

GENESIS

Post Graduation Medical Orientation Centre
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FCPS PART-I MOCK TEST-I

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. Anti-staphylococcal penicillins are

- a) Nafcillin
- b) Metronidazole
- c) Rifampicin
- d) Methicillin
- e) Ticarcillin

2. Drugs that cross blood placental barrier

- a) Heparin
- b) Atracurium
- c) Iodine
- d) Live vaccine
- e) Levodopa

3. Following drugs are enzyme inducer

- a) Sulphinpyrazone
- b) Allopurinol
- c) NSAIDs
- d) Disulfiram
- e) Smoking

4. Drug induced lupus is caused by

- a) Isoniazid
- b) Nefidipin
- c) Procainamide
- d) Azathioprine
- e) Leflunamide

5. Following are the sources of ammonia

- a) Amino acid catabolism
- b) Glycosaminoglycans
- c) Pyrimidine catabolism
- d) Bacterial degradation of urea
- e) Alanine

6. Sources of acetyl CoA are

- a) Breakdown of cholesterol
- b) Krebs's cycle
- c) β oxidation of fatty acid
- d) Glycolysis
- e) Breakdown of ketone bodies

7. NADP is

- a) Used for synthesis of ketone bodies
- b) Required for reductive synthesis of fatty acid
- c) Required for bile acid synthesis
- d) Facilitating antioxidant activity in RBC
- e) Taken up by respiratory chain for ATP production

8. Apolipoprotein

- a) C-II activates lipoprotein
- b) A1 activates Apo A_{II}, A_{IV}
- c) B-48 mediates VLDL secretion
- d) E mediates remnant uptake
- e) C-II activates hormone sensitive lipase

9. Sites where tight gap junctions are found

- a) Gastrointestinal mucosa and epithelia
- b) Thyroid and adrenal gland
- c) The epithelia of the human lung
- d) Bladder tissue
- e) Epithelial lining of the BBB

10. Action potential of cardiac muscle is characterized by

- a) Increase Ca^{++} influx in slow repolarization
- b) In Plateau phase decrease Ca^{++} influx
- c) Influx of Na^+ in rapid repolarization
- d) Gradual activation of Na^+ channel in slow repolarization
- e) Increase K^+ efflux in rapid repolarization

11. Renal tubular acidosis is associated with

- a) Osteomalacia
- b) Hypertension
- c) Hyperchloraemia
- d) Growth failure
- e) Dehydration

12. Indications of bone marrow aspiration

- a) Enteric fever
- b) Secondary malignancy
- c) Gaucher's disease
- d) Galactosemia
- e) Addison's disease

13. ECG findings of hypokalaemia

- a) Prolong QT interval
- b) T wave peak, slender
- c) ST depression
- d) Prominent R wave
- e) Prolong P-P interval

14. Local metabolic activity is the chief factor for determination of the rate of blood flow to

- a) Heart
- b) Skin
- c) Kidney
- d) Skeletal muscle
- e) Lung

15. Heart rate is slowed by

- a) Hypoxia
- b) Increased activity of atrial baroreceptor
- c) Brainbridge reflex
- d) Increased ICP
- e) Decreased activity of baroreceptor

16. The surfactant lining the fluid of lung alveolar epithelium causes

- a) Increase work of breathing
- b) Decrease pulmonary capillary filtration
- c) Increase elastic recoil pressure
- d) Decrease stability of alveoli
- e) Increase compliance of lung

17. Special functions of ADH are

- a) Causes glycogenolysis in liver
- b) Acts as a putative neurotransmitter in brain
- c) Maintain osmolarity in ECF
- d) Formation of concentrated urine
- e) Increase movements of stomach and intestine

18. Physiological effects of thyroid hormone are

- a) Decrease number of adrenergic receptors
- b) Decrease proportion of myosin heavy chain
- c) Stimulate oxygen consumption in anterior pituitary
- d) Formation of VLDL receptor
- e) Enhanced responses to circulating catecholamines

19. HCl secretion is stimulated by

- a) Vagal stimulation
- b) Anti muscarinic drugs
- c) Acidosis
- d) Vasoactive intestinal peptide
- e) Gastric distension

20. Renin secretion is increased by

- a) Increased parasympathetic activity via renal nerve
- b) Increased afferent arteriolar pressure
- c) Increased Na⁺ and Cl⁻ reabsorption across macula densa
- d) Decreased circulating catecholamine
- e) Increased sympathetic activity via renal nerve

21. Following drugs are used to raised blood pressure in anaphylactic shock

- a) Dopamine
- b) Adrenaline
- c) Hydrocortisone
- d) Promethazine
- e) Noradrenaline

22. Effects of metabolic acidosis are

- a) Peripheral vasoconstriction
- b) Anion gap increased
- c) Myocardial depression
- d) Kussmaul's respiration
- e) Confusion and drowsiness

23. Autosomal recessive disorder is related to

- a) The disease can be traced in every generation of the family
- b) Affect both sexes equally
- c) Unaffected female carriers transmit the disease
- d) High new mutation rate
- e) Heterozygotes are phenotypically unaffected

24. The following physiological changes are associated with pregnancy

- a) Increased haemoglobin
- b) Decreased functional residual capacity of lungs
- c) Increase blood volume
- d) Decrease oxygen consumption
- e) Decreased minute volume of lungs

25. Factors affecting GFR

- a) Severe constriction of efferent arteriole decrease GFR
- b) Stimulation of sympathetic nervous system increase GFR
- c) Constriction of afferent arteriole increase GFR
- d) Bowman's capsule hydrostatic pressure decrease GFR
- e) Bowman's capsule colloidal osmotic pressure decrease GFR

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

26. In first order kinetics?

- a) Variable half life
- b) Constant amount of drug will be eliminated
- c) Amount of elimination is fixed
- d) A few drugs follow
- e) Constant fraction of drug is eliminated

27. SIADH is characterized by?

- a) Normal blood urea
- b) Urine osmolarity < 100 mosmol/kg
- c) Urinary sodium excretion > 40 mEq/L
- d) Low fractional excretion of sodium
- e) High serum uric acid

28. Nerve impulse transmit to motor end plate in skeletal muscle, except

- a) K⁺ influx
- b) Na⁺ and Cl⁻ influx into the cell
- c) Impulses pass from presynaptic vesicle
- d) Acetylcholine granule release
- e) Ca⁺⁺ entry

29. During normal quiet breathing?

- a) Intrapleural pressure is lowest at the end of inspiration
- b) Intra alveolar pressure is lowest at inspiration
- c) Most of the tidal air enters into the apex of the lung
- d) Intra alveolar pressure is lowest at the end of inspiration
- e) Intrapleural pressure is lowest at the apex of the lungs

30. Regarding thiamin deficiency which is incorrect

- a) Neurological beriberi
- b) Cardiac beriberi
- c) Wernick's encephalopathy
- d) Ophthalmoplegia
- e) Korsakoff psychosis

31. Muscle spindle is conducted by following nerve fibre

- a) Beta nerve fibre
- b) Delta nerve fibre
- c) Theta nerve fibre
- d) Gamma nerve fibre
- e) Alpha nerve fibre

32. Metabolic acidosis with a normal anion gap

- a) Hypergammaglobulinaemia
- b) Acute renal failure
- c) Poisoning with ammonium chloride
- d) Accumulation of ketones
- e) Liver disease

33. In blood, most of the CO₂ is transported by

- a) Dissolved state
- b) As carbamino haemoglobin
- c) As bicarbonate form
- d) Oxy-haemoglobin form
- e) Carboxy-haemoglobin form

34. The following reflexes and innervating spinal segment are correct

- a) Triceps jerk- C₆, 7
- b) Ankle jerk- S₂, 3
- c) Knee jerk- L₅, 6
- d) Abdominal reflex- T₆, 8
- e) Supinator jerk- C₇, 8

35. Breakdown of haemoglobin by the reticuloendothelial system can be determined by measurement of which exhaled gas?

- a) Carbon dioxide
- b) Carbon monoxide
- c) Hydrogen
- d) Nitric oxide
- e) Nitrogen

36. The major lipoprotein source of the cholesterol used in cells

- a) Chylomicrone
- b) Intermediate density lipoprotein
- c) Very low density lipoprotein
- d) Low density lipoprotein
- e) High density lipoprotein

37. Which of the following is the principle buffer in interstitial fluid?

- a) Haemoglobin
- b) Amonia buffer
- c) Carbonic acid
- d) H₂PO₄
- e) Compound containing Histidin

38. Which of the following is responsible for the movement of O₂ from the alveoli into the blood in the pulmonary capillaries?

- a) Primary Active transport
- b) Filtration
- c) Secondary Active transport
- d) Facilitated diffusion
- e) Passive diffusion

39. Effect of aldosterone on sweat and salivary gland is

- a) Increased extra cellular fluid volume
- b) Increased Ca⁺⁺ secretion
- c) Increased blood pressure
- d) Increased H⁺ secretion
- e) Increased K⁺ secretion

40. The hypofunctional state of the thyroid gland during fetallife,infancy or childhood and is characterized specially by failure of growth. Which cause is not related to this condition

- a) Fetal thyroid dysgenesis
- b) Maternal diabetes mellitus
- c) Fetalhypopituitary hypothyroidism
- d) Meternalantithyroid antibodies that cross the placenta
- e) Inborn errors of thyroid hormone sythesis

41. The end products of digestion that are formed within the lumen of gut absorbed into blood and lymph by using one of the following method of biological transport,except

- a) Vitamin, lipid by simple diffusion
- b) Fructose absorption by facilitated diffusion
- c) Folic acid absorption by passive transport
- d) Galactose, aminoacid by Na⁺ dependent active transport
- e) Vitamin B₁₂ absorption by endocytosis

42. Which one of these statements best describes the mechanism of action of montelukast?

- a) Blocks the action of leukotriene D4 in the lung
- b) Decreases the level of gamma interferon
- c) Increases the level of leukotriene D4
- d) Increases the level of phosphodiesterase PDEIII
- e) Inhibits C1 esterase enzymes

43. Glucose 6-phosphatase enzyme is found in

- a) Skeletal muscle
- b) Kidney
- c) Adipose tissue
- d) Liver
- e) Neurons of brain

44. Which is the best descriptor of fetal circulation in the newborn?

- a) Blood flows through the foramen ovale from left atrium to right atrium
- b) In the fetus there are two umbilical arteries and one umbilical vein
- c) Over 90% of blood bypasses the liver via the ductus venosus
- d) The umbilical artery carries oxygenated blood from the placenta to the fetus
- e) The patency of the ductus arteriosus is maintained by the vasodilating effects of prostaglandin G2

45. Considering the mechanism of action of furosemide, which pattern of results would be most likely?

- a) Hyperkalaemia, hyponatraemia, hyperchloraemia, metabolic alkalosis
- b) Hyperkalaemia, hyponatraemia, hypochloraemia, metabolic alkalosis
- c) Hypokalaemia, hypernatraemia, hypochloraemia, metabolic acidosis
- d) Hypokalaemia, hyponatraemia, hypochloraemia, metabolic acidosis
- e) Hypokalaemia, hyponatraemia, hypochloraemia, metabolic alkalosis

46. A competitive antagonist

- a) Both agonist and antagonist compete for different receptors
- b) Alters the efficacy of an agonist
- c) Antagonist increase the potency of the agonist
- d) Inhibition that is caused by antagonist can be removed by increasing the concentration of agonist
- e) Decrease the maximum response to antagonist

47. Which is the teratogenic drug

- a) Salbutamol
- b) Ciprofloxacin
- c) Azithromycin
- d) Folic acid
- e) Aspirin

48. In Down's syndrome the most likely cause of the additional chromosomal material is:

- a) Inherited translocation
- b) Maternal-nondisjunction
- c) Mosaicism
- d) Paternal nondisjunction
- e) Spontaneous translocation

49. What makes dark green color of bile?

- a) Urobilinogen
- b) Hemosiderin
- c) Biliverdin
- d) Bilirubin
- e) Stercobilin

50. Which of the following statements regarding exogenous surfactant is TRUE in a neonate with respiratory distress syndrome? I

- a) Decrease lung compliance
- b) Improves only oxygenation, not ventilation
- c) Increases alveolar surface tension
- d) Maintains residual lung capacity
- e) Reduces the critical closing volume

Paediatrics-Mock-1, Paper-2

1. TFFTF (Ref: Vision Pharma 6th/P-451)
2. FFTTF (Ref: Vision Pharma 6th/P-16)
3. TFFFT
4. TFFTF (Ref: Davidson 22nd/Page-1132)
5. TFFTF (Ref: ABC 4th/Page-216)
6. FFTTF (Ref: ABC 4th/Page-155)
7. FTFTT (Ref: ABC 4th/Page-166)
8. TTFFF (Ref: ABC 4th/Page-198)
9. FFTFT (Ref: Ganong 25th/Page-41)
10. TFFFT (Ref: Guyton 13th/Page-61)
11. TFTTT (Ref: Davidson 22nd/Page-445/Box-16.19)
12. TTTFF (Ref: Davidson 22nd)
13. TFFTF (Ref: Ganong 25th/Page-534)
14. TFFTF (Ref: Roddie 6th/Page-33)
15. FTFTF (Ref: Ganong 25th/Page-124-559)
16. FTFFT (Ref: Ganong 25th/Page-631-632)
17. FTFFT (Ref: Ganong 25th/Page-666)
18. FFFFT (Ref: Ganong 25th/Page-345)
19. TFFFT (Ref: Guyton 13th/Page-797/ Ganong 25th/Page-457-460)
20. FFFFT (Ref: Ganong 25th/Page-703)
21. TTTFT (Ref: Vision 6th/Page-354)
22. FTTTT (Ref: Vision 7th/Page-492)
23. FTFFT (Ref: Robbin's (genetics) 7th/page-140-142)
24. FFFTT (Ref: Guyton 13th/Page-470)
25. TFFTF
26. E (Ref: Vision 6th/Page-24-25)
27. A (Ref: Davidson 23rd/Page-357)
28. B (Ref: Ganong 25th/Page-105)
29. E (Ref: Ganong 25th/Page-628-630)
30. D (Ref: ABC 4th/Page-508)
31. D (Ref: Snell 6th/Page-82)
32. C (Ref: Davidson's 22nd/Page-445/23rdPage-365)
33. C (Ref: Ganong 25th/Page-641-644)
34. A (Ref: Snell 6th/Page-100)
35. B
36. D (Ref: Ganong 25th/Page-31)
37. D (Ref: Ganong 25th/Page-717)
38. E (Ref: Ganong 25th/Page-639)
39. E (Ref: Guyton 13th/Page-968)
40. B (Ref: Ganong 25th/Page-344)
41. C (Ref: Ganong 25th/Page-475)
42. A
43. D (Ref: ABC 4th/Page-170)
44. B
45. E
46. D (Ref: Vision 6th/Page-30)
47. B (Ref: Vision 6th/Page-569)
48. B
49. C
- 50.