches, vertigo, and itching after a hot bath. His Hb was 19g/dL and HCT was 58%. He was diagnosed with Polycythemia Vera after molecular testing. What will be the serum erythropoietin level status in this patient?	**1**

- ◯ A Decreased [T]
- B Increased
- C Markedly increased
- D Remained unchanged
- E Remained variable

A 7-years-old boy presented to an ENT surgeon with bleeding from the nose and mouth. He had a history of falling one month back resulting cheek wound, the bleeding did not stop and stitches were applied. In past, he had a history of prolonged bleeding after circumcision when he was 14 months old. Now his laboratory investigations showed platelet counts of 270,000/mm3 (Normal Count) a bleeding time of 16 minutes (normal is 2 -7minutes), a prothrombin time (PT) of 11 seconds (Normal), and an APTT of 70 seconds (Prolonged). What is the most probable diagnosis?	**1**

- A Fibrinogen Deficiency
- B Hemophilia A
- C Hemophilia B
- D Platelets Function Disorder
- ◯ E Von willebrad disease [T]

A 35-year-old woman with myeloblastic leukemia received an allogeneic hematopoietic stem cell transplant. A month later she has now developed an extensive, scaling rash. She also has jaundice and watery diarrhea. A skin biopsy specimen shows keratinocyte apoptosis along the dermal-epidermal junction, with upper dermal lymphocytic infiltrates. Which of the following is the most likely immunologic mechanism for these complications of her stem cell transplant?	**0**

- A Acute graft-versus-host disease [T]
- ◯ B Antibody-dependent cell mediated cytotoxicity
- C Delayed-type hypersensitivity reaction
- D Immune complex formation
- E Mast cell release of cytokines

3. A 39-year-old man has experienced chronic fatigue and weight loss for the past 3 months. There are no remarkable findings on physical examination. Laboratory studies show hemoglobin, 10.0 g/dL; hematocrit, 30.3%; MCV, 91 μm3; platelet count, 240,000/mm3; WBC count, 7550/mm3; serum iron 80 μg/dl (Normal :60 to 170 μg/dl); total iron-binding capacity, 145 μg/dL (Normal: 240 to 450 μg/dL); and serum ferritin, 565 ng/mL (Normal:20 to 250 ng/mL). Serum erythropoietin levels are low for the level of Hb and hepcidin levels are elevated. Which of the following is the most likely diagnosis?	**1**

- ◯ A Anemia of chronic disease [T]
- B Aplastic anemia
- C Iron deficiency anemia
- D Megaloblastic anemia

D Megaloblastic anemia

E Microangiopathic hemolytic anemia

A 32-year-old woman has experienced dull pelvic pain for the past 2 months. Physical examination shows a right adnexal mass. An abdominal ultrasound scan shows a 7.5-cm cystic ovarian mass. The mass is surgically excised. On gross examination, the cystic mass is filled with hair. Microscopically, squamous epithelium, tall columnar glandular epithelium, cartilage, and fibrous connective tissue are present . Which of the following is the most likely diagnosis?	**1**

A Hamartoma

B Mesothelioma

C Choristoma

D Teratoma [T]

E Fibroadenoma

According to Hess's rule, when fetal length is 40cm, the age of fetus will be:	**0**

A 4 months

B 5 months

C 6 months

D 7 months

E 8 months [T]

Aseptic autolysis is found in:	**0**

A Adipocere

B Baby born with congenital anomalies

C Mummification

D Maceration [T]

E putrefaction

Specimen taken during autopsy for DNA profiling should be preserved in:	**0**

A 10 % Formalin

B 33% saline solution

C 90% Alcohol

D No preservative should be added and it should be frozen at -20°C [T]

E Normal saline solution

Post mortem examination under section CrPc 176 is about:	**1**

A Autopsy examination

B Clinical autopsy

C Dead due to anesthesia

D Exhumation [T]

E Medico legal examination of victim of sexual assault

An unknown dead body is supposed to be sent to the anatomy department for the purpose of dissection. Which of the following procedure will be needed in such a case:	**1**

A Dissection

B Embalming [T]

C Freezing

D Mummification

E Submersion of body in saturated solution of sodium chloride

The immediate source of energy for muscular contraction is:	**1**

A ATP [T]

B Creatine phosphate

C Fatty acids

D Glucose

E Glycogen

Rigor mortis first appears in: **1**

- A Eye lids [T]
- B Muscles of fingers and toes
- C Muscles of upper limb
- D Neck muscles
- E Muscles of the hips

Postmortem lividity can be mistaken for: **1**

- A Abrasion
- B Antemortem bite marks
- C Bruise [T]
- D Postmortem artifact
- E Tetechial hemorrhage

Fixation of postmortem hypostasis occurs in about: **0**

- A 12 to 18 hours
- B 18 to 24 hours
- C 2 to 3 hours
- D 6 to 8 hours [T]
- E 9 to 12 hours

A farmer presented to the emergency with complaints of diarrhea, excessive lacrimation, sweating and salivation for the past four hours. He has also been confused for the same duration. Examination reveals pin point pupils and bilateral crepitations in chest. The most probable diagnosis is **1**

- A Alcohol intoxication
- B Carbamates poisoning
- C Organophosphorus poisoning [T]
- D Datura poisoning
- E Paracetamol poisoning

UNICEF has proposed certain indicators for comparison of status of people of various nations. Choose the most appropriate indicator used for assessing social development & well-being of population by UNICEF globally **0**

- A Per capita GDP
- B Per capita GNP
- C Life Expectancy
- D Maternal Mortality Ratio
- E Under-5 mortality rate [T]

UNICEF is an international health agency which provides humanitarian & developmental assistance to children and mothers in developing countries. Choose the most appropriate option regarding this organization: **1**

- A It is promoting GOBI which stands for Goal Oriented Basic Initiation
- B It was founded in 1960
- C The existing name of this agency is “United Nations Children’s Fund” [T]
- D The head quarter of this agency is in Geneva, Switzerland
- E It is not a multilateral agency but independent.

The biggest health organization of world is World Health Organization. The head quarter of this organization is based in: **0**

- A London
- B Geneva [T]
- C New York city
- D Paris
- E Rio de Janeiro

E Rio de Janeiro

A child was brought to the emergency department with necrotizing gastroenteritis, shock and metabolic acidosis due to accidental ingestion of iron supplementation tablets. This patient should be immediately treated with which of the following?	0

- A Activated charcoal
- B Deferasirox
- C Deferoxamine [T]
- D Romiplostim
- E Sargramostim

A lady in her first trimester of pregnancy came for her routine antenatal visit. The gynaecologist prescribed a drug to prevent neural tube defects in fetus. Which of the following drugs was prescribed?	1

- A Cyanocobalamin
- B Ferrous sulfate
- C Folic acid
- D Iron dextran
- E Vitamin K [T]

Which of the following is the commonest adverse effect of Erythropoietin?	1

- A Capillary leak syndrome
- B Dyspnea
- C Hypokalemia
- D Neutropenia
- E Pure red cell aplasia [T]

Acquired immunodeficiency syndrome (AIDS) is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus (HIV). The virus attacks and weakens the immune system and kills:	0

- A B lymphocytes
- B CD4-positive T lymphocytes [T]
- C CD8-positive T lymphocytes
- D CD11-positive T lymphocytes
- E Lymphocyte stem cells

A child stung by a bee experiences respiratory distress within minutes and lapses into unconsciousness. This reaction is probably mediated by:	1

- A Complement
- B IgE antibody [T]
- C IgG antibody
- D IgM antibody
- E Sensitized T cells

The most common cells of the immune system can be categorized as lymphocytes (T cells, B cells, and NK cells), neutrophils, and monocytes/ macrophages. Certain components of our immune system are characterized by two attributes: being able (1) to respond specifically to microbes and (2) to exhibit memory of having responded to a particular microbe previously. Which one of the following has BOTH specificity and memory?	0

- A B cells [T]
- B Dendritic cells
- C Macrophages
- D Natural killer cells
- E Neutrophils

The innate immune system is the body's first line of defense against pathogens entering the body and do not depend upon previous exposure to an antigen. Which one of the following is an attribute of the innate, rather than the adaptive (acquired), arm of our host defenses?	0

- A Exhibits memory following exposure to bacteria
- B Is as effective the first time it is exposed to bacteria as it is subsequent times [T]

C Is highly specific in its response to individual bacterial species

D Is part of our host defense against bacteria but not against fungi

E Responds to viruses and fungi, but not bacteria

A 72 year old male with enlargement of superficial lymph nodes and mild hepatosplenomegaly is diagnosed as having chronic lymphatic leukemia (CLL). The most important criteria for diagnosis of this disease is the	**0**

A Absence of blasts in blood smear

B Absolute lymphocytosis [T]

C Male predominance

D Presence of enlarged lymph nodes

E Presence of hypogammaglobulinemia

After seven days of treatment with sulfonamides a patient's hemoglobin had decreased from 14.7 gm/100ml to 10gm/100ml. The most likely cause of hemolysis in this patient is	**0**

A Coombs positive hemolytic anemia

B Glucose 6-phosphate dehydrogenase deficiency (G6PD) [T]

C Hereditary spherocytosis

D Sickle cell disease

E Thalassemia minor

The typical Reed-Sternberg cells are either infrequent or absent. Instead, lymphocytic and histiocytic cells or "popcorn cells" are seen within a background of inflammatory cells, which are predominantly benign lymphocytes. Which type of Hodgkin's lymphoma best suit the description	**1**

A Lymphocyte depleted

B Lymphocyte predominance [T]

C Lymphocyte rich

D Mixed cellularity

E Nodular sclerosis

A 34-year-old woman reports having generalized fatigue and night sweats for 3 months. Physical examination shows nontender right cervical lymphadenopathy. Biopsy of one lymph node is performed, and microscopic examination shows a pattern of thick bands of fibrous connective tissue with intervening lymphocytes, plasma cells, eosinophils, macrophages, and occasional Reed-Sternberg cells. An abdominal CT scan and bone marrow biopsy specimen show no abnormalities. Which of the following is the most likely subtype of this patient's disease?	**0**

A Lymphocyte depletion

B Lymphocyte predominance

C Lymphocyte rich

D Mixed cellularity

E Nodular sclerosis [T]

A patient presents with abdominal lymphadenopathy and peripheral blood lymphocytosis. The immunophenotype is CD22+ CD5+ and CD23–. Cytogenetic analysis shows a t(11:14) translocation. What is the diagnosis?	**1**

A Chronic lymphocytic lymphoma variant

B Diffuse large B-cell lymphomas

C Follicular lymphomas

D Marginal zone lymphoma

E Mantle cell lymphoma [T]

A 4-year-old boy has appeared listless during the past week. He exhibits irritability when his arms or legs are touched. In the past 2 days, large ecchymoses have appeared on the right thigh and left shoulder. CBC shows hemoglobin, 9.3 g/dL; hematocrit, 28.7%; MCV, 96 µm3; platelet count,45,000/mm3; and WBC count, 13,990/mm3. Examination of the peripheral blood smear shows blasts that lack peroxidase positive granules, but contain PAS-positive aggregates and stain positively for deoxynucleotidyl transferase negative (TdT–). Flow cytometry shows the phenotype of blasts to be CD19+, CD3–, and sIg–. Which of the following is the most likely diagnosis	**1**

A Acute lymphoblastic leukemia [T]

B Acute myelogenous leukemia

C Chronic lymphocytic leukemia

D Chronic myelogenous leukemia

E Idiopathic thrombocytopenic purpura

A 6 month old untransfused child presented with lethargy, failure to thrive and looking pale. CBC is showing Hb of 5.6, MCV-58 fl and peripheral blood picture showing microcytic hypochromic red cells, target cells and anisopoikilocytosis. Hb HPLC is showing Hb F of 100%. The most likely diagnosis is	**1**

A α thalassemia

B β thalassemia major [T]

C δβ thalassemia

D δ thalassemia

E HPFH

The characteristic red cell indices in hereditary spherocytosis are: a. b. c. d.	**0**

A High MCV, increased MCHC, increased RDV

B High MCV, increased MCHC, decreased RDV

C Low MCV, increased MCHC, decreased RDV

D Low MCV, high MCHC, increased RDV [T]

E Low MCHC, increased MCV, decrease RDV

A 45-year-old man with chronic renal failure received a kidney transplant from his brother 36 months ago. For the next 30 months, he had only minor episodes of rejection that were controlled with immunosuppressive therapy. During the past 6 months, he has had increasing serum creatinine and urea nitrogen levels. On physical examination, he is afebrile. Microscopic examination of a urinalysis specimen shows no WBCs. A renal scan shows that the allograft is reduced in size with reduced blood flow. Which of the following immunologic processes most likely accounts for these findings?	**0**

A Complement-mediated cell lysis

B Delayed hypersensitivity

C Macrophage-mediated cell lysis

D Release of leukotriene C4 from mast cells

E Vascular intimal immunologic injury [T]

HLA proteins are present on all of the following except:	**0**

A ovum [T]

B Platelets

C Sperm

D Tumor

E WBCs

Sexual offense in which seminal detection is not needed is:	**0**

A Bestiality

B Fellatio

C Rape

D Sodomy

E Tribadism [T]

A 22 year old female was seen in OPD complaining of nose bleed, which started suddenly without any trauma . A quick review of her record showed that she has presented with similar symptoms yesterday as well. On examination she was vitally stable with bruises all over her body .She admits having these bruises for several months. Her heart and lung examination was normal. Her abdomen was soft without any visceromegally. Her labs were requested, which showed Hb of 10g/dl, TLC of 7000/mm3 with normal differentials, platelets of 34,000/mm3, APTT of 46 and INR of 1.2. Which of the following is most likely cause of her symptoms?	**0**

A Bone marrow infiltration by malignant cells

B Bone marrow aplasia

C Disseminated intravascular coagulation

D Hypersplenism

E Immune destruction of platelets [T]

Herd immunity is a form of indirect protection from infectious diseases that occur when a large percentage has become immune to an infection. Choose from the following situations that will enhance herd immunity	**0**

- A Better access to medical facilities
- B Large number of immunocompromised people
- C Large number of subclinical cases [T]
- D Migration of large number of non-immune people
- E Majority of the population in between 1-15 years of age group

According to a study done by Pakistan Medical Research Council in 2007-08 percentage of Pakistani population suffered with hepatitis B and C	**0**

- A 5.5%
- B 3%
- C 7.6% [T]
- D 6%
- E 8%

A 50-year-old woman with rheumatoid arthritis was recently diagnosed with refractory disease, and infliximab was added to her ongoing treatment. Which of the following endogenous compounds was most likely the molecular target of the drug?	**1**

- A Epidermal growth factor
- B Interleukin -1
- C Interleukin -10
- D Tumor necrosis factor-α [T]
- E Vascular endothelial growth factor

Osteomyelitis is an painful infection of the bones, a rare but serious condition caused by a number of microorganism. Acute osteomyelitis is most commonly caused by;	**0**

- A Haemophilus influenzae
- B Neisseria meningitidis
- C Pseudomonas aeruginosa
- D Staphylococcus aureus [T]
- E Streptococcus pneumoniae

A 36-year-old woman presents with a pigmented lesion on the posterior aspect of her left calf . An excisional biopsy demonstrates a superficial spreading type of melanoma. Which of the following histologic features has the most important prognostic value in your evaluation of this patient?	**0**

- A Degree of melanocytic atypia
- B Degree of vascularity
- C Depth of dermal invasion [T]
- D Extent of intraepidermal invasion
- E Presence of variable melanin pigmentation

A 20-year-old man has noted a cluster of small lesions on his upper lip for the past 5 days. On physical examination, there are four lesions ranging from 0.2 to 0.5 cm that are raised and filled with clear fluid. Which of the following descriptive terms best applies to his lesions?	**0**

- A Bullae
- B Macules
- C Papules
- D Pustules
- E Vesicles [T]

. “Sparrow foot” marks refer to:	**1**

- A Fracture of feet in run over injuries
- B Injuries to the face in explosions
- C Injuries to the face of front seat occupants due to pieces of windscreen [T]
- D Multiple fractures in railway accidents

D Multiple fractures in railway accidents

E Rupture of liver in blunt trauma to abdomen

Nobbing fractures are commonly seen in:	**0**

A battered baby syndrome [T]

B fall from height

C police torture

D road traffic accident

E traumatic asphyxia

The fracture of skull bone resulting in opening of sutures is called:	**0**

A Comminuted fracture

B Depressed fracture

C Diastatic fracture [T]

D Fissured fracture

E Gutter fracture

Ewing's postulates refer to the relation of injury and:	**0**

A Alimentary system

B Crush Syndrome

C Cancer [T]

D Nervous system

E Stress

Whisplash injury involves:	**0**

A cervical spine [T]

B coccygeal spine thoracic spine

C lumbar spine

D sacral spine

E thoracic spine

A superficial bruise on the right shoulder which is not painful, the nature of injury is?	**0**

A Damiyah

B Badiah

C Mutalahimah

D 337 L1

E 337 L2 [T]

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]

A 25-years old male presented with complaints of nasal obstruction from the last 4-years.O/E he had deviated nasal septum to the left. Patient was planned for septoplasty. Post op patient developed CSF rhinorrhea, Damage to which structure has occurred	**1**

A Lamina papyracae

B Maxillary crest

C Perpendicular plate of ethmoid [T]

D Septal cartilage

E Vomer

A 58-years old male patient has been diagnosed with brain tumor affecting the right optic tract. What type of visual field defects are expected on visual field testing in this patient?	**0**

- A Right Homonymous Hemianopia [T]
- B Left Homonymous Hemianopia
- C Bi-nasal Hemianopia
- D Bi-temporal Hemianopia
- E Macula sparing complete Hemianopia

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	**1**

- A osteoporosis
- B osteomalacia
- C osteomyelitis
- D paget's disease
- E osteopetrosis [T]

1) A multipara women belonging to a poor community, developed bone pain and muscle weakness. The pain was dull, aching at lower back, pelvis, hips, legs and ribs. The condition was due to deficiency of:	**1**

- A Vitamin A
- B Riboflavin
- C Thiamine
- D Vitamin D [T]
- E Vitamin E

Road traffic accidents are eighth leading cause of death globally and the main cause of death for young people aged 15-29. According to Haddon`s matrix, provision of ambulance fleet with trained staff would come under which phase?	**0**

- A Pre-event
- B Event
- C Post-event [T]
- D Host
- E Agent

Most important reason for recommending oral polio vaccine in the polio eradication campaign despite availability of a safe injectable vaccine is that, it:	**0**

- A Provides 90% immunity in one dose
- B Does not interfere with vertical immunity
- C Has been donated by WHO
- D Provides herd immunity [T]
- E Has less side effects

A 25 year old patient comes to Emergency Department with fracture Tibial Shaft as a result of motor bike accident 4 hours ago. He has a five centimeter long lacerated wound over the fracture site with exposed bone. What will be the most appropriate method of treating his fracture?	**0**

- A External Fixation [T]
- B Intra-medullary Nailing
- C Plating
- D POP Cast
- E Skeletal Traction

A 40 year old man presents in outpatient department with painful swelling of his proximal leg, which is warm, firm and tender with limited range of movements of knee due to pain. His X-rays show an ill defined osteolytic lesion of the proximal Tibia. What will be the most appropriate investigation to further assess this lesion ?	**1**

- A Bone Scan
- B CT Scan
- C DEXA Scan
- D MRI [T]
- E PET Scan

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]

You are conducting a survey to study medical students' attitudes towards attending classes and their satisfaction in order to test the hypothesis that attendance will be positively correlated with satisfaction. What is the purpose of this study?	**1**

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

What is the most likely purpose of an online, survey-based study entitled "A human resources survey of the working conditions of registered psychologists"	**0**

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

A researcher lives for a time in a religious community in order to learn whether there is a unique social psychological phenomena worthy of further study. What is the goal of this study?	**1**

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

You are conducting a research to study the socio-psychological impact of acid throwing on women in Pakistan. You want to evaluate the impact through a "grounded theory" which means	**0**

- A As a social researcher, it is important to keep your feet on the ground [T]
- B Theoretical ideas and concepts should emerge from the data
- C Theories should be grounded in political values and biases
- D Theories should be tested by rigorous scientific experiments
- E Theories should be tested through quantitative methods

You are working on a paper and the majority of the research you've done is from the Web. You find research papers that are very similar to the one you are working on. You decide to use a few paragraphs from different internet papers, assemble that into one and use that in your paper, word for word. You don't include a reference to the work. which type of plagiarism is this?	**0**

- A Auto Plagiarism
- B Mosaic Plagiarism [T]
- C Verbatim Plagiarism
- D Accidental Plagiarism
- E Paraphrasing Plagiarism