

Time Allowed: 120 min.

Max. Marks: 120

Note: • Attempt all questions. Select the best answer from given choices. Handover response sheet along with question paper after attempting.
• Use BLUE / BLACK ink only. Do not use RED Color. Filling of more than one option shall not be considered.
• Possession of mobile phone and other electronic accessories are strictly prohibited.

1. A mutation in a codon leads to the substitution of one amino acid with another. What is the name for this type of mutation?
a. Nonsense mutation b. Missense mutation c. Frame shift mutation d. Promoter mutation e. Operator mutation
2. In a family, father is having a disease and mother is normal. The disease is only inherited to daughters and not to sons. What type of disease is this?
 a. Sex linked dominant b. Sex linked recessive c. Autosomal dominant d. Autosomal recessive e. Y linked dominant
3. Which of the following is correct about G6PD deficiency hemolytic anemia?
a. Autosomal recessive disease b. Affects Females more than males c. Class I of the disease is mild
d. Inherited X-linked recessive disease e. Inherited X-linked recessive disease
4. Ultraviolet light leads to the development of skin cancer by _____.
 a. Directly damaging DNA b. Heating up the skin c. Inducing vitamin D formation
d. Causing water in the skin to vibrate wildly e. Killing immune cells located in the skin
5. Mutations in hedgehog pathway are seen in:
a. Squamous cell carcinoma b. Basal cell carcinoma c. Dysplastic Nevi d. Melanoma e. Trichoepithelioma
6. A 55-year-old man has worked for 20 years in a factory producing plastic pipe but not following safety standards. He has noted weight loss, nausea, and vomiting worsening over the past 5 months. An abdominal CT scan reveals a 12 cm right liver lobe mass. Liver biopsy reveals a neoplasm composed of spindle cells forming irregular vascular channels. Exposure to which of the following substances most likely led to development of this neoplasm?
a. Benzene b. Radon c. Cyclophosphamide d. Asbestos e. Vinyl chloride
7. A child is born with a single functional allele of a tumour suppressor gene. At the age of five the remaining normal allele is lost through a point mutation. As a result, the ability to inhibit cell cycle progression until the cell is ready to divide is lost. Which of the following neoplasms is most likely to arise via this mechanism?
a. Breast ductal carcinoma b. Pulmonary small cell anaplastic carcinoma c. Ocular retinoblastoma
d. Cerebral astrocytoma e. Chronic myeloid leukemia
8. A 27-year-old woman in excellent health has a routine health maintenance examination. A 2 cm firm, rounded mass is palpable beneath the skin of the left forearm. She has no difficulty using the arm and there is no associated pain with the mass, either in movement or on palpation. The overlying skin appears normal. The mass does not change in size over the next year. Which of the following neoplasms is she most likely to have?
a. Metastatic carcinoma b. Melanoma c. Rhabdomyosarcoma d. Lipoma e. Leiomyoma
9. Which of the following is a benign neoplasm?
a. Wilm's tumour b. Hepatoma c. Seminoma d. Mesothelioma e. Hamartoma
10. Which of the following is tumor suppressor gene?
 a. TP53 b. KRAS c. ALK d. KIT e. BCR
11. The most common tumor associated with paraneoplastic syndrome is:
 a. Small cell carcinoma of lung b. Squamous cell carcinoma of lung c. Breast carcinoma
d. Renal carcinoma e. Ovarian carcinoma
12. CEA is a tumor marker of:
a. Breast b. Testis c. Colorectal carcinoma d. Thyroid e. Colon
13. Effect of hyperparathyroidism is carcinoma lung is due to:
 a. Parathyroid like protein b. Parathyroid hormone 1 c. Parathormone d. Antibodies against gland e. Autoantibodies
14. Benign tumour made up of parenchymal cells representative of more than one germ layer (usually all 3)
a. Sarcoma b. Osteoma c. Carcinoma d. Teratoma e. Papilloma
15. What is disease is an X-linked disorder that is marked by wasting in the proximal muscles and extremities and compensatory hypertrophy of distal sites?
a. Myotonic dystrophy b. Limb girdle muscular dystrophy c. Emery dreifuss muscular dystrophy
d. Duchenne muscular dystrophy e. Fascioscapulohumeral muscular dystrophy
16. Which joint disease is associated with morning stiffness that improves with activity?
 a. Rheumatoid arthritis b. Osteoarthritis c. Gout d. Ankylosing spondylitis e. Psoriatic arthritis
17. What type of hypersensitivity reactions best fits in hemolytic disease of newborn.
 a. Anaphylactic b. Atopic c. Cytotoxic d. Immune complexes e. Delayed type
18. A child is stung by bee and experiencing respiratory distress. The reaction is probably
 a. IgE mediated b. IgA mediated c. IgM mediated d. IgG mediated e. Sensitized T cell
19. Systemic Lupus Erythematosus (SLE) is associated with
a. Antibody to TSH b. Antibody to IgG c. Antibody to acetylcholine receptor d. Antibody to DNA
e. Antibody to streptococci
20. Rheumatoid arthritis is associated with
a. Antibody to TSH b. Antibody to IgG c. Antibody to acetylcholine receptor d. Antibody to DNA
e. Antibody to streptococci

Handwritten notes: "May Hypochromic", "noble", "ly", "and", "ign or", "ant"

21. Patient underwent gastrectomy, after three months she presented with:
 a. Iron deficiency anemia b. Pernicious anemia c. Hemolytic anemia d. Folic acid deficiency
 e. Anemia of chronic disease
22. The pathogenesis of hypochromic anemia in lead poisoning is due to:
 a. Inhibition of enzymes involved in heme biosynthesis * b. Binding of lead to transferrin, inhibiting transport of iron
 c. Binding of cell-to-cell membrane of erythroid precursor d. Binding of lead to ferritin inhibiting their breakdown into hemosiderin e. Both a and b
23. In megaloblastic anemia, peripheral blood smear will show:
 a. Low platelets b. Hyper segmented neutrophils c. Microcytes d. Blast cells e. Smudge cells
24. Autoimmune hemolytic anemia is an example of:
 a. Type I hypersensitivity reaction b. Type II hypersensitivity reaction c. Type III hypersensitivity reaction
 d. Type IV hypersensitivity reaction e. Type V hypersensitivity reaction
25. Which hemoglobinopathies presented with crises?
 a. Sickle cell trait b. Aplastic anemia c. Sickle cell disease d. Thalassemia e. Hb C
26. Headache and visual problems are common symptoms of:
 a. Aplastic anemia b. Hemolytic anemia c. Agranulocytosis d. Lymphopenia e. Polycythemia
27. Splenectomy will help in treating which type of anemia?
 a. Hereditary spherocytosis b. Anemia of chronic disease c. G6PD deficiency d. Iron deficiency anemia
 e. Sideroblastic anemia
28. DIC occurs in:
 a. ALL b. CLL c. CML d. Acute promyelocytic e. Burkitt lymphoma
29. Bence Jones proteins are produced in:
 a. Multiple myeloma b. Leukemia c. Pernicious anemia d. Hemolytic anemia e. Hodgkin lymphoma
30. A 30-year-old woman is a known case of Rheumatoid arthritis. She is on NSAID for a long time. Now she has been found to have microcytic anemia. Her iron studies reveal a low iron and iron binding capacity. Which of the following is the most likely cause of anemia?
 a. Anemia of chronic illness b. Iron deficiency anemia c. Thalassemia d. Sideroblastic anemia e. Hemolytic anemia
31. Which ONE of the following is used to monitor transfusion iron overload?
 a. Bone marrow biopsy b. Serum ferritin c. Magnetic Resonance Imaging d. Cardiac function e. Lung function
32. 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:
 a. B lymphocytes b. CD4-positive T lymphocytes c. CD8-positive T lymphocytes
 d. CD11-positive T lymphocytes e. Lymphocyte stem cells
33. 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?
 a. B cells b. Dendritic cells c. Macrophages d. Natural killer cells e. Neutrophils
34. 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/ μ L 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.
 a. Acute Lymphoblastic Leukemia b. Acute Myeloid Leukemia c. Chronic Myeloid Leukemia
 d. Chronic Lymphocytic Leukemia e. Acute Promyelocytic Leukemia
35. A 1-year-old child on routine medical checkup showed low hemoglobin Hb: 11g/dL with normal TLC and platelet counts. His MCV was 64.9 fL (low), MCH :20.6 pg (low), RBC count: 6.2 million/ μ L (high) and RDW: 13.4% (normal). He has advised hemoglobin electrophoresis and his HPLC showed Hb A₂: 4.2%, Hb F: 1.2%, and Hb A: 94.6%.
 a. Alpha Thalassemia b. Beta Thalassemia Intermedia c. Beta Thalassemia Major d. Beta Thalassemia Minor
 e. Sickle Cell Anaemia
36. Mast cells play an important role in the immune system's response to certain bacteria and parasites and help control other types of immune responses. What is the role of mast cells during a Type I hypersensitivity reaction?
 a. Become phagocytic b. Release IgD antibodies c. Release interferon d. Release IgA antibodies
 e. Degranulate and immediately release histamine
37. Which of the following laboratory findings is typical in a patient with DIC?
 a. Elevated plasminogen b. Elevated protein S and C c. Decreased fibrinogen
 d. Normal clotting times (PT, APTT and TT) e. Thrombocytosis
38. The prothrombin time (PT) and INR (international normalized ratio) measure the integrity of:
 a. Platelet function b. Extrinsic pathway c. Intrinsic pathway d. Both extrinsic and intrinsic pathway e. Fibrinolysis
39. A 3-year-old boy who exhibits prolonged bleeding after minor trauma and a prolonged aPTT, but a normal platelet count, is likely to be diagnosed with:
 a. Liver dysfunction b. Disseminated intravascular coagulation c. Hemophilia d. Thrombocytopenia e. Thromboasthenia
40. Osteomyelitis is a painful infection of the bones, a rare but serious condition caused by a number of microorganisms. Acute osteomyelitis is most commonly caused by:
 a. Haemophilus influenzae b. Neisseria meningitidis c. Pseudomonas aeruginosa
 d. Staphylococcus aureus e. Streptococcus pneumoniae

Handwritten note: "85-1"

Handwritten note: "AML, CML"

Handwritten note: "E"

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.

- a. Staphylococcus aureus b. Staphylococcus epidermidis c. Streptococcus pneumoniae
d. Streptococcus pyogenes e. Streptococcus viridans
42. 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?
a. Bullae b. Macules c. Papules d. Pustules e. Vesicles
43. 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?
a. B lymphocytes b. Melanocytes c. Mast cells d. Neutrophils e. T lymphocytes
44. 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?
a. Congo red stain b. Giemsa stain c. Gram stain d. Orange stain e. Zeil-Nelson stain
45. 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?
a. Blood agar b. Chocolate agar c. CLED agar d. Lowenstein Jensen agar e. Sabouraud's agar
46. 55-year-old woman presents with muscle weakness. She has difficulty climbing stairs and lately tires while combing her hair. She also complains of difficulty in swallowing. A muscle biopsy demonstrates lymphocytic infiltration with single-fiber necrosis. In addition, muscle fibers exhibit basophilic granular material. An electron micrograph shows protein containing cytoplasmic vacuoles. Which of the following is the most likely diagnosis?
a. Amyotrophic lateral sclerosis b. Inclusion body myositis c. Becker muscular dystrophy
d. Myotonic dystrophy e. Myasthenia gravis
47. 60-year-old man who had been treated for lung cancer complains of a rash on his chest and pain in his upper arms and calves. He cannot raise his arms and climbs the stairs only with difficulty. A muscle biopsy shows perivascular infiltrates of lymphocytes and plasma cells extending in between the muscle fibers. Immunofluorescence reveals immune complexes in the walls of intramuscular blood vessels. Which of the following is the most likely diagnosis?
a. Becker muscular dystrophy b. Dermatomyositis c. Lambert-Eaton syndrome d. Myasthenia gravis
e. Toxic myopathy
48. A 23 year old male presented with 1 week history of fever, malaise, and mucocutaneous vesicles and blisters involving <10% of the body surface area. The symptoms appear in a week after initiation of some antibiotic therapy. Biopsy of the skin shows apoptotic and necrotic keratinocytes, epidermal necrosis and subepidermal bullae. The patient is diagnosed as Stevens-Johnson syndrome (SJS). Which of the following cell is involved in the pathogenesis of SJS?
a. CD4+ T-cell b. CD8+ T-cell c. Eosinophil d. Macrophage e. Plasma cell
49. A 28-year-old HIV-infected man has had increasing fever, cough, and dyspnea for the past 3 days, which has culminated in acute respiratory failure. On auscultation, diffuse crackles with diminished breath sounds are noted in all lung fields. He undergoes a bronchoalveolar lavage that yields Pneumocystis jiroveci by direct fluorescent antigen testing. Within 1 week after initiation of therapy, he develops target lesions of the skin composed of red macules with a pale, vesicular center, involving the upper arms and chest. Which of the following drugs is most likely to be implicated in the development of these lesions?
a. Dapsone b. Pentamidine c. Ritonavir d. Sulfamethoxazole e. Zidovudine
50. A 34 year old man present with 1 year history of non-progressive swelling in the cervical region. Core biopsy of the lesion shows spindle cells arranged in fascicular pattern. The tumor cells have elongated nuclei with blunt ends. No atypia, necrosis or mitosis is seen. The tumor is positive for smooth muscle actin (SMA). What is the most likely diagnosis?
a. Fetal type rhabdomyoma b. Fibrosarcoma c. Leiomyoma d. Leiomyosarcoma e. Spindle cell rhabdomyosarcoma
51. A 65 years old male having stage IV colorectal carcinoma develops multiple bone lytic lesions. These osteolytic lesions develop due to release of
a. Bone morphogenic proteins b. Beta catenin c. Parathyroid hormone like peptides
d. Insulin like growth factors e. Transforming growth factor beta
52. Most common pathogen causing osteomyelitis in neonates is
a. Klebsiella b. Pseudomonas c. Haemophilus influenzae d. Salmonella e. Escherichia coli
53. Postmortem lividity and rigor mortis are criteria to determine:
a. Cause of death b. Extent of volitional activity c. Fatal period d. Manner of death e. PM interval
54. Post mortem examination under section CrPc 176 is about:
a. Autopsy examination b. Clinical autopsy c. Dead due to anesthesia d. Exhumation
55. The immediate source of energy for muscular contraction is:
a. ATP b. Creatine phosphate c. Fatty acids d. Glucose e. Glycogen
56. Cherry-red discoloration is seen in poisoning due to
a. Arsenic b. Carbon monoxide c. Hydrogen Sulphide d. Lead e. Phosphorus
57. Which of the following is NOT a side effect of Digoxin toxicity?
a. Bradycardia b. Yellow vision changes c. Scooping of the T segment on ECG d. Hypokalemia e. None of above

58. "Casper dictum" refers to
 a. Drowning b. Death c. Suspended animation d. Putrefaction e. Electrocution
59. Bloating of facial features after death is due to:
 a. Secondary relaxation of body muscles b. Pressure effect of putrefactive gases c. Progression of marbling & its sequelae
 d. Enzymatic digestion of cells by its own enzymes e. Skin slip & bacterial action
60. The first internal sign of putrefaction is usually discoloration seen on:
 a. Bases of lungs b. Base of brain c. Lower poles of the kidneys d. Under surface of the liver e. Under surface of spleen
61. Tissue biopsy for histopathological examination should be sent in:
 a. Normal Saline b. Formalin c. Rectified spirit d. Saturated solution of NaCl e. Sodium fluoride solution
62. Milky appearance of semen is due to:
 a. Ascorbic acid b. Choline c. Seminal vesicle secretions d. Prostatic secretions e. Prostaglandin
63. The human blood can be differentiated from other species by:
 a. Benzidine test b. Hemin crystal test c. Phenolphthalein test d. Precipitin test e. Takayama test
64. Approximately how much percent of people secrete ABO blood group substances in their secretion?
 a. 85% of population b. 65% of population c. 95% of population d. 80% of population e. 25% of population
65. A superficial bruise on the right shoulder which is not painful, the nature of injury is?
 a. Damiyah b. Badiyah c. Mutalahimah d. 337 L1 e. 337 L2
66. A young man has sustained abrasion on the forehead during a fight, what is the nature of injury according to Q&D ACT?
 a. Shajjah-I-khafifah b. Shajjah-I-Mudihah c. Shajjah-I-Hashimah d. Shajjah-I-Munaqqillah e. JURH JAIFAH
67. Killing with intention only to harm, but death occurs which is unlikely, is called:
 a. QATL-I-Shib-I-AMD b. QATL-I-AMD c. QATL-BIS-SABAB d. QATL-I-KHATA e. MURDER
68. The injury where the length of the wound is greater than the depth and the margins are clean cut, this is known as:
 a. Abrasion b. Avulsion c. Incised Wound d. Stab wound e. Split laceration
69. Back spatter or Blow back phenomenon can be observed after spraying DERMAL NITRATE on the hands of suspected assailant to detect presence of:
 a. Washed blood stains b. Semen c. Blood d. Bleach e. Gun Powder
70. A victim of physical torture died in the custody of police. There is history of oliguria and subsequently anuria before death. On autopsy examination multiple bruises were found on various parts of the body. The likely cause of death is:
 a. Neurogenic shock b. Fat embolism c. Air embolism d. Infection e. Crush syndrome
71. A man was stabbed by a metallic rod which was having a square shaped cross section. The resultant injury will be:
 a. Square wound b. Rhomboid wound c. Oval wound d. Cruciate wound e. Round wound
72. According to the Qisas and Diyat ACT, injuries present on the neck are classified as:
 a. Jurh Jaifa hurts b. Miscellaneous hurts c. Shajjah d. Jurh e. Polygraph
73. Bumper fractures caused to the pedestrian are actually:
 a. Primary impact injuries b. Secondary impact injuries c. Secondary injuries d. Run over injuries e. Accidental injuries
74. Alpha thalassemia is caused by alpha gene deletions on chromosome 16. If all 4 genes are deleted what would be the clinical manifestation
 a. HbH disease b. Thalassemia intermedia c. Thalassemia minima d. Thalassemia minor e. Hydrops foetalis
75. In Duchenne Muscular Dystrophy, the basic defect present in the muscle cell membrane is
 a. Excessive production of Dystrophin b. Non production of Dystrophin c. Thickening of Sarcolemma
 d. Absence of Actin filaments e. Malfunction of C- terminals
76. In Juvenile Idiopathic Arthritis, the 2nd line medication of choice especially for arthritis is
 a. Cyclosporin b. Prednisolone c. Methotrexate d. Naproxen e. Celecoxib
77. Vitamin D deficiency causes
 a. Night blindness b. Rickets c. Dermatitis d. Chelitis e. Kolonychia
78. A child falls from a chair and complains of pain in the mid-leg. There is no visible deformity. He is unable to bear his weight on standing. What is the diagnosis?
 a. Oblique Fracture b. Spiral Fracture c. Comminuted Fracture d. Fracture of Epiphysis e. Transverse Fracture
79. 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?
 a. Bone Scan b. CT Scan c. DEXA Scan d. MRI e. PET Scan
80. A 39-year-old carpenter has mistakenly ingested four packets of insecticides. After about an hour, he develops confusion, vomiting and blurring of vision. He has been brought to the emergency department. What is the best first line of management in this patient?
 a. Activated charcoal b. Gastric lavage c. Flumazenil d. Naloxone e. Domperidone
81. A 15 years old male presented to the medical OPD with chief complaints of easy fatigability, shortness of breath and palpitation for the past three months. He is also complaining of severe bony aches and pains which comes in episodes. On examination he is markedly pale and jaundiced. Rest of the examination is unremarkable. His CBC showed Hb of 9gm/dl, MCV 80, platelets normal and normal WBC count. Indirect bilirubin is 3mg/dl. What abnormality would you expect on the peripheral smear of this patient?
 a. Spherocytes b. Sickle cells c. Tear drop cells d. Howel jolly bodies e. Target cells
82. 30-year-old male presented with three months history of headache blurring of vision and pruritus after a hot bath. He is nonsmoker and lives in Mardan. On examination he is plethoric and has splenomegaly. Rest of the examination is unremarkable. His CBC shows Hb of 20mg/dl hematocrit 60. Normal TLC and platelets. Rest of the labs are also normal. A provisional diagnosis of polycythemia rubra vera is made. What is the investigation of choice?
 a. JACK 2 mutation b. Bone marrow c. Flow cytometry d. Philadelphia chromosome e. Protein electrophoresis

- ... 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 assess his symptoms further?
- a. DEXA scan b. MRI sacroiliac joint with STIR sequence c. MRI lumbar spine d. Ultrasound of the spine
- e. X-ray thoracolumbar spine
84. 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?
- a. Ankylosing Spondylitis b. Rheumatoid Arthritis c. Osteoarthritis d. Osteomalacia e. Osteoporosis
85. You are conducting research to examine the relationship between variables with the primary goal being to analyze and represent that relationship mathematically through statistical analysis. You are conducting
- a. Diagnostic research b. Experimental research c. Fundamental research d. Qualitative research e. Quantitative research
86. 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
- a. As a social researcher, it is important to keep your feet on the ground
- b. Theoretical ideas and concepts should emerge from the data c. Theories should be grounded in political values & biases
- d. Theories should be tested by rigorous scientific experiments e. Theories should be tested through quantitative methods
87. 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?
- a. Descriptive b. Diagnostic c. Explanatory d. Exploratory e. Predictive
88. What is the most likely purpose of an online, survey-based study entitled "A human resources survey of the working conditions of registered psychologists"
- a. Descriptive b. Diagnostic c. Explanatory d. Exploratory e. Predictive
89. 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?
- a. Descriptive b. Diagnostic c. Explanatory d. Exploratory e. Predictive
90. When one person understands another person's experiences by imagining oneself in another person's situation, it is called?
- a. Empathy b. Sympathy c. Professionalism d. Humanism e. Confidence
91. A 58-years old male patient has been diagnosed with Pituitary tumor affecting the Optic Chiasma. What type of visual field defects are expected on visual field testing in this patient?
- a. Right Homonymous Hemianopia b. Left Homonymous Hemianopia c. Bi-nasal Hemianopia
- d. Bi-temporal Hemianopia e. Macula sparing complete Hemianopia
92. Fallopian canal in the middle ear is the:
- a. Aditus b. Eustachian tube c. External auditory meatus d. Facial nerve canal e. Internal auditory meatus
93. Immuno-biological substance which produces specific protection against a disease is called
- a. Immunity b. Vaccine c. Immune globulin d. Cell e. Serum
94. A system which is used to help the storage and transportation of vaccine at low temperature is
- a. Cold box b. Fridge c. Ice pack d. Cold chain e. Refrigerator
95. True about viral hepatitis B is
- a. Transmits by oral route b. Transmit by fomite c. Transmit by fecal route d. No vaccine available
- e. Transmit by reuse of infected syringe
96. How can osteoporosis be prevented? →
- a. Eat low fat diet b. Eat low calcium diet c. Get calcium and Vit D in diet d. Eat low protein diet
- e. Eat high Carbohydrates
97. A 2 years old child was brought to the emergency department. He was having convulsions. On a rapid general physical examination kyphoscoliosis was discovered X-ray showed swollen lower end of radius. What is the likely diagnosis?
- a. Osteomalacia b. Keratomalacia c. Rickets d. Pellagra e. Beriberi
98. Self-administration of drug for non-medical reasons in quantities and frequencies which may impair an individual's ability to function effectively and which may result in social, physical and emotional harm is best named as
- a. Drug dependence b. Drug tolerance c. Drug abuse d. Self-medication e. Drug therapy
99. The most important factor which makes the smoking cessation program successful is
- a. The desire of smoker to quit b. Availability of replacement therapy c. A well planned program
- d. Advice by competent doctor e. Follow-up Program
100. Japan has low incidence of prostate cancer as compared to the incidence in US. The incidence of carcinoma prostate in Japanese did not change with their migration to the U.S. It supported:
- a. Nutritional effect b. Environmental effect c. Genetic effect d. Metabolic effect e. Catabolic effect
101. Atropine is the prototype drug in the muscarinic anti cholinergic drugs. Its therapeutic application is curtailed due to its broad range of toxic effects. Where applicable which of the following in toxic doses is NOT typically caused by atropine?
- a. Hallucinations b. Bronchospasm c. Hyperthermia d. Urinary retention e. Blurred vision
102. In addition to counseling and psychotherapy, a man in a smoking cessation program receives Varenicline, a drug that reduces craving and withdrawal effects. The receptor activation of this drug results in:-
- a. Sodium influx b. Potassium efflux c. Increased cyclic AMP d. Increased cyclic GMP e. IP3 formation
103. Which of the following drugs used in the management of glaucoma helps by decreasing the synthesis of aqueous humor?
- a. Carbachol b. Dipivefrin c. Latanoprost d. Pilocarpine e. Timolol

↑ 11B39 DAG
nicotinic
no name

81 (B)
A1

Atropin ACE
ACE → Spasm
The ...

ACE
Spasm

104. Which of the following β -blockers does not have intrinsic sympathomimetic activity?
 a. Acebutolol b. Carteolol **c. Metoprolol** d. Penbutolol e. Pindolol
105. Which of the following strengths of Epinephrine (Adrenaline) solutions are used in the management of anaphylaxis?
 a. 1 : 100 **b. 1 : 1000** c. 1 : 10,000 d. 1 : 80,000 e. 1 : 200,000
106. A 52-year-old female with rheumatoid arthritis has enrolled herself in a clinical study to assess the effectiveness of several medications. Which of the following inhibits tumor necrosis factor by binding to its receptor?
 a. Adalimumab b. Anakinra c. Denosumab **d. Etanercept** e. Roxolutinib
107. 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?
 a. Cyclopentolate b. Phenylephrine **c. Pilocarpine** d. Prazosin e. Tropicamide
108. Which of the following is a selective α -1A receptor blocker that affords symptomatic relief in benign prostatic hypertrophy without producing significant fall in blood pressure?
 a. Doxazosin b. Phentolamine c. Prazosin **d. Tamsulosin** e. Terazosin
109. Ritodrine is a beta 2 agonist that acts like a tocolytic. Which of the following is a contraindication to its use?
 a. Cephalopelvic disproportion b. Dysmenorrhea c. Fetal Malpresentation d. Post-term labor **e. Threatened Abortion**
110. A sea merchant is advised a drug in the form of a patch as he is about to leave on a 6 week trans-Atlantic voyage. Which of the following best describes the mechanism of action of this drug?
 a. Chemical antagonist at muscarinic receptors b. Irreversible antagonist at muscarinic receptors
 c. Physiologic antagonist at muscarinic receptors **d. Reversible antagonist at muscarinic receptors**
 e. Reversible antagonist at nicotinic receptors
111. Dilatation of the pupil without paralysis of accommodation is best accomplished with
 a. Atropine b. Echthiophate **c. Phenylephrine** d. Pilocarpine e. Tropicamide
112. A person with history of chronic diarrhea frequently gets a large amount of diphenoxylate and consumes it all at once for the euphoria related with opioids. The physician now decides to prescribe diphenoxylate in combination with smaller doses of another drug that causes a host of unpleasant systemic responses if such combination is ingested in higher doses. Identify the drug:
 a. Apomorphine b. Atropine **c. Ipecac** d. Magneslum sulfate e. Naltrexone
113. A 42-year-old man with an acute MI is treated with Alteplase. Which of the following most accurately describes how this drug exerts its intended effect?
 a. Blocks platelet ADP receptors b. Inhibits platelet thromboxane production
 c. Inhibits synthesis of vitamin K-dependent coagulation factors d. Prevents platelet aggregation by blocking GP IIb/IIIa receptors
 e. Promotes conversion of plasminogen to plasmin
114. A 36-year-old man presents with tingling and neuropathic pain in his feet. Blood test reveals macrocytic anemia. Which of the following drugs will probably be required in this case?
 a. Erythropoietin b. Filgrastim c. Folic acid d. Iron dextran **e. Vitamin B12**
115. A patient with a history of carcinoma caecum and resection of the terminal ileum and caecum along with ascending colon. One year back is evaluated by oncologist and found to be fully cured of cancer. He however complains of severe pallor and weakness in spite of good dietary intake and nutritional supplements. Investigations reveal a hemoglobin value of 5.6 grams%. Which of the following therapeutic interventions is most likely to improve his hematological parameters?
 a. Oral iron b. Parenteral iron c. Oral vitamin B12 **d. Parenteral vitamin B12** e. Oral folic acid
116. If a patient began oral therapy with alendronate, she should be advised to drink large quantities of water with the tablets and remain in an upright position for at least 30 minutes and until eating the first meal of the day. These instructions would be given to decrease the risk of which of the following?
 a. Cholelithiasis b. Diarrhea c. Constipation **d. Erosive esophagitis** e. Pernicious anemia
117. Among the NSAIDs the Aspirin is considered as a prototype drug. However sometimes Ketorolac is preferred over it in certain therapeutic considerations. The chief advantage of ketorolac over aspirin is that the Ketorolac:-
 a. Can be combined more safely with an opioid such as codeine b. Does not prolong bleeding time.
 c. Is available in a parenteral formulation that can be used intramuscularly or intravenously. d. Is less likely to cause acute renal failure in patients with preexisting renal impairment.
 e. Is more cheaper
118. A patient with asymptomatic hyperuricemia is started on probenecid. In a couple of days he develops acute gout. Which of the following is the best explanation of how probenecid triggered this acute gouty arthritic episode although it itself is a treatment of chronic gouty arthritis?
 a. Accelerated synthesis of uric acid by the probenecid b. Co precipitation of probenecid and urate in the joints
 c. Idiosyncratic response d. Probenecid-induced systemic acidosis, favoring uric acid crystallization
 e. Reduced renal excretion of uric acid
119. NSAIDs have multiple indications other than that for rheumatologic disorders. One such drug is the treatment of choice for the treatment of a patent (open) Ductus Arteriosus. Which of the following drugs would be administered in an attempt to close the ductus medically?
 a. Cimetidine b. Diphenhydramine **c. Indomethacin** d. Misoprostol e. Prostaglandin E1 (PGE1; alprostadil)
120. 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?
 a. Epidermal growth factor b. Interleukin -1 c. Interleukin -10 **d. Tumor necrosis factor- α** e. Vascular endothelial growth factor

FNP

β_2 uterine
Kibodnic

thromboxin \rightarrow platelet agg

Macrocytic anemia \rightarrow B12

Aspirin

Am
AB \rightarrow Ab
B

probenecid \rightarrow \downarrow absorption of uric acid