

1. Cholinomimetics are useful in the treatment of all the following conditions except?

- a) Peptic Ulcer.
- b) Paralytic ileus.
- c) Slowing of the Glaucoma.
- d) Xerostomia.
- e) Urinary Retention.

2. Which drug is used for motion sickness?

- a) Pilocarpine
- b) Atropine
- c) Scopolamine
- d) Rivastigmine
- e) Pirenzepine

3. Which of the following mydriatics has the fastest and briefest action?

- a) Atropine
- b) Homatropine
- c) Tropicamide.
- d) Cyclopentolate
- e) Scopolamine

4. Which of the following has high affinity for phosphorous atom in parathion & is often used to treat insecticide poisoning?

- a) Atropine.
- b) Bethanechol
- c) Cyclopentolate
- d) Neostigmine
- e) Pralidoxime

5. A 30 years old man has been treated with several autonomic drugs for 4 weeks. He is now admitted with signs of toxicity. Which of the following would distinguish between overdose of ganglion vs muscarinic blocker?

- a) Blurred vision
- b) Dry mouth, constipation
- c) Mydriasis.
- d) Postural hypotension
- e) Tachycardia

6. Which of the following physiological changes can happen when a person is attacked by a ferocious leopard?

- a) Increase in heart rate
- b) Increase in lacrimation (tears)
- c) Constriction of the pupil (miosis)
- d) Increase in gastric motility
- e) All of the above

7. A Hypertensive patient was accidentally given an α_2 agonist instead of an α_1 blocker. Which of the following is correct in this situation?

- a) α_2 agonists can increase the release of norepinephrine from sympathetic nerve terminals
- b) α_2 agonists can reduce blood pressure in this patient
- c) α_2 agonists can increase blood pressure in this patient
- d) α_2 agonists will not affect blood pressure in this patient
- e) None of the above

8. A 58 year old female patient started on a new antihypertensive medication recently. Her blood pressure seems to be under control, but she complains of fatigue, drowsiness & fainting when she gets up from the bed (orthostatic hypotension). Which of the following drugs is she most likely taking?

- a) Metoprolol
- b) Propranolol
- c) Prazosin

9. A β -blocker was prescribed for hypertension in a lady asthmatic patient. After about a week of treatment, the asthma attacks got worse and the patient was asked to stop taking the β -blocker. Which of the following would you suggest as an alternative in this patient that is less likely to worsen her asthma?

- a) Propranolol
- b) Metoprolol
- c) Labetalol
- d) Carvedilol.
- e) None of the above

10. A patient undergoing cancer chemotherapy has an increase in urinary frequency with much discomfort. No specific findings are apparent on physical examination. Laboratory results include hematuria and mild leukopenia but no bacteria or crystalluria. If the symptoms experienced by the patient are drug related, the most likely cause is?

- a) Cyclophosphamide
- b) 5-Fluorouracil
- c) Methotrexate
- d) Prednisone
- e) Tamoxifen

11. Following surgery for breast cancer, a patient is to undergo chemotherapy with a regimen that consists of cyclophosphamide, methotrexate, 5-fluorouracil, and doxorubicin. Which one of the following agents is most likely to be protective against the toxicity of methotrexate?

- a) Dexrazoxane
- b) Folinic acid
- c) Mercaptoethansulfonate
- d) Tamoxifen
- e) Vitamin C

12. A patient recently underwent cardiac surgery and is taking Warfarin. Which herb or medicine should be taken cautiously with this therapy?

- a) Ephedra
- b) Co-enzyme Q 10
- c) Allium sativum (Garlic)
- d) Both b and c
- e) Asian ginseng

13. Which of the following reactions require Vitamin B12 but not Folate?

- a) Conversion of malonic acid to succinic acid
- b) Conversion of homocysteine to methionine
- c) Conversion of serine to glycine
- d) Thymidylate synthesis
- e) None of the above

14. INF are usually induced by

- a) Viral infections
- b) Gram positive bacteria
- c) Gram negative bacteria
- d) Fungal infections
- e) Tumor growth

15. Which of the following is considered "fibrin selective" because it rapidly activates plasminogen that is bound to fibrin?

- a) Alteplase
- b) Fondaparinux
- c) Streptokinase
- d) Urokinase
- e) All of the above

16. A 40-years old female is diagnosed with Rheumatoid arthritis, is already taking Methotrexate

P.T.D

1. A 43 years old male presents with acute onset of severe pain in the base of right big toe which keeps him awake all night. His serum uric acid levels are 10.2 mg/dl. Most likely risk factors for his condition are all of the following EXCEPT

- a) alcohol consumption
- b) obesity
- c) drugs like thiazide diuretics
- d) nephropathy
- e) age related wear and tear of the joints

2. A 35 years old female presents with a mobile, non-tender soft tissue swelling on the upper back about 3 cm in diameter for the last 3 months. On histopathology it is characterized by all of the following EXCEPT

- a) mature adipocytes
- b) a well encapsulated lesion ✓
- c) circumscribed non infiltrative lesion ✓
- d) presence of lipoblasts ✓
- e) fibrous tissue septae ✓

3. Type I muscle fibers are characterized by all of the following EXCEPT

- a) low glycogen content of muscle cells
- b) appears red due to high myoglobin content
- c) has high mitochondrial number
- d) are slow fibers
- e) they are easily fatigued

4. A 50 years old women presents with arthritis and deformities of small joints of hands for the last 10 years now present with multiple nodules on forearms which on biopsy reveal central areas of fibrinoid necrosis surrounded by a rim of palisaded histiocytes. These are most likely

- a) gumma
- b) osteophytes
- c) tophi
- d) rheumatoid nodule
- e) granulomas

5. A 60 years old laborer presents with progressively worsening pain of right knee joint which gets worse with activity. Following morphological features are associated with this condition EXCEPT

- a) osteophytes
- b) eburnation
- c) joint mice
- d) subchondral fibrous cysts
- e) rice bodies

6. A 26 years old male presents with progressive lower backache and stiffness. He is HLA B27 positive with no antibodies detected in the serum. His X-ray shows straightening of the lumbar spine and loss of intervertebral space. His provisional diagnosis is

- a) gouty arthritis
- b) ankylosing spondylitis
- c) reactive arthritis
- d) osteoarthritis
- e) infective arthritis

7. A 44 years old man has hyperuricemia with serum uric acid levels 9.2 mg/dl. Pathogenesis of gout include all of the following EXCEPT

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8. A 19 years old girl presents with high grade fever, acute onset of painful right knee swelling which appears red and warm on examination with limitation of movement. His ESR and leucocyte counts are elevated. He is most likely suffering from

- a) reactive arthritis
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- d) Potts disease
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DMD

9. A 12-year-old boy is suffering from Duchene muscular dystrophy. The incorrect statement regarding this condition is

- a) it is X linked disease
- b) first involves shoulder girdle
- c) cardiomyopathies cause death
- d) calf muscles show pseudo hypertrophy
- e) teenage patients are wheel chair bound.

10. A 50 years old male having history of repeated attacks of gouty arthritis will have all of the features EXCEPT

- a) crystals deposition in joints and soft tissue
- b) tophi
- c) uric acid nephrolithiasis
- d) pyelonephritis
- e) targetoid skin lesions

11. Most common pathogen causing osteomyelitis in neonates is

- a) Klebsiella
- b) Pseudomonas
- c) Haemophilus influenzae
- d) Salmonella
- e) Escherichia coli

12. 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 protein
- b) Beta catenin
- c) Parathyroid hormone like peptide
- d) Insulin like growth factors
- e) Transforming growth factor beta

13. Osteosarcoma is associated with all of the following mutations except

- a) RB gene
- b) TP53
- c) APC
- d) CDKN2A (INK4a)
- e) MDM2

14. The classic complement pathway is initiated by:

- a) Antigen
- b) Factor B
- c) Bacterial Endotoxin
- d) Antigen-IgG complex
- e) Mannose binding lectin

15. Natural killer cells are:

- a) B cells that can kill without complement
- b) Cytotoxic T cells
- c) Increased by immunization
- d) Kill virus infected cells without prior sensitization
- e) Mainly involved in autoimmune diseases

16. Type IV hypersensitivity reaction is characterized by:

- a) Edema without a cellular infiltrate
- b) An infiltrate composed of neutrophils only
- c) An infiltrate composed of helper T cells and macrophages
- d) An infiltrate composed of eosinophils only.
- e) An infiltrate composed of macrophages only

17. Heavy chain of IgG is of following type:

- a) Epsilon
- b) Gamma
- c) Mu
- d) Delta
- e) Alpha

18. Neutrophils are attracted to an infected area by:

- a) IgM
- b) C1
- c) C5a
- d) C8
- e) C2a

19. Time required to produce detectable antibodies in primary immune response is:

- a) 12 hours
- b) 3 days
- c) 5 days
- d) 7 days
- e) 28 days

20. If an individual was genetically unable to make a J chain, which of the following immunoglobulins would be affected:

- a) IgG and IgE
- b) IgD and IgE
- c) IgM and IgA
- d) IgD and IgG
- e) IgD and IgM

Total Marks: 20

Roll No: _____

Dated: 31/08/2023

1. The pedestrian will sustain the following bonnet injuries after getting hit by a moving vehicle except:
 - a. Linear abrasions.
 - b. Grazes.
 - c. Bruises.
 - d. Friction burns.
 - e. Incised wounds.
2. Temperature changes on Postmortem cooling curve is depicted by
 - a. Parabolic curve
 - b. Linear curve
 - c. Sigmoid curve
 - d. Straight curve
 - e. None of the above
3. Algor mortis is best measured by
 - a. Anal temperature measurement
 - b. Ear insertion method
 - c. Computerized examination
 - d. In situ visceral measurement
 - e. All of the above
4. Livor mortis can be confirmed on autopsy table by single best test that is
 - a. Vital reaction
 - b. Color changes
 - c. Incision Test
 - d. Histo chemical examination
 - e. Microscopic examination
5. Custodial death investigations can be done under which section of CrPc
 - a. 42
 - b. 174
 - c. 176
 - d. 187
 - e. All of above
6. Preservation of body for long term preservation is carried out at temperature at °C range of
 - a. -20
 - b. 0
 - c. 4
 - d. 10
 - e. All of above
7. Rifling is a
 - a. Loading of gun
 - b. Making land and grooves in a rifle
 - c. Spectroscopic examination of rifles.
 - d. Smooth bore examination
 - e. None of above
8. When two poisons are taken simultaneously in non toxic doses, they may cause intense signs and symptoms, this effect is called:
 - a. Hyper sensitivity.
 - b. Ideosyncrasy.
 - c. Synergism
 - d. Inherent Intolerance.
 - e. All of above.
9. While dealing a suspected case of poisoning, if there is imminent death of a victim, which one of the following is the legal duty of a doctor
 - a. Issue a death certificate without delay
 - b. Arrange for dying declaration.
 - c. Not to inform investigating officer.
 - d. Inform district health officer immediately.
 - e. Referral.
10. You are working in basic health unit and you encounter a suspected poisoning case. What is your legal duty if you have, limited equipments/arrangements for managing your patient:
 - a. Do not inform police.
 - b. Keep patient with you with strict vital monitoring.
 - c. Get in touch on phone with your colleagues.
 - d. Refer to tertiary care hospital.
 - e. Prepare dying declaration.
11. Which of the following is used to detect the human blood in the stain:
 - a. Precipitin test.
 - b. Benzidine test.
 - c. Haemin crystal test.
 - d. Takayama's test.
 - e. Haemochromogen crystal test.

12. A father is having blood group B, mother is AB. The children are not likely to have:

- a. A
- b. B
- c. O
- d. AB
- e. None of above

13. You receive a person bleeding heavily in casualty after having a fight on roadside on examination he was in shock and had incised wound on (L) leg. Give your opinion according to Qisas and Diyat act.

- a. Jurh Ghayr jaifah Hashima.
- b. Jurh Ghayr jaifah Badiha
- c. Jurh Ghayr jaifa Mudiha
- d. Jurh Ghayr jaifa Damiyah
- e. Jurh Jaifa

14. A bullet injury over the vertex wherein bullet enters into brain parenchyma and lodges at the base of skull. It is included in which type of hurt according to Qisas and Diyat:

- a. Shajjah Mudiha
- b. Shajjah Amnah
- c. Shajjah Damigha
- d. Shajjah Munaqillah
- e. Jurh Jaifa

15. Compensation specified in section 323 payable to the heirs of the victim by offenders for causing death of victim is called:

- a. Arsh
- b. Daman
- c. Ta'azir
- d. Diyat
- e. None of above.

16. Tort is a

- a. Crime
- b. Civil wrong
- c. Criminal wrong
- d. Public involvement
- e. All of above

17. Which of the following is the common example of demulcents?

- a. Activated charcoal and KMnO₄
- b. Egg albumin and vinegar
- c. EDTA and Penicillamine
- d. Fat and milk
- e. Nalaxone and Milk

18. Structural and functional damage of brain stem may be diagnosed depending upon the following observation.

- a. Irreversible unconsciousness
- b. Absent Respiration
- c. Absent gag reflex
- d. Absent Vestibulocochlear test
- e. All of Above

19. Suspended animation can be due to

- a. Death trance
- b. In Newborns
- c. Drowning
- d. Electrocutation
- e. All of Above

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

- a. Dissection
- b. Embalming
- c. Freezing
- d. Mummification
- e. Submersion of body in saturated solution of sodium chloride.

**AYUB MEDICAL COLLEGE ABBOTTABAD
DEPARTMENT OF COMMUNITY MEDICINE**

3rd Year MBBS, Block "II" Assessment Exam
(Held on 30-08-2023)

Name: _____ 20- _____ Marks: _____

Note: Read the text carefully and choose the correct one & encircle your answer in the answer column only.

S. No.	Text of the Question	Answer
1.	The example of blood borne infection is: a) Hepatitis A b) Hepatitis E c) Hepatitis B d) Cholera e) Scabies	A B C D E
2.	Infected blood can enter humans through: a) Eyes b) Acne c) Abrasions d) Cuts e) All of the above	A B C D E
3.	One of the most appropriate public health strategies for prevention of nutritional anemia in school going children is: a) Vitamin C rich diet b) Periodic deworming c) Malaria prophylaxis d) Environmental sanitation e) Feeding young children	A B C D E
4.	The example/s of Nutritional programs in Pakistan are: a) Micronutrient initiative b) School health program c) NP for FP & PHC d) Tawanna Pakistan e) All of the above	A B C D E
5.	Oral polio vaccine is an example of: a) Toxoid b) Live attenuated vaccine c) Killed (inactivated) vaccine d) Recombinant vaccine e) Cellular fraction vaccine	A B C D E
6.	Under the EPI program of Pakistan, a child is vaccinated against TB at the age of: a) At birth b) 6 weeks c) 10 weeks d) 14 weeks e) 9 months	A B C D E
7.	Among the vaccines, polio is the most sensitive to heat which requires storage at: a) -10 degree C b) -15 degree C c) -20 degree C d) -5 degree C e) 0 degree C	A B C D E
8.	The principle of Ergonomic dictates a) Fitting worker to the job b) Fitting the job to the worker c) Fitting the machinery to the work d) Fitting the job to the environment e) Prevent loss of production	A B C D E
9.	The head quarter of WHO is located in a) Washington b) New York city c) Geneva d) Nairobi e) London	A B C D E
10.	According to WHO what was the most commonly reported cancer Globally in 2022? a) Breast Cancer b) Lung Cancer c) Lip, Oral Cavity Cancer d) Liver Cancer e) Esophageal Cancer	A B C D E
11.	UNICEF works in following 4 areas except for one: a) Child health b) Child nutrition c) Family and child welfare d) Education e) Future job of child	A B C D E
12.	A 40 year old male patient diagnosed as a case of tuberculosis and had started anti-tuberculosis medication 2 months back. He suddenly has developed hearing loss in last 3 days. What medication could have caused this hearing loss? a) Vancomycin b) Isoniazid c) Streptomycin d) Neomycin e) Vlarithromycin	A B C D E

<p>13. A 38-year-old female presents to the ER with history of bruising and petechia for the last 15 days. She has heavy menstrual bleed in the recent cycle, but she was fine previously. She denies having fever or headache. She has not taken any medicines recently. O/E there is no lymphadenopathy or hepatosplenomegaly. CBC shows Hb 11.3 g/dL, TLC 7900/mcL, Platelets 17000/mcL. What is the likely diagnosis?</p> <p>a) AML b) CLL c) CML <input checked="" type="checkbox"/> d) ITP e) Myofibrosis</p>	<p style="text-align: right;">A <input checked="" type="radio"/> B C D E</p>
<p>14. A 62-year-old man presents to the OPD with the complaints of body aches, low grade fever, and abdominal fullness for the past 8 months. On examination his GPE is unremarkable and he has moderate splenomegaly. CBC shows Hb of 11g/dL, TLC 150,000/mcL, Platelets 145,000/mcL. Neutrophils are 85%, Lymphocytes are 15%. What is the likely diagnosis?</p> <p>a) AML b) ALL c) CLL <input checked="" type="checkbox"/> d) CML e) Lymphoma</p>	<p style="text-align: right;">A B C <input checked="" type="radio"/> D E</p>
<p>15. A 32-year-old female presents with the complaints of joint pain and swelling for 6 months. She says that her wrist joints, MCP joints and PIP joints are involved. The pain and stiffness are more in the morning and as she gets along the day, the pain and stiffness gradually decrease. On examination the wrist, MCP and PIP joints are swollen and tender. She cannot close her hands to make a fist. What investigation will you advise her to reach a diagnosis?</p> <p>a) ANA <input checked="" type="checkbox"/> b) Anti-CCP antibodies c) Anti-Ds-DNA d) Wrist joint aspiration e) Uric acid</p>	<p style="text-align: right;">A B <input checked="" type="radio"/> C D E</p>
<p>16. A 35-year-old presents with backache radiating into the buttocks for the past 4 years which is gradually increasing in intensity & more in the morning. He also has occasional episodes of pain, redness and swelling involving back of his ankles. There is no history of trauma to his back. He does not have psoriasis and denies any episode of UTI or diarrhea recently. On examination his straight leg raising test is normal. What investigation will help you in reaching the diagnosis?</p> <p>a) Anti-nuclear Antibody b) Anti-CCP antibodies c) Anti-Histone antibodies <input checked="" type="checkbox"/> d) MRI sacroiliac joints e) Uric acid</p>	<p style="text-align: right;">A <input checked="" type="radio"/> B C D E</p>
<p>17. A 23-year-old male presented in the emergency ward with history of road traffic accident. On examination he has open fracture of the Rt. Tibia with large wound and exposed bones. Patient was shifted to emergency OT where initial wound wash was performed. Patient bones were exposed because of skin loss but distal neurovascular status was intact. What is the type of open Tibia fracture?</p> <p>a) Gustilo-Anderson type 3 <input checked="" type="checkbox"/> b) Gustilo-Anderson type 3a c) Gustilo-Anderson type 3b d) Gustilo-Anderson type 3c e) Gustilo-Anderson type 3d</p>	<p style="text-align: right;">A <input checked="" type="radio"/> B C D E</p>
<p>18. 9 years old child visited orthopedic OPD with two days history of high grade fever, unable to walk. On examination, right proximal tibia is swollen and tender with limited movements of knee joint. In which area does osteomyelitis usually begin in children?</p> <p>a) The joint. <input checked="" type="checkbox"/> b) The epiphysis. c) The physis. d) The metaphysis. e) The diaphysis.</p>	<p style="text-align: right;">A <input checked="" type="radio"/> B C D E</p>
<p>19. An eight months old male child is brought with complaints of progressive pallor for the last 2 months. He is product of consanguineous marriage. On examination the child is markedly pale and spleen is palpable. Hb Electrophoresis reveals Hb F: 94%, HbA: 4%, HbA2: 2%. What are the chances of the same disease in future pregnancy?</p> <p>a) 0% <input checked="" type="checkbox"/> b) 25% c) 50% d) 75% e) 100%</p>	<p style="text-align: right;">A B <input checked="" type="radio"/> C D E</p>
<p>20. A 3 years old male child is brought for evaluation of gait. The child started walking at the age of 18 months and has history of frequent falls. On examination, <u>Gowers sign</u> is positive and the calf muscles appear hypertrophied. The inheritance pattern of the underlying disease is</p> <p>a) Autosomal dominant b) Autosomal recessive c) Sporadic <input checked="" type="checkbox"/> d) X-linked dominant e) X-linked recessive</p>	<p style="text-align: right;">A <input checked="" type="radio"/> B C D E</p>
<p>21. A 4 year old girl presented with pain and swelling of right knee joint for the last two months. She complains of severe pain especially in the morning and after periods of inactivity. Her ESR was 120, RF was negative and ANA was positive. What is the likely diagnosis?</p> <p>a) Juvenile Dermatomyositis <input checked="" type="checkbox"/> b) Juvenile idiopathic arthritis c) Reactive arthritis d) Rheumatic fever e) SLE</p>	<p style="text-align: right;">A <input checked="" type="radio"/> B C D E</p>

<p>22. A 6 months old child is brought with history of nasal stuffiness and poor weight gain since birth. On examination, the child weighs 4 kg and is markedly pale with hepatosplenomegaly. Xray chest is performed which shows diffuse bone sclerosis and hyperdense bones. What is the likely diagnosis?</p> <p>a) Achondroplasia b) Hypochondroplasia c) Osteogenesis imperfecta <input checked="" type="checkbox"/> d) Osteopetrosis e) Rickets</p>	<p>A B C D E</p>
<p>23. What are average adult corneal diameters?</p> <p><input checked="" type="checkbox"/> a) 11mm horizontally and vertically b) 12mm horizontally and vertically c) 12mm horizontally and 11mm vertically d) 11mm horizontally and 12mm vertically e) 10mm horizontally and vertically</p>	<p>A B C D E</p>
<p>24. Which one of the following is an example of positive attitude in workplace environment?</p> <p>a) Backbiting about a colleague to another fellow b) Not sharing the right information <input checked="" type="checkbox"/> c) Helping a colleague in a difficult or stressful situation d) Being indifferent about what other colleagues are doing e) All of the above</p>	<p>A B C D E</p>
<p>25. After writing the objectives and operational definitions in a research proposal, focus should then move on to?</p> <p>a) Conclusion b) Discussion c) Literature review <input checked="" type="checkbox"/> d) Materials and methods e) Results</p>	<p>A B C D E</p>
<p>26. Which of the following referencing styles is most commonly used in health sciences research?</p> <p>a) APA b) Chicago c) Harvard d) MLA <input checked="" type="checkbox"/> e) Vancouver</p>	<p>A B C D E</p>
<p>27. Which of the following is the correct method to write authors' names in Vancouver's style?</p> <p>a) Saeed, H., Riaz, Z., Jameel, K., et al. b) H Saeed, Z Riaz, K Jameel, et al. c) Saeed H, Riaz Z, Jameel K & Mohib T. <input checked="" type="checkbox"/> d) Saeed H, Riaz Z, Jameel K, Mohib T, Siddiqui A, Jahangir S, et al. e) Saeed H, Riaz Z, Jameel K, Mohib T, Siddiqui A, Jahangir S et al.</p>	<p>A B C D E</p>
<p>28. Duration of study in research means what?</p> <p>a) Time from conceptualization of idea till report writing <input checked="" type="checkbox"/> b) Time from developing objectives till data analysis c) Time required for data collection d) Time required for data collection and analysis e) Time from ethical approval till publication</p>	<p>A B C D E</p>
<p>29. Which of the following statement best explains academic integrity?</p> <p>a) Brief text that shows the original source of a borrowed idea b) Quoting in whole or in part without acknowledgement c) Representing someone else's ideas or work as your own d) Text to indicate that what follows came from another source <input checked="" type="checkbox"/> e) The quality of intellectual honesty in academic work</p>	<p>A B C D E</p>

1. A 40-year-old male presents with acute onset of severe pain in the right big toe which keeps him awake at night. His serum uric acid level is 10.2 mg/dl. Most likely risk factors for his condition are all of the following EXCEPT

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- e) age related wear and tear of the joint.

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- a) mature adipocytes
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- c) circumscribed non-infiltrative lesion
- d) presence of lipoblasts
- e) fibrous tissue capsule

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- a) low glycogen content of muscle cells
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4. A 52-year-old woman presents with arthritis and deformities of small joints of hands for the last 12 years now presents with multiple nodules on forearms which on biopsy reveal central areas of fibrinoid necrosis surrounded by a rim of palisaded histiocytes. These are most likely

- a) gamma
- b) cutaneous
- c) rheumatoid nodule
- d) granuloma

5. A 60-year-old laborer presents with progressively worsening pain of right knee joint which gets worse with activity. Following morphological features are associated with this condition EXCEPT

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- b) tophi
- c) uric acid nephrolithiasis
- d) pyrimethamine
- e) tophoid skin lesions

11. Most common pathogen causing osteomyelitis is resistant to

- a) tetracycline
- b) penicillins
- c) vancomycin
- d) trimethoprim
- e) fusidic acid

12. A 65-year-old man having stage IV colorectal carcinoma develops multiple bone lytic lesions. These osteolytic lesions deriving due to release of

- a) bone morphogenic protein
- b) bone resorptin
- c) parathyroid hormone like peptide
- d) insulin like growth factors
- e) transforming growth factor beta

13. osteosarcoma is associated with all of the following mutations except

- a) RB gene
- b) TP53
- c) APC
- d) CDKN2A (p16)
- e) APC2

14. The classic complement pathway is initiated by

- a) antigen
- b) factor B
- c) bacterial endotoxin
- d) antigen-antibody complex
- e) mannose binding lectin

15. Natural killer cells are

- a) B cells that can kill without complement
- b) cytotoxic T cells
- c) increased by immunization
- d) kill virus infected cells without prior sensitization
- e) mainly involved in autoimmune diseases

16. Type IV hypersensitivity reaction is characterized by

- a) edema without a cellular infiltrate
- b) an infiltrate composed of neutrophils only
- c) an infiltrate composed of helper T cells and macrophages
- d) an infiltrate composed of eosinophils only
- e) an infiltrate composed of macrophages only

17. Heavy chain of IgG is of following type

- a. Epsilon
- b. Gamma
- c. Mu
- d. Delta
- e. Alpha

18. Neutrophils are attracted to an infected area by

- a. IgM
- b. C1
- c. C5a
- d. C8
- e. C2a

19. Time required to produce detectable antibodies in primary immune response is:

- a) 12 hours
- b) 3 days
- c) 5 days
- d) 7 days
- e) 28 days

20. If an individual was genetically unable to make a J chain, which of the following immunoglobulins would be affected:

- a. IgG and IgE
- b. IgD and IgE
- c. IgM and IgA
- d. IgD and IgG
- e. IgD and IgM

21. Regarding immunodeficiency diseases which of the following statements is not correct.

- a. SCD manifest during 1st 3 months of infant life.
- b. In Bruton's agammaglobulinemia, all the immunoglobulins are deficient.
- c. In DiGeorge's syndrome both thymus & parathyroid gland fail to develop.
- d. In Hereditary Angioedema there is deficiency of C1 component of complement system.
- e. Patients with congenital deficiency of late complement components (C6, C7, C8) are prone to disseminated Neisserial infections.

22. Which of the following statements is true regarding T&B cell tolerance:

- a. Peripheral tolerance of T cells develop in thymus.
- b. Central tolerance of B cells develop in lymph nodes.
- c. Breakdown of tolerance of both T&B cell play major role in autoimmune diseases.
- d. Peripheral tolerance of T cells is brought about by receptor editing.
- e. Regulatory T cells induce peripheral tolerance of T cells by producing IL-12 and Alpha Interferon.

23. The immunity acquired by inoculation of living organism of attenuated virulence is

- a. Artificial active immunity
- b. Passive immunity
- c. Natural active immunity
- d. Local immunity
- e. Innate immunity

24. A young man was advised pre-operative coagulation screening. He had prolonged bleeding time and clotting time, while his platelets count were low. His PT and APTT was also prolonged. On further investigation he gave history of epistaxis and bleeding gums off and on. Factor IX assays were normal but factor VIII was assays were low, Ristocetin induced platelet aggregation (RIPA-Ricof) was markedly low. What is the most likely diagnosis of this patient?

- a. Christmas disease
- b. Hemophilia A
- c. Hemophilia B
- d. TTP
- e. Von willebrand disease

25. A 35 years old female presented in emergency with abruptio placenta. She has bruising and ecchymosis. Her laboratory findings show elevated INR while her platelet count is low. Your senior is suspecting acute DIC. Which findings of her tests support the diagnosis of DIC in this patient?

- a. Increased PT and APTT, decreased Fibrinogen, increased FDP, raised D-dimers
- b. normal PT and APTT, increased Fibrinogen, decreased FDP, normal D-dimers
- c. normal PT and APTT, increased Fibrinogen, increased FDP, normal D-dimers
- d. normal PT and APTT, increased Fibrinogen, normal FDP, normal D-dimers
- e. normal PT and APTT, normal Fibrinogen, normal FDP, normal D-dimers

26. A 32 years old female came with nosebleed, easy bruising and menorrhagia for 4 months. Her BP 90/60 mmhg. has scattered petechia on distal extremities and no organomegaly. Her viral screening and anti nuclear antibodies are negative. Her labs show Hb 12.3 gm/dl, HCT 37%, Platelets 21500/mm³ and TLC is 7300/mm³. Bone marrow biopsy show megakaryocytes. What is the most likely diagnosis?

- a. DIC
- b. Hemophilia B
- c. Immune thrombocytopenia purpura **I TP**
- d. Vit K deficiency
- e. Von willebrand disease

27. A 12 year old boy has worsening problem of joint mobility (knee joint) for past 6 years. He has bleeding tendencies. His grandfather had similar condition, who died in mid twenties. On examination there are no petechia or purpura. His Hb 12.9g/dl, WBC 6620/mm³, Platelets 238,500/mm³.

PT is in normal limits but APTT is raised. The factor VIII is low (1%-5%) while factor IX is within normal limits. Which is most likely diagnosis?

- a. Antiphospholipid syndrome
- b. Glenomati thrombasthenia
- c. Hemophilia A
- d. Hemophilia B
- e. Von willebrand disease

28. A 60 years old man presented in opd with weakness, lethargy. On examination he was pale with massive spleenomegaly. CBC shows Hb 8.2 g/dl, TLC 98,000/ μ l and platelets 465,000/ μ l. DLC showed mainly neutrophils and myelocytes. Bone marrow was hypercellular with neutrophils and myelocytes peaks.

The most likely diagnosis is:

- a. ALL
- b. AML
- c. CML
- d. CLL
- e. Hodgkin lymphoma

29. CBC of 56 years old patient shows Hb 7.2 g/dl, TLC 78,000/ μ l, Platelets 325,000/ μ l. Bone marrow showed morphology of chronic myeloid leukemia. Molecular abnormality seen in Chronic myeloid leukemia is:

- a. BCR-ABL
- b. IGH-IL3
- c. NPM-RARA
- d. NUPA-RARA
- e. PML-RARA

30. Bone marrow of the 25 years old patient was performed showing 24% blasts cells with auer rods in the blasts; the most likely diagnosis is:

- a. AML
- b. CML
- c. CLL
- d. ALL
- e. Non Hodgkin lymphoma

31. 24 years old boy presented in OPD with weight loss, fever and night sweats from last few months. On examination there was cervical lymphadenopathy. Lymph node biopsy was performed showing Reed Sternberg cells. The diagnosis is:

- a. CML
- b. Hodgkin lymphoma
- c. AML
- d. Non Hodgkin lymphoma
- e. CLL

32. A patient was brought to OPD with CBC done 2 days back showing decrease Hb and decreased TLC and decrease Platelets which were confirmed by peripheral smear. This term is known as

- a. Dysplasia
- b. Metaplasia
- c. Bicytopenia
- d. Monocytopenia
- e. Pancytopenia

33. A patient of 54 years was brought to Medical OPD. He was looking pale with history of recurrent infections. On examination he was having multiple bruises all over the body. Peripheral blood film showing decrease Hemoglobin, TLC and platelets with dysplasia. Bone marrow aspirate was performed showing dysplasia in all cell lines. The most likely diagnosis is:

- a. Aplastic anaemia
- b. Myelodysplastic syndrome
- c. Acute myeloid leukemia
- d. Chronic myeloid leukemia
- e. Acute lymphoblastic leukemia

34. 62 years old female patient admitted in medical ward with history of recurrent infections, easy bruisability and shortness of breath. On examination no visceromegaly and no lymphadenopathy. CBC show cytopenias, peripheral smear and bone marrow diagnose myelodysplastic syndrome (MDS). It is characterized by:

- a. Abnormal cells in blood film
- b. High reticulocyte count
- c. Raised ALT
- d. Raised serum cholesterol
- e. Thrombocytosis

35. 57 years old male presented in ortho opd with severe back ache and bony pains. On examination, he was pale with no visceromegaly and no lymphadenopathy. CBC showed hgb 7.5 with marked rouleaux formation in smear. Bone marrow was performed showing 35% abnormal plasma cells, the most likely diagnosis is:

- a. Non Hodgkin lymphoma
- b. CML
- c. Multiple myeloma
- d. AML
- e. CLL

36. 6 years old boy presented in peds opd with high grade fever and epistaxis. On examination, there was lymphadenopathy, spleen was palpable 4cm below left costal margin. Peripheral smear showed abnormal mono-nuclear cells. Bone marrow exam showed 80% blasts with high NC ratio and inconspicuous nuclei, the most likely diagnosis is:

- a. AML
- b. CLL
- c. ALL
- d. CML
- e. MDS

...and many varied for the routine checkup in OPD. He had no ... components. On examination, there was mild symmetrical CBC ... normal hgb and platelets but TLC was 75000 per microliter ... 62% mature looking lymphoid cells and smudge cells, the most ... diagnosis is:

38. A 9 year old boy was brought to OPD for checkup. Her mother complained that the child eat dirt and clay. Complete blood count shows Hb 8g/dl with low MCV and MCH. The most likely diagnosis is

- a. Anemia of chronic disorder
- b. Folic acid deficiency anemia
- c. Iron deficiency anemia
- d. Lead poisoning
- e. Vitamin B12 deficiency

39. Anemia mostly seen in vegetarians

- a. Anemia of chronic disorder
- b. Hemolytic anemia
- c. Iron deficiency
- d. Megaloblastic anemia
- e. Sideroblastic anemia

40. In pathogenesis of thalassemia the main defect is in

- a. Folate metabolism
- b. Globin chain synthesis
- c. Iron absorption in GIT
- d. Iron transport
- e. Vit B12 transport

41. A patient was brought to OPD with CBC done 2 days back showing decrease Hb and decreased TLC and decrease Platelets which were confirmed by peripheral smear. This term is known as:

- a. Bicytopenia
- b. Dycytopenia
- c. Metaplasia
- d. Monocytopenia
- e. Pancytopenia

42. For correction of the anemia in patient of very low hemoglobin, the doctor should ask for the arrangement of

- a. Albumin
- b. Cryoprecipitate
- c. FFP
- d. Platelets
- e. Red blood cells

43. Following is NOT a sign / symptom of Polycythemia Vera:

- a. Anemia
- b. Bleeding gums
- c. Itching / Pruritis
- d. Splenomegaly
- e. Tiredness or weakness

44. A 58 years old male presented with fatigue and pallor. He also complained of bilateral loss of sensation below knees. His blood CP shows, Hb - 8.4 g/dl, TLC - 2800/mm, Platelets - 75000/mm. Smear shows macro ovalocytes. What is the most likely diagnosis?

- a. Aplastic Anemia
- b. Iron deficiency Anemia
- c. Leukaemia
- d. Megaloblastic Anemia
- e. Paraplegia

45. Abnormal haemoglobins are inherited as:

- a. Autosomal co-dominant
- b. Autosomal dominant
- c. Autosomal recessive
- d. X-linked dominant
- e. X-linked recessive

46. G6PD deficient patients shows high resistance against:

- a. Ametiasis
- b. Enteric fever
- c. Malaria
- d. Syphilis
- e. Typhoid

47. All of these parameters are raised in hemolytic anemia except:

- a. Bilirubin
- b. Haptoglobin
- c. Reticulocytes
- d. Stercobilinogen
- e. Urobilinogen

48. ABO system presence of AB blood group is an example of:

- a. Autosomal recessive inheritance
- b. Co-dominance
- c. X linked recessive inheritance
- d. Y linked inheritance
- e. None of above

49. If a dominant gene fails to produce an expected phenotypic effect, in genetic terms it is referred as:

- a. Penetrance
- b. Expressivity
- c. Phenocopy
- d. Gene interaction
- e. Mutation

50. Chromosomal abnormality in mongolism is ?

- a. Trisomy 5
- b. Trisomy 17
- c. Trisomy 18
- d. Trisomy 21
- e. Trisomy 22

51. A 22 year old young man came for medical examination for a job. He is very tall, has long fingers and hyperflexed joints. He stated that he has been called "double jointed" he has dissecting aortic aneurysm on ultrasound. Which syndrome this young man has?

- a. Angelman's syndrome
- b. Klinefelter's syndrome
- c. Marfan's syndrome
- d. Prader-Willi's syndrome
- e. Turner's syndrome