GENESIS

Post-Graduation Medical Orientation Centre

230 New Elephant Road (4th floor), Katabon More, Dhaka-1205

Phone: 01404-432 530, 01404-432 515

FCPS PART-I MOCK TEST-II

SUBJECT : Paediatrics

PAPER : II

Exam Date	:	**Mock-I**	**: 13-12-20/17-12-20/20-12-20**
		Mock-II	**: 25-12-20/26-12-20/27-12-20**
Exam Time	**:**	**2.30.pm-4.00pm**	
Total Number	**:**	**100**	

Question 26-50 based on single answer

1. Regarding the motor neuron pathways which of the following statements are true?
a) Areflexia is a sign of LMN lesion
b) Hemisection of the spinal cord causes contralateral paralysis
c) Hypertonia is a sign of an upper motor neuron (UMN) lesion
d) Poliomyelitis affecting right-sided anterior horn cells never causes left sided weakness
e) The cell body of the lower motor neuron (LMN) is in the medulla

2. Antibiotics that inhibit protein synyhesis
a) Vancomycin
b) Erythromycin
c) Aminoglycoside
d) Penicillin
e) Sulfonamide

3. Adverse effects of salbutamol
a) Decrease release of glucagon
b) Bradycardia
c) Peripheral vasodilatation
d) Down regulation
e) Tremor

4. During pregnancy following drugs are safely used
a) Insulin
b) Penicillins
c) Aminoglycosides
d) Tetracyclines
e) Chloramphenicol

5. Which substances are synthesized from cholesterol
a) Prostaglandins
b) Ketone bodies
c) Bile acids
d) Aldosterone
e) Co-lipase

6. Polyunsaturated fatty acids are
a) Butyric acid
b) Arachidonic acid
c) Stearic acid
d) Oleic acid
e) Palmitic acid

7. While standing, compared to the upper part of the lung, the lower portion of the lung **has**
a) Higher ventilation
b) Larger size of the alveoli
c) Higher ventilation-perfusion ratio
d) Higher alveolar PO_2
e) Larger compliance

8. Fates of pyruvate in the body
a) Glycerol
b) Formation of ketoacid
c) Synthesis of glucose
d) Oxidation to acetyl Co-A
e) Conversion to lactate

9. Glut-4 is abundant in
a) Cardiac muscle
b) Skeletal muscle
c) WBC
d) Brain
e) Smooth muscle

10. Factors inversely related to rate of blood flow
a) Velocity of blood
b) Pumping action of heart
c) Viscosity of the blood
d) Total cross sectional area
e) Length of the blood vessels

11. In respiratory center
a) Dorsal respiratory group is situated in the nucleus of tractus solitarius of pons
b) Pneumotaxic center is situated in ventrolateral medulla
c) Apneustic center in upper pons
d) Voluntary respiratory control center in cerebral cortex
e) Ventral respiratory group is situated in nucleus ambigus

12. Glomerular filtrate
a) Albumin concentration is only 0.2% of its plasma concentration
b) Concentration of anions is 5% lesser than in plasma
c) Concentration of cation is 5% greater than in plasma
d) Ca^{++} and fatty acid concentration are less than is plasma
e) Specific gravity 2.009-3.010

13. Following statements are true about vitamin D deficiency.
a) 25-hydroxylation of vitamin D occurs in the kidney
b) Increase calcium absorption from gut(Duodenum)
c) Breast milk contains more vitamin D than formula milk
d) Calcidiol is the biologically active form of vitamin D
e) In teenagers typically less than 10% of vitamin D comes from dietary sources
As part of her initial investigations a blood gas is done which reveals she is hypocalcaemic)

14. During sleep, there is a fall of plasma level of
a) Cortisol
b) Insulin
c) Adrenaline
d) ADH
e) Growth hormone

15. Synthetic functions of liver
a) Immunoglobulin
b) Urea
c) Amino acid
d) Vitamin D
e) 25- Hydroxycholecalciferol

16. Functions of zinc are
a) Helps in growth
b) Supports gonadal activity
c) Co-factor of many enzyme
d) Helps in wound healing
e) Regulates nerve and muscle function

17. Platelet activation is occurred by following substances
a) Collagen
b) Prothrombin
c) APTT
d) Thromboplastin
e) Epinephrine

18. Target cell is found in
a) Liver disease
b) Acute leukaemia
c) Post splenectomy state
d) Pernicious anaemia
e) IDA

19. A patient with carbon dioxide retention is likely to have
a) Metabolic acidosis
b) Alkaline urine
c) Cool extremities
d) Raised cerebral blood flow
e) Raised plasma bicarbonate

20. Regarding somatomedin
a) Somatomedin activity has been found in serum, kidney and muscle tissue
b) Relaxin is a somatomedin
c) Increase collagen synthesis
d) Inhibit incorporation of sulfate into cartilage
e) It is not produced from non hepatic tissue

21. Following are side effect of quinolone antibiotics
a) Teratogenicity
b) Allergic reaction
c) Ototoxicity
d) Tendinitis
e) Phototoxicity

22. The velocity of blood flow is
a) Higher in the arteries than in the arterioles
b) Higher in the venules than in the veins
c) Inversely proportional to cross sectional area of blood vessels
d) Close to zero during early diastole in ascending aorta
e) Decreases in a constricted area of blood vessel

23. The structural chromosomal disorders are
a) Homochromosome
b) Translocation
c) Ring chromosome
d) Deletion
e) Translation

24. Stomach in not digested by following causes
a) Mucusal barrier protects the gastric epithelium
b) Mucosal blood flow
c) Prostaglandin provides cytoprotective action
d) Surface mucus cells also secrete HCl that counteracts the effect of HCO3
e) The presence of trefoil peptides in the mucosa, they are acid sensitive

25. Findout the true statements about surfactant
a) Thyroid hormone decrease the number of inclusion in type-II cells
b) Insulin stimulate SP-A accumulation in cultured human fetal lung tissue
c) Glucocorticoid accelerate maturation of surfactant
d) It begins to secrete at the beginning of surfactant
e) Helps in preventing pulmonary oedema

Each question below contains five suggested answers- choose the <u>one best</u> response to each question (26-50)

26. A case of restrictive lung disease is similar to a case of obstructive lung disease in having lower
a) Residual volume
b) FEV_1/FVC
c) Total lung capacity
d) PEFR
e) Vital capacity

27. Which is the metabolic autosomal dominant disorder
a) Myotonic dystrophy
b) Osteogenesisimperfecta
c) Marfan syndrome
d) Acute intermittent porphyria
e) Neurofibromatosis

28. Which of the following is correct about fetal haemoglobin (HbF)?
a) 2,3 DPG levels are high in HbF as compared to adult haemoglobin
b) Acidosis shifts the oxygen dissociation curve to the right
c) The affinity of adult haemoglobin towards oxygen is greater than that of HbF
d) The oxyhaemoglobin dissociation curve for HbF is shifted to the left as compared with adult haemoglobin
e) The shift from HbF to HbA happens during adolescence

29. Regarding neonatal respiratory distress which ONE of the following statements concerning grunting is most correct?
a) Increases endogenous surfactant production
b) Increases the critical closing volume
c) Increases the functional residual capacity
d) Is an inspiratory sound due to narrowing of the glottis
e) Reduces the residual volume

30. In steps of muscle contraction which statement is the most inappropriate
a) Discharge of motor neuron and release of acetylcholine at motor end plate
b) Binding of acetylcholine to nicotinic acetylcholine receptor
c) Increased Na^+ and K^+ conductance in end plate potential and generation of action potential
d) Outword spread of depolarization along T tubule
e) Release of Ca^{++} and binding to troponin C

31. Carboxypeptidase is a proteolytic enzyme in
a) Gastric juice
b) Salivary juice
c) Succus intericus
d) Gall bladder bile
e) Liver bile

32. Concerning the sensory pathways which of the following statements is true?
a) Hemisection of the spinal cord would cause contralateral loss of fine touch and proprioception
b) Symptoms suggest a lesion to the right side of her spinal cord
c) The dorsal column tracts decussate in the brain stem
d) The sensory neuronal pathways are mostly composed of two neurons
e) The spinothalamic tract not carries pain and temperature sensation

33. A 7 years old boy came to tertiray care hospital with the complaints of progressive pallor for 1 month& fever also for same duration. On examination he had pain in different parts of the body. Regarding bone marrow study which finding is incorrect
a) Erythropoiesis is decreased
b) Myeloid erythroid ratio is increased
c) Megakaryopoiesis are reduced
d) Hypercellularity
e) Blast cells of <25% is diagnostic

34. On which of the following does aldosteron exerts its greatest effect?
a) Glomerulus
b) Proximal tubules
c) Cortical collecting duct
d) Thin portion of loop of henle
e) Thick portion of loop of henle

35. In causes of hypophosphatemia which is false
a) Malabsorption
b) Chronic alcoholism
c) Crush injury
d) Renal phosphate wasting
e) Insulin administration

36. In the absence of vasopressin, the greatest fraction of filtered water is absorbed in the?
a) Proximal tubules
b) Loop of henle
c) Distal tubules
d) Cortical collecting duct
e) Medullary collecting duct

37. Blood in which of the following vessels normally has the lowest PO2?
a) Maternal artery
b) Coronary artery
c) Maternal femoral vein
d) Umbilical artery
e) Umbilical vein

38. The cells where insulin plays role for glucose uptake
a) Pancreatic β-cell
b) Hepatocyte
c) Neuron in the brain
d) Adipose tissue
e) Retinal epithelium

39. In basal metabolic rate which hormone has dual functions
a) Growth hormone
b) Thyroid hormone
c) Male sex hormone
d) Epinephrine
e) Nor adrenaline

40. The secretion of which of the following would be least affected be a decrease in extracellular fluid volume?
a) CRH
b) Arginin
c) Dehydroepiandrosteron
d) Estrogen
e) Aldosteron

41. A raised blood pH and bicarbonate level is consistent with
a) Metabolic acidosis
b) Partly compensated respiratory alkalosis
c) A reduced PCO_2
d) Chronic renal failure with a raised PCO_2
e) A history of persistent vomiting of gastric contents

42. Which of the following drugs have enzyme inducing properties
a) Morphine
b) Dizaepam
c) Penecillin
d) Isoniazide (INH)
e) Phenobarbitone

43. Passage of drug through cell membrane is affected by
a) Molecular weight of the drug
b) Water solubility of the drug
c) Source of the drug
d) Dose of the drug
e) Mode of action of the drug

44. Inhibition of acetylcholinesterase enzyme causes following symptoms EXCEPT
a) Increase salivation
b) Convulsion
c) Diarrhoea
d) Pulmonary congestion
e) Spastic paralysis

45. The following statements about hypocalcaemia is true?
a) Acute reduction in blood pH causes an increase in ionised calcium
b) Cardiac arrhythmias occur typically due to QT prolongation
c) It typically results in reduced or absent tendon reflexes
d) It results in deep seated bleeding
e) Laryngospasm is not a recognised complication

46. Aspirin has following pharmacological action,EXCEPT
a) Anti-inflammatory action
b) Analgesic action
c) Aggregation of platelet
d) Antipyretic action
e) Antiplatelet effect

47. The volume receptors of circulatory system false statement is
a) Are required for effective regulation of blood volume
b) Are confined to right atrium
c) Influence renal function
d) Influence secretion of ADH
e) Influence secretion of atrial natriuretic peptide

48. Special action of growth hormone is
a) Mitosis of chondrocytes and osteocytes
b) Sodium depletion
c) Maintenance of balance between osteoblastic and osteoclastic cell activity
d) Lactogenesis
e) Anti insulin effects in muscle

49. Presence of following chemical group increase water solubility of drug
a) Halogen group
b) Steroid nucleus
c) Carboxylic group
d) Hydrocarbon chain
e) Benzene ring

50. In comparison between DNA and RNA true statement is
a) A/T and G/C ratio in DNA is two
b) Alkali merely denature DNA by breaking hydrogen bonds only
c) RNA translates general information
d) RNA is the chemical basis of heredity
e) Uracil is present instead of thymin in DNA

Paediatrics Mock-II Paper-II

1.. TFTTF
2. FTTFF **(Ref: Vision Pharma 7th/Page-442)**
3. FFTTT (Ref: Vision Pharma 7th/Page-85)
4. TTFFF (Ref: Vision Pharma 7th/Page-569)
5. FFTTF (Ref: ABC 5th/Page-190)
6. FTFFF (Ref: ABC 5th/Page-61)
7. TFFFT [Ref: Ganong physiology/25th/P-635-636]
8. FFTTT (Ref: ABC 5th/P-160)
9. TTFFF (Ref: Lippinkot 5th/Page-97)
10. FFTFT (Ref: Guyton 13th/Page-176)
11. FFFTT (Ref: Ganong 25th/P-659)
12. TFFTF (Ref: Guyton 13th/Page-335)
13. FTFFT (Ref: AH Mollah/5th/P146)
14. TTTFF [Ref: Rodde/6th/Q-446]
15. FTFTT (Ref: Ganong 25th/Page-511)
16. TTTTF (Ref: Vision 5th/P-516)
17. TFFFT (Ref: Guyton 13th/Page-483)
18. TFTFT (**Ref: Khalaque/Page-218)**
19. FFTTF (**Ref: Roddie 6th/Q-179)**
20. TTTFF (**Ref: Vision 9th/P-350)**
21. TTFTT (Ref: Vision Pharma 7th/P-472)
22. TFTTT [Ref: Ganong/Ed-25th/P-572 + Robbins/6th/Q-87]
23. FTTTF (Ref: Robbin9th/Page-140-142)
24. TTTFF (Ref: Ganong 25th/Page-458)
25. FFTTT (Ref: Vision 9th/P-190)
26. E
27. D (Ref: Robbins &Cotrans 9th/Page-141)
28. D
29. C (Ref:AH Mollah/5th/P-105)
30. D (Ref: Ganong 25th/Page-105)
31. C (Ref: Ganong 25th/Page-461)
32. C
33. D (Ref:AH Molah/5th/P-223)
34. C (Ref: Ganong 25th/Page-694)
35. C (Ref: ABC Biochemistry)
36. A (Ref: Ganong 25th/Page-693)
37. A (Ref: Ganong 25th/Page-617)
38. D (Ref: ABC 5th/Page-499)
39. B (Ref: Harper30th)
40. A (Ref: Ganong 25th/Page-374)
41. E (Ref: Roddie)
42. E [Ref: Lippincott/6th/P-15 + Katzung/14th/P-59]
43. A
44. A (Ref: AH Mollah/5th/P-329)
45. B
46. A (Ref: Vision Pharma 7th/P-195)
47. B (Ref: Ganong 25th/Page-587)
48. D (**Ref: Ganong 25th/Page-325)**
49. C (Ref: Lipincott's)
50. B (Ref: ABC 5th/Page-115)