MOCK TEST 2014 (held on 22nd Oct 2014)

1. The papillae present on margins of the tongue is
A) fungiform papillae
B) filliform papillae
C) vallate papillae
D) folate papillae

Ans: A exp: fungiform present on the margins filiform are spread all over the dorsum of the tongue vallate papillae are present anterior to sulcus terminalis

2. Deep veins accompany arteries except in the
A) abdomen
B) thorax
C) cranium
D) lower extremities

Ans: C exp: deep veins usually accompany arteries except in the cranium superficial veins also do not accompany the artery

3. Cartilagenous joint present in the median plane of a body are called as
A) symphysis
B) synchondrosis
C) syndesmosis
D) schindylesis

Ans: A exp: symphysis are the secondary cartilageous joint present in the median plane of the body each body surface has a plate of hyaline cartilage finally attached to it which in turn blends with a thick strong deformable plate of fibrocartilage these joints allows restricted but appreciable movement

4. Following arteries supplying a long bone arises from arteries supplying muscles attached to the bone are
A) metaphyseal arteries
B) epiphyseal arteries
C) periosteal arteries
D) nutrient arteries

Ans: C exp: at bone surfaces cortical capillaries make connections with periosteal plexus which are formed by arteries from neighbouring muscles contributing vascular arcades to the fibrous peritoneum

5. Following are the branches of lateral cord of brachial plexus except
A) ulnar nerve
B) musculocutaneous nerve
C) lateral pectoral nerve
D) lateral root of median nerve

Ans: A exp: ulnar nerve is a branch of medial cord of brachial plexus

6. Following are the tributaries of great saphenous vein except
A) superficial external pudendal
B) superficial epigastric
C) superficial circumflex iliac
D) deep circumflex iliac

Ans: D exp: deep circumflex iliac is a tributary of external iliac vein and not the saphenous vein

7. Compare with a person who ingest 2L of distilled water a person with water deprivation will have a
A) higher free water clearence (C-h20)
B) lower plasma osmolarity
C) lower circulating level of ADH
D) higher rate of H20 reabsorption in the collecting ducts

Ans: D exp: the person with water deprivation will have a higher plasma osmolarity and higher circulating levels of ADH these effects will increase the rate of H20 reabsorption in the collecting ducts and create a negative free water clearence (C-H20)

8. Hypoxemia produces hyperventilation by a direct effect on the
A) carotid and aortic body receptors
B) medullary chemoreceptors
C) J receptors
D) lung stretch receptors

Ans: A exp: hypoxemia stimulates breathing by a direct effect on the peripheral chemoreceptors in the carotid and aortic bodies medullary chemoreceptors are stimulated by Co2 or H ions J receptors and lung stretch receptors are not chemoreceptors

9. Regarding histology of gastrointestinal tract, which is inappropriate ?
A. Striated brush border is composed of microvilli

B. Peneth cells contain Eosinophilic granules in apical cytoplasm
C. chief cells of stomach secretes intrinsic factor
D. Peyer's patches are present in illeum
E. The longitudinal coat of muscularis externa is arranged in 3 bands in colon

Exp: Parietal cells secrete intrinsic factor

10. Regarding the axilla, one is inappropriate..

A. The axillary artery terminates at the lower border of Teres major.
B. In the neck, the plexus is closely related, posteriorly, to the fascia of the scalenus medius
C.The axillary lymph nodes receive 75% of the lymphatics of the breast.
D The third part of the axillary artery is related to the cords of the brachial plexus.
E Anterior fold of the axilla is higher than the posterior fold.

Explanation: The second part of the axillary artery is related to the cords of the brachial plexus.

11. Second part of dudenum is crossed anteriorly by?
A. Right vein
B. IVC
C. transverse colon
D. Psoas muscl
E. portal vien

Explanation: All others are posterior relation

12. Synthesis of secretory Vesicles takes place in?
A Golgi apparatus
B Lysosomes
C Ribosomes
D Endoplasmic reticulum
E Mitochondria
Explanation: It occur in E.R while packaging nd modification occur in golgi bodies

13. Patient develops sensory loss over left side of body. After few days his behavior for pain is changed & he become angry after touching. Where could be the lesion in brain
A. Internal capsule
B. Thalamus
C.Cerebral cortex

D, Basal ganglia
E. Midbrain

Explanation: he has Thalamic Pain Syndrome

14. Otic ganglion lies under?
A. Foramen spinosum
B. Foramen ovale
C. Maxillary nerve
D. Stylomastoid foramen

15. The increase level of 5-hydroxyindolacetetic acid in urine is most commonly found in?
A. Phenylketonurea
B. Alkaptonurea
C. Carcinoid syndrome
D. Malignant melanoma
E. DIC

EXPLANATION: Urinary 5-HIAA is the best initial test for Carcinoid syndrome.

16. Regareding Azathioprine ?
A. Its in active form
B. xanthine oxidase is active metabolite form
C. Belongs to the chemical class of pyrimidine analogue
D. The main adverse effect of azathioprine is vasculitis
E. It is an immunoproliferative drug

Explanation: . Xanthine oxidase is active metabolite form. its a prodrug, The main adverse effect of azathioprine is bone marrow suppression,and belongs to the chemical class of purine analogues.

17. Which part of blood test should be sent for matching histo compatibility of the recipient and donor
A. WBC
B. RBC
C. Bone Marrow
D. Serum
E. Platelets

Explanation: HLA = Human Leukocytes Antigen, Leukocytes = WBCs.

18. Difference between mean of two samples is tested by ?
A. Chi square test
B. Pie test
C. T test
D. F Test
E. Correlation analysis

19. "Menopause"" occur before "Menarche"..??
A. Patau..
B. Edwards
C. Turners
D. Polycystic ovarian Diseases
E. Angelamans syndrome

20. Major form of CO2 in the blood is as..??????
A. As dissolved state in plasma
B. As carboxy hemoglobin
C. As carbnic Anhydrase in RBC
D. As Carbonic anhydrase in WBC..
E. In WBC cytoplasm

EXPLANATION: CO2 transport in blood

Bicarbonate – 70%
Carbaminohemoglobin – 23%
Dissolved CO2 – 7%

21. Nicotinic receptors sites includes all of the following EXCEPT;
A. Bronchial smooth muscles.
B. Adrenal medullary Cells.
C. Parasympathetic Ganglia.
D. Skeletal muscles.
E. Sympathetic ganglia

Explanation: M3 receptors (Muscarinic NOT Nicotinic) & beta 2 receptors.

22. The earliest hormonal deffficeincy clinically evident on hypopituatarism is???
A. ACTH
B. LH and FSH
C. Prolactin.
D.TSH.
E. None of above

EXPLANATION: That's why these pts will come with Amenorrhea/Loss of Libido etc.

23. A localized lesion in which of the following produces prolong coma????
A. Nucleus tractus solitarius..
B. Locus Ceruleus
C. Right frontal lobe
D. Both Frontal lobes.
E. Periaquiducatal region at top of mid brain

(Reference Ganong's Nervous System Physiology Chapter)

24. When thoracotomy incision was made to enter the pleural cavity following structure were incised except which one???

A. Skin and subcutaneous tissue

B. Pectoral muscle and serratus ant: muscle

C. Latissimus Dorsi muscle

D. External intercostals &inner most intercostal muscle

E. Internal intercostals

Explanation: Latissimus dorsi is a sheet of muscle that cover the back of thoraeic cage and inserts into the floor of bicipital groove of the humrus .It is located too far posterior to be damage by the exploratory thoracotomy.

25. A patient shifts to the A/E Department with a penetrating injury to the 5th intercostal space at mid axillary line which structure is unlikely to be damage?

A Sup: vana cava

B. Liver

C. Right atrium

D. Upper lobe of Right lung

E. Right pulmonary arty

Ans .C

Explanation. As question asking unlikely damage structure due to right 5th I/C injury Right atrium most unlikely to damage b/c right atrium of heart which extends free 3rd costal cartilage to 6th costal cartilage just to the right of the sternum not in mid axillary line.

26. Atrophy of the short muscle of thumb mainly which nerve is interpolated

A. Deep branch of radial nerve

B.Median nerve

C.Deep branch of ulnar nerve

D.Posterior interossus nerve

Ans.B

Explanation. Short Muscle of thumb is

Abductor pollicis brevis flexor pollicis and oppones pollicis these are innervates by median nerve and Adductor pollicis oblique and transverse head innervates by deep branch of ulnar nerve main nerve is median

27. 25 years old office secretary wearing high heeled shoes inverts and sprains her ankle while running down a flight of stairs which of the following ligament did she most likely injured?

A. Anterior tibial &posterior tibial

B.Deltoid

C.Medial collateral and lateral collateral

D.Calcaneo_tibial

E.Calcano fibular and Anti: talofibular

Ans.B

Explanation. The most common type of ankle sprain is lateral which occurs as a result of excessive inversion of the foot and dorsiflexion of the ankle the calcano fibular and anti: talofibular ligament may tear producing marked swelling and pain these two ligament combined to the posterior talofibular ligament constitute the lateral ligament of ankle

28. 40 years old male come to the physician with complainant of some think was protruding out from his anus after defecation 2 year history of blood stained stools on proctosopic examination showed that mucous membrane above the level of anal valves the swelling was Mucous membrane contained large enlargement of vein beneath the surface???

A. External hemorrhoid

B.Perianal abscess

C.Chronic anal fissure

D.Internal Hemorrhoid

E.Complete rectal prolapsed

Ans.D

Explanation .Internal Hemorrhoid are dilation of the tributaries of superior rectal vein they are covered by mucous membrane in the upper half of anal canal protruded down due to enlargement of veins and pressure of defecation the dilated vein comes out from anus

29. 20 Years old biker has RTA come to A/E department with compliant of unable to extend the wrist and figures which nerve probably damage???

A. Median nerve

B.Ulnar nerve

C.Radial nerve

D.Musculo_cutaneous nerve

Ans .C

Explanation. Radial nerve lesion commonly result the fracture of the mid shaft of the hummers' which injures the nerve in the spiral groove the patient unable to extend the wrist and fingers and there is wrist drop.

30. Femoral sheath is formed by???

A. Fascia transversalis

B.Fascia transversalis & iliac fascia

C.Pectineal fascia

D.Lacunar ligament

E.Inguinal ligament

Ans.B

Explanation. The femoral sheath (crural sheath) is formed by prolongation downward behind the inguinal ligament the tranversalis fascia being continued down in front of the femoral vessels and the iliac fascia behind then.

31. The highest rate of occurs of carcinoma of tongue is that of

A. Tip

B. Ventral surface

C.Dorsal surface

D.Lateral margin

E.Posterior surface

Ans.D

Explanation: The tongue is the most common intra_oral site of carcinomas most tumors are the lateral margin extending into the ventrum.

32. Lymph from the nail bed of the big toe drains into the which lymphatic group???

A. Horizontal group of superficial inguinal nodes

B. Pre-sacral nodes

C. Popliteal nodes

D. Internal iliac nodes

E. Vertical group of superficial inguinal nodes

Ans. E

33. 3 years old children H/O avascular necrosis of head of femur what is the chief arterial supply to the head of femur they compromise and cause the avascular necrosis???

A. Obturator artery

B. Internal pudendal artery

C. Branch from medial and lateral circumflex femoral artery

D. Deep circumflex iliac artery

E. Superficial circumflex artery

Ans-A

Explanation: the nutrient artery which is a branch of obturator artery reaches the femoral head in children along the ligament of the head and enters the bone at the fovea capitis

34. 40 YEARS OLD WOMEN TAKING ANTI-DEPRESSENT DRUG HER

HUSBAND RECENDLY PASSED AWAY SHE DIAGNOSED AS DEPRESSED AFTER START MEDICATION HER COMPLAINING OF DROWSINESS, CONFUSION, AND FATIQUE DEPLETION OF WHICH OF THE FOLLOWING ECTROLYTES MAY CAUSING THESE SYMPTOMS??

A. Cl-

B. Mg+

C. PSO4

D. K+

E. Na+

Correct answer: E

Explanation: hyponateremia is associated more frequently with selective

Serotonin reuptake inhibitors

Hyponatremia should be considered in all patients who develop drowsiness .confusion, convulsion while taking anti-depressant

35. A 56 YEARS OLD LADY IS ADMITTED WITH 30/MINTS HISTORY OF HEAVY CENTRAL CHEST PAIN ASSOCIATE WITH NAUSEA AND SWEATING HER ECG SHOWS ST ELEVATION IN LEADS V1.V2.V3&V4 WHICH OF THE FOLLOWING CORONARY ARTERY IS MOST LIKELY TO BE OCCLUTED ???

A. Circumflex artery

B. Left anterior descending artery

C. Marginal artery

D. Right coronary artery

E. Posterior descending artery

Correct answer B

Explanation: anteroseptal M-I is due to an infarct in the territory of the left anterior descending artery

36. AN 18 YEARS OLD BOY PRESENTED WITH TWO WEEK HISTORY OF DYSURIA AND PURULENT PENILE DISCHARGE GRAM STAIN OF URETHERAL SWAB SHOW GRAM NEGATIVE INTRACELLULAR DIPLOCOCCI WHAT SPECIFIC TREATMENT SHOULD HE RECIVE ???

A. Cefixime

B. Cephradine

C. Ciprofloxacin

D. Co-amoxiclav

E. Crystalline penicillin

Correct answer A

Explanation: N.gonorrhoea occurs in young age adult gram stain +ve in 25%

Culture +ve 50 % current guidelines recommend 1st line treatment with cefotaxime, cefixime or spectinomycin may give (as stat dose)

Fluroquinolones are no longer used as 1st line due to the high rate of resistance

37. THE MANTOUX RACTIONS IS AN EXAMPLE OF WHICH TYPE OF HYPERSENSITIVTY REACTIONS???

A. Type -1 H.S.R

B. Type-2 H.S.R

C. Type – 3 H.S.R

D. Type – 4 H.S.R

E. Humoral immune response

Correct _D

EXPLINATION: tuberculin test is exp: of type 4 HSR or delayed type of hypersensitivity reaction (DTH) this reaction develops when primed Th1 cells encounter their specific antigens an inflammatory response evolves over 24- 72 hours

38. ABGs OBTAINED & SHOWS A PH.7.51 AND PCO2 OF 48mmHg ON BLOOD SAMPLE

Na+ =136meg/L K+ 3.2 meq/L Cl_= 100 meg/L HCo3 =37 meq/L WHAT IS THE MOST LIKELY DIAGNOSIS???

A. Pt with vomiting

B. Pt with diabetic ketocidosis

C. pt with diarrhea

D. Pt with primary Aldosteronism

E. pt with hyperventilation syndrome

Correct answer A

Explanation: the patient has an alkalemia (ph. More then 7.45)

Since PCO2 is elevated (more 40 mmhg) the pt is primary metabolic acidosis with respiratory compensation an elevation of HCO3 could come from loss of acids as well as loss of intravascular volume

39. THE MEASURE OF CENTRAL TENDANCY THAT IS MOST AFFECTED BY EXTRME SCORE IN A SAMPLE DISTRIBUTION IS THE???

A. MEDIAN

B. MODE

C. STANDERD DEVIATION

D. MEAN

E. VARIAN

CORRECT ANSWER D

EXPLINATION; mean is the measure of central tendency that most affected by extreme score neither the standard deviation and no variance is A measure of central tendency

40. REGARDING THE MYOPATHIES ALL ARE THE FOLLOWING ARE TRUE EXCEPT???

A. duchenn myopathy is X-link dominant

B. Becker's myopathy is X-link recessive

C. Facioscapulo humeral dystrophy is autosomal dominant

D. Limb – girdle dystrophy is autosomal recessive

E. Myotonic dystrophy is Autosomal dominant

Correct answer A

Explanation: Duchenne muscular dystrophy is inherited X-link recessive disorder not X-link Dominant

41. Vertebral artery traverses all of the following EXCEPT

A. Foramen magnum

B. Subarachnoid space

C. Intervertebral foramen

D. Foramen transversarium

Ans. C

42. Which of the following elements is known to influence the body's ability to handle oxidative stress?

A. Calcium

B. Iron

C. Potassium

D. Selenium

Ans. D. Selenocysteine is part of enzyme glutathione peroxidase which has antioxidant action

44: The most common site of carcinoma of the colon is

a.Cecum

b.Ascending colon

c.Transverse colon

d.Splenic flexure

e. Rectosegmoid

(Reference Goljan: 50% cases)

43. Pulmonary compliance is not decreased in?
A. COPD
B. Decreased surfactant production
C. Pulmonary congestion
D. Pulmonary fibrosis

Correct answer : A. COPD
Pulmonary compliance is increased in **emphysema** (a type of chronic obstructive pulmonary disease). In the other 3 conditions (Decreased surfactant production, Pulmonary congestion and Pulmonary fibrosis), the pulmonary compliance is decreased.

45. What is the single most important test in diabetic ketoacidosis (DKA)?
a. Glucose level
b. pH
c. Ketone and/or acetone levels
d. Serum osmolarity

Answer b. pH
The glucose level is not as important as knowing if the patient is acidotic. Glucose levels can fluctuate wildly from high to medium, but if the patient's pH on an ABG or serum bicarbonate on chemistry is near normal, it does not matter. The same is true of ketones, acetone, beta-hydroxybutyrate, or acetoacetate. The level of these ketone bodies is not as important as the level of accumulated acid.

46. The best initial test for Acromegaly is?

a. Insulin-like Growth Factor (IGF)

b. GH

c. MRI head

d. Glucose suppression test

EXPLANATION: They are asking best **INITIAL** test which IGF & most accurate test is Glucose suppression test. NEVER start with radiology in Endocrinological diseases. First do biochemical test to ensure that disease really exist then scan.

47. The earliest finding in hyperkalemia on an ECG is?

a. P wave disappear

b. QRS widening

c. AV block

d. Peaked T wave

e. T wave flatting

Explanation: Initial change on ECG is Peaked T wave, then widening of QRS complex etc.

48. 70 years old man admitted with palpitation to ER, ECG reveals tachycardia rate of 170 bpm and blood pressure 120\80, which is ideal to give

a. Amiodarone

b. Lidocane with central line

c. Procanamide

d. Verapamil

e. Defibrillate

Explanation: Pt in question is Hemodynomically stable (BP : 120/80) so there is NO Point in defibrillating him. For Rate control the best INITIAL drug choice is Amiodarone with central line. VERAPAMIL is wrong. The descending order of medication (which will be used first) Amiodarone > Lidocain > Procanamide.

49. Which of the following is the only hormone made continuously?
a. Cortisol
b. Testosterone
c. T4
d. Growth hormone (GH)
e. ACTH

Answer c. T4
All hormones are made in pulsatile fashion except for T4 and T3, which are made continuously. They are all subject to feedback inhibition—after production, they go back and shut off their own stimulatory hormone. Cortisol does feedback inhibition on the pituitary and hypothalamus to shut off ACTH and corticotropin-releasing hormone (CRH).

50. What receptor is affected most by exercise?
a. GLUT1 in brain
b. GLUT2 in kidney and bowl
c. GLUT3 in neurons
d. GLUT4 in skeletal muscle

Answer d. GLUT4 in skeletal muscle
Exercise does not affect any of the glucose transporters except the one in skeletal muscle

51. Venous return of lower limb on standing from the supine posture depends on all except

A) Deep fascia sleeve

B) Arterial pressure

C) Valves of perforators

D) Calf muscle contraction

EXPLANATION: All others options do has effect. ONLY arterial pressure has NOTHING to do with venous return when pt change from supine to standing position.

52. The dorsal roots of all spinal nerves contain

a) sensory neuronal processes.

b) sensory and autonomic neuronal processes.

c) motor neuronal processes.

d) motor and autonomic neuronal processes.

EXPLANATION: Dorsal roots only contain sensory neuronal processes of spinal nerves. All ventral roots contain motor processes and the thoracic, lumbar and sacral spinal nerves also autonomic nerve processes.

53. Parasympathetic preganglionic axons leave the CNS with the

a) cervical spinal nerves.

b) thoracic spinal nerves.

c) lumbar spinal nerves.

d) sacral spinal nerve

Explanation: Parasympathetic axons exit the central nervous system only with sacral spinal nerves and four of the cranial nerves. Sympathetic preganglionic axons exit the CNS only with the thoracic and upper lumbar spinal nerves

54. Which of the following endocrinopathies is associated with high prolactin level?

a. Estrogen deficiency

b. Addison disease

c. Cushing syndrome or hypercortisolism

d. Hypothyroidism

e. GH deficiency

Answer d. Hypothyroidism

It is reasonable to exclude hypothyroidism in any person with hyperprolactinemia. Increased estrogen directly stimulates the pituitary to release prolactin. This is the mechanism in pregnancy of how breast glands normally grow. The placenta makes estrogen. Estrogen makes prolactin. Prolactin makes the breast glands grow.

55. Absolute refractory period in the heart

a. corresponds to the duration of relaxation

b. lasts till half of cardiac contraction

c. shorter than refractory period in skeletal muscle

d. lasts till cardiac contraction

56. Great saphaenous vein does NOT:

A. lie behind medial malleolus
B. lies 1 hand's breadth behind medial border of patella
C. drains into femoral vein 3.5 cm below & lateral to pubic tubercle
D. contains up to 20 valves
E. most valves are found below the knee level

Explanation: it lies anterior to medial malleolus.

57. The hypothalamus:

a. forms part of the mid-brain.

b. forms part of the roof of the third ventricle.

c. is responsible for hormones and enzymes regulation.

d. contains the tuber cinerueum.

e. has nerve connections with the anterior lobe of the pituitary gland.

58. The superior cervical ganglion: all are true except

a. contains both parasympathetic and sympathetic fibres

b. gives off branches that supply the heart

c. is the only cervical ganglion that supplies the cranial nerves

d. gives off branches that supply the sweat glands of the face

e,The SCG is located opposite the second and third cervical vertebræ.

59. Sterilization can be achieved with all, except

a. Pasteurization

b. gamma irradiation

c. moist heat at 1340C for 3 minutes at 202kPa

d. ethylene chamber

e. Tndylization

60. Normally (Physiological) Hemolysis is

a. extravascular

b. intra vascular

c. extra + intravascular

d. interiovascular

e. exterio interior

EXPLANATION: Normal hemolysis (i.e destruction of RBCs after 120 days) take place in SPLEEN and Extravascular hemolysis mean Spleen & Liver. INTRAVascular hemolysis is ALWAYS pathological.

61. The relationship of the heart to lung is?

a. superior

b. lateral

c. dorsal

e. medial

d. medio lateral

EXPLANATION: Heart is surrounded by Lungs on either side. So it is medial to lung.

62. Regarding histology of cervix, which of following is true?

a. squamous epithelium layer forms mucous secreting cells over endocervix

b. transformation zone is a region where over time more fragile squamous cells replaces columnar epithelia cells.

c.cells of ectocervix will nt collected in pap smear

d.In parous cervix appear as small slit like opening in center.

e. during pre adulscent endocervix is located in vaginal portion of cervix

63. Regarding Blood Flow dynamics All are true, except

a. generally blood flow is laminar

b. ascending aorta have turbulent blood flow

c. turbulence decreases the perfusion pressure

d. turbulence increases with increased raynolds numbers

e. turbulence can generate murmurs

EXPLANATION: Turbulence will INCREASE perfusion PRESSURE.

64. Tall boy 14 yr old secretion from mammary gland, x-ray skull show larged pituitary. Histological exam of pituitary is likely to show.

A. Dec number of pituicytes

B. Inc numbr of basophil cells

C. Inc numbr of chromophobes

D. Inc number of eosinophils

65. ESR is increased with decreased in?

a. fibrinogen

c. globulin

d. albumin

e. infection

b. age

EXPLANATION: ESR has DIRECT relation with Fibrinogen & Globulin (will increase with increase in these two) while INVERSE relationship with Albumin (will Increase with Decrease in Albumin)

66. Morphologically hallmark of apoptosis is, except?

a.condensation of nucleoli

b.karyorrhexix

c.shirinkage of cytoplasm

d.proteolytic cleavage

e. mitochondria damage is hall mark

Explanation: Mitochondria will INTACT in Apoptosis.

67. All of the following are features of apoptosis EXCEPT:

a. Cell swelling
b. Chromatin condensation
c. Formation of cytoplasmic blebs
d. Lack of inflammation
e. Phagocytosis of apoptotic bodies

EXPLANATION: Check Question 71 explanation.

68. All of the following are characterized by granulomatious inflammation except

a) Sarcoidosis

b) Tuberculosis

c) Histoplasmosis

d) Diphtheria

e) Leprosy

EXPLANATION: You don't need it (explanation) ☺

69. Silicosis is most often complicated by

a.Asthma

b.Carcinoma of lung

c.Mesothelioma

d.Tuberculosis

e. bronchi alveolar carcinoma

(Ref: Goljan Respiratory Chapter)

70. Condition is not associated with sinus bradycardia?

A.Brucellosis

B. Leptospirosis

C.Hypothyroidism

D.Advanced liver disease

E. Typhoid fever

EXPLANATION: Leptospirosis is associated with Tachycardia. Contrary to our common belief that ONLY Typhoid is associated with Bradycardia there are many other conditions (3 are given here) like Falciparum Malaria etc.

71. All of the following are features Irreversible cell injury, Except?

a.acidosis

b.lysosomal swelling

c.mitochodreal swelling

d.damage to plasma membrane

e.plasma membrane blebbing & blunting

EXPLANATION: Reversible cell injury: cell swelling, detachment of ribosomes from granular e.r. and dissociation of polysomes into monosomes. Fatty change encountered in cells invloved in fat metabolism (hepatocyte, myocardium). Histologically characterized by pallor, hydropic change, vacuolar degeneration. EM: plasma membrane blebbing, blunting, villous distortion, myelin figures, mitochondrial swelling, rarefaction, nuclear disaggregation of granular and fibrillar elements.

Irreversible cell injury: mitochondria swell, lysosomes swell, damage to plasma membrane and lysosomal membranes leads to enzyme leakage; acidosis somewhat protective by inhibiting enzymatic reactions.

72. Serious adverse effect of morphine?

a) Extreme sedation

b) Increased intracranial pressure

c) Decreased respiration

d) Decreased myocardial conductivity

e) Decreased blood pressure

EXPLANATION: Respiratory depression is one of the most serious adverse effect. You have to start Nalaxone to such pts.

73. Glucose Transported from mother to fetus by:

A. Primary active transport
B. Facilitated diffusion
C. Simple diffusion
D. Na co-transport
E. None of the above

Ans: BBBB (Glucose via Facilitated (mainly), Amino-acids via Na- Co-transport)

74. A young female developed nausea vomiting and jaundice & suddenly (within hours) she died which is most likely in this patient?

A. HAV
B. Hep B
C. Hep C
D. Hep D
E. . Hep E

Ans: Hep D (She is NOT pregnant, so E is unlikely and the HIGHEST mortality is associated with Hepatitis D virus)

75. Transmission of which type of infection is most likely to occur after platelet transfusion?

a. Syphilis.

b. Malaria.

c. Hepatitis B.

d. HIV.

e. Bacterial.

Explanation: Platelet are stored at room temperature and at room temp. BACTERIAL transmission is common as their growth is promoted.

76. What is the greatest stimulant to saliva production?

a. Acetylcholine

b. Epinephrine

c. Norepinephrine

d. Nicotinic receptors

Answer a. Acetylcholine

EXPLANATION: Saliva production is the only part of the body in which the sympathetic and parasympathetic nervous system both lead to increased production of a substance. The greatest stimulant, however, by far, is acetylcholine. The acetylcholine receptors in the salivary glands are muscarinic receptors not nicotinic receptors

77. Which test is most likely to be positive in SLE?

a. Antinuclear antibody (ANA)

b. Anti-dsDNA

c. Anti-Smith

d. RF

e. Anti-Jo

Answer a. Antinuclear antibody (ANA)

Although the ANA test has no specificity for SLE, it is the test most commonly found to be positive. Ninety-five percent of patients with SLE should be positive for ANA, this means the ANA has an enormously strong negative predictive value for the disorder.

78. What is the single most specific test for multiple myeloma?

a. SPEP

b. Bone marrow biopsy

c. Urine immunoelectrophoresis

d. Bence Jones protein

e. Peripheral blood smear

Answer b. Bone marrow biopsy

Looking for >10% plasma cells on bone marrow biopsy is the single most specific test for myeloma. When combined with a monoclonal spike on SPEP and lytic lesions, this establishes the diagnosis of myeloma. Some cancers can give lytic lesions. The monoclonal gammopathy of unknown significance (MGUS) accounts for 99% of IgG spikes on SPEP. You can have Bence Jones proteinuria alone without myeloma. The only thing that gives >10% plasma cells on bone marrow biopsy is myeloma.

79. Which of these can be associated with target cells?

a. Autoimmune hemolysis

b. Iron deficiency

c. Folic acid deficiency

d. Vitamin B12 deficiency

EXPLANATION: Any of the microcytic anemias can be associated with target cells. The most likely of all the anemias to cause target cells is thalassemia. Both alpha- and beta-thalassemia can cause target cells and thalassemia can also be caused by thalassemia trait. Autoimmune hemolysis causes spherocytes, not target cells.

80. What will change first in response to iron replacement in Fe deficiency anemia therapy?

a. MCV

b. Reticulocyte count

c. Hemoglobin level

d. RDW

Answer b. Reticulocyte count

Reticulocytes are the measure of new cell formation. Reticulocyte concentration has to increase first for any of the other features of a CBC to change.

81. What test should be done to confirm the presence of vitamin B12 deficiency?

a. Methylmalonic acid level

b. Anti-intrinsic factor/antiparietal cell antibodies

c. Schilling test

d. Homocysteine level

Answer a. Methylmalonic acid level

Methylmalonic acid levels build up in vitamin B12 deficiency. Homocysteine level increases in both vitamin B12 and folate deficiency. Vitamin B12 deficiency can have a

low normal level in 10% to 20% of patients routinely. Anti-intrinsic factor, antiparietal cell antibodies, and the Schilling test are not used to discover whether there is a vitamin B12 deficiency. They are used to identify the etiology of the deficiency.

82. 65 years old man with Hx of hypertension & epilepsy is noted to have gingival hyperplasia on examination in the cardiology clinic. Which one of the following is most likely to be responsible?

a. Sodium Valporate

b. Lisinopril

c. Atrovastatin

d. Nifedipine

e. Carbamazipine

EXPLANATION: Anti-psychotic drug which causes gingival hyperplasia is Phenytoin NOT Valproate or Carbamezipine. Calcium channel blockers (especially Nifedipine can also cause gingival hyperplasia)

83. What is the physiologic basis of a barrel chest?

a. Increased fibrosis of lungs

b. Increased residual volume

c. Decreased compliance

d. Decreased FEV1

Answer b. Increased residual volume

As air becomes trapped in the lungs, the diaphragm flattens and the chest enlarges. These increased volumes are all residual volume, or the part of the air that cannot be exhaled. This is all a sign of increased total lung capacity, but not usable lung. The usable part of lung volume, the FEV1 and FVC, both diminish.

84. The Most common cause of death in Adult polycystic kidney disease is?

A. Berry Aneurysm

B. Renal Cell Carcinoma

C. Chronic Renal failure

D. Splenic Rupture

E. Liver Cirrhosis

Answer: CRF (Ref: Goljan Kidney Diseases Chapter)

85. All of the following will cause Right shift of Oxygen dissociation curve, EXCEPT:

A. Increase pCO2

B. Increase Temp

C. Decrease pH

D. Chronic Acidosis

E. Increase 2.3-GDP

Answer: D (In Option D – will remain Same – No shift, as initial acidosis will cause Right shift but with pessage of time the level of 2.3-GPD inside RBCs will decrease which move AWAY Curve toward LEFT and the result will no NO Shift)

86. A 41-year-old woman was taken to the emergency department after being involved in a motor vehicle accident. Neurologic examination showed that the papillary light reflex was absent in both eyes when light was shone in the left eye, but was normal in both eyes when light was shone in the right eye. At which location could a lesion account for this pattern of deficit in the pupillary light response?

A. Left occulomotor nerve (CN III)
B. Left optic nerve
C. Right Edinger-Westphal nucleus
D. Right visual cortex
E. Superior colliculi

B: The absence of both the direct and consensual light reflex response when light is shone in the left eye indicates a problem with the afferent part of the pupillary light reflex pathway on the left. A normal response on both sides when light is shone in the right eye demonstrates that the efferent parts of the reflex pathway, including the Edinger Westphal nucleus and cranial nerve III, are unaffected. The superior colliculus and visual cortex are not involved in the pupillary light reflex.

87. Why does Mycoplasma not appear on Gram stain?

a. No cell wall

b. Intracellular

c. Too small

d. No stainable DNA

Answer a. No cell wall

Mycoplasma does not have a true cell wall. Mycoplasma is encased in a cell membrane that does not pick up Gram stain. Chlamydia and viruses are intracellular. Gram stain does not stain DNA, it stains the cell wall

88. Which of the following parts of the eye has the greatest concentration of rods?

A. Ciliary body
B. Iris
C. Optic disk
D. Fovea
E. Parafoveal region

Answer: EEEE (Ganong's MCQ)

89: Which of the following is the principal buffer in interstitial fluid?
A. Hemoglobin
B. Other proteins
C. Carbonic acid
D. H 2 PO 4
E. Compounds containing histidine

Answer: CCCCC (Ganong's MCQ)

90: Compared to hepatic bile, gallbladder bile contains a reduced concentration of which of the following?

A. Bile acids
B. Sodium ions
C. Protons
D. Glucose
E. Protons

Answer: BBBBB (Ganong's MCQ)

91. Which of the following parameters is decreased during moderate exercise?

A. Arteriovenous O_2 difference
B. Heart rate
C. Cardiac output
D. Pulse pressure
E. Total peripheral resistance (TPR)

Answer: EEEEE

92. Which of the following is the major immunoglobulin in human serum, accounting for 80% of the immunoglobulin pool?

A) IgA

B) IgD

C) IgG

D) IgM

E) IgE

Answer: CCCC

Below are the some unique characteristics of each antibody:

(1) **IgG** = Smallest (in size) antibody, Highest concentration in serum, One that crosses placenta and antibody that is known as a Warm antibody.

(2) **IgM** = Largest in size, antibody that is mainly Intravascular, Earliest antibody to be synthesized and Cold antibody.

(3) **IgE** = Reagenic antibody, antibody with Minimum life, Heat labile antibody.

(4) **IgA** = Antibody that protect surfaces, antibody that is present in body fluids like Saliva, Breast Milk

93. Pulmonary Arterial Hypertension may be seen in each one, EXCEPT?

A. Hepatitis B

B. Eisenmenger's Syndrome

C. Sickle cell disease

D. Sarcoidosis

E. HIV

EXPLANATION: Hep B is NOT associated with Pulmonary HTN.

94. Which one of the following is least associated with small-cell lung carcinoma?

A. Cushing's syndrome

B. Worst prognosis

C. Hyponatremia

D. Lambert Eaton Syndrome

E. PTH related protein

EXPLANATION: Small cell is associated with Cushing's (due to ectopic ACTH) & SIADH (due to ADH production). PTH-rp with squamous cell carcinoma.

95. Preganglionic autonomic fibers are which type of fibers?

A. A Delta fibers

B. A gamma fibers

C. A beta fibers

D. C fibers

E. B fibers

(Ref: BRS Neurophysiology Chapter table: Kindly do memorize this table)

96. Receptors of all of the following are rapidly adopting receptors, EXCEPT?

A. Pressure

B. Velocity

C. Vibration

D. Tapping

(Ref: BRS Physio, Neurophysiology chapter)

97. Which one of the following hormone has 2 different mechanisms action on its receptors?

A. Insulin

B. Angiotensin II

C. ADH

D. Vitamin D

E. ACTH

EXPLANATION: Insulin: Tyrosine kinase, Angiotensin II: IP3, Vitamin D: steroid hormone mechanism, ACTH: cAMP mechanism, ADH (V1: IP3 mechanism, V2: cAMP mechanism)

98. 55 years old woman had hysterectomy presents for advice about HTR (Hormone Replacement Therapy). Which one of the following would result from the use of a combined OCPs compared to an Estrogen only:

A. Decrease risk of thromboembolism

B. Increase risk of stroke

C. Increase risk of breast cancer

D. Increase risk of endometrial cancer

E. Better control of symptoms

Explanation: Adding progesterone increases the risk of breast cancer while decrease the risk of endometrial cancer

99. Patient with suspected COPD, which of the following is least relevant?

A. X-ray chest

B. Smoking

C. CBC

D. Peak expiratory flow

E. Spirometry

EXPLANATION: As per recommendations Peak expiratory flow has NO value in COPD management. CBC is helpful in the sense that it will EXCLUDE secondary polycythemia.

100: Which of the following Cephalosporin is effective in Meticillin-Resistant Staphylococcus Aureus (MRSA) infections?

A. Cefixime

B. Ceftaroline

C. Ceftazidime

D. Ceftriaxone

E. Cephalexin

Explanation: The ONLY cephalosporin with MRSA coverage is Ceftaroline. MRSA is resistant to ALL others cephalosporin.

NOTE: Explanation for some questions (especially Anatomy related) is NOT given because there is NO Concept in these questions but still if you think there is some confusion then feel free to ask. We will try our level best to give you the logical explanation.

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