GENESIS

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FCPS PART–I

Review Exam

Batch : FRIDAY MEGA BATCH 2

Topic : **Renal system, Body Fluid, Endocrine Physiology, GIT Physiology , Metabolism, Head & Neck, Respiratory system, Nervous system**

Exam Date	: 20/07/20
Total Number	**: 100**
Exam Time	: 8.00 am - 8.40 am
Pass Mark	**: 70**

Question 1-50 based on single answers

BODY FLUID

1. Metabolic acidosis is seen in conjunction with which cause of hypokalaemia?
a) Diarrhoea
b) Gitelman's syndrome
c) Loop diuretics
d) Primary hyperaldosteronism
e) Vomiting
A

2. ECG finding of hyperkalemia
a) Flattened T wave
b) U wave
c) Wide QRS complex
d) Short QT interval
e) ST depression
C (Genesis + Davidson 23rd 347)

3. Regarding total body buffer capacity all are true except:
a) The total amount of acid or base that can be buffered by all body buffer without any significant change in PH
b) In a normal individual it is about 1000mmol
c) ICF contribute about 60% of total buffering capacity of the body
d) About 85% buffering capacity is done by bicarbonate buffer
e) About 2% buffering capacity is done by phosphate buffer
D (58) (abc 6th 346p)

4. Right answer regarding gibbs donnan permeable membrane is:
a) Equal concentration of non-diffusible ions
b) Equal concentration ratio of diffusible ions
c) Equal concentration of diffusible ions
d) Electrical potential exacerbation
e) Osmotic gradient
B(abc 5th 22,23,24; d= difference)

5. All are true regarding effect of diuretic except:
a) Aldosterone antagonist causing metabolic acidosis
b) Thiazide causing metabolic alkalosis
c) Loop diuretic causing metabolic alkalosis
d) Spironolactone causing metabolic alkalosis
e) CA inhibitors causing metabolic acidosis
Ans D(It causes metabolic acidosis)ABC 6th 378p

Endocrine physiology

6. Hormones act through calcium phospholipid system are-
a) Angiotension-II(Epithelial cells)
b) Oxytocin
c) Calcitonin
d) ADH(V_2)
e) PTH
B (Ref:Genesis lecture sheet-3)

7. Protein hormones
a) Synthesized in smooth endoplasomic reticulum
b) Lipophillic
c) Have long half life
d) Act via second messenger system
e) Slow onset of action
D (Ref:Guyton page-882)

8. Stimuli that increase growth hormone secration –
a) Growth hormone
b) Protein meal
c) IGF
d) Cortisol
e) FFA
B (Ref: Genesis lecture sheet-15)

9. Diagnostic features of SIADH-
a) Plasma osmolality >270mmol/kg
b) Urine osmolality >100mmol/kg
c) Urine sodium conc. >30 mmol/L
d) Plasma sodium con. >130 mmol/L
e) High serum uric acid
C (Ref:Davidson page-557)

10. Sub clinical thyrotoxicosis-
a) Thyroxine is highly elevated
b) Triiodothyronine mildly elevated
c) TSH low
d) Thyroxine within normal limit
e) TSH raised
D (Ref:Davidson page-616)

11. Most common cause of cushing syndrome is-
a) Pituitary adenoma secreting ACTH
b) Adrenal adenoma
c) Adrenal carcinoma
d) Neuroendocrine tumor
e) Alcohol excess
A (Ref:Genesis lecture sheet-54)

12. Insulin-
a) Is a anabolic hormone
b) Promote glucose uptake in adipose tissue & kidney
c) Requirement are increased by exercise
d) Increase plasma potassium level
e) Is required for utilization of glucose in brain
A(Ref: Vision page -211)

13. Regarding PCOS which one is false
a) Elevated FSH
b) Infertility
c) Elevated estrogen
d) Elevated prolactin
e) High level of androgen
A(Ref:Davidson page-658)

Nervous system

14. Which one is correct of the following fibre about susceptible to hypoxia
a) B is least susceptible
b) A is most susceptible
c) A is Least susceptible
d) C is most susceptible
e) C is least susceptible
E(Ref: Ganong 25th Page-95)

15. Which one of the following is slow neurotranmitter
a) Serotonin
b) Substane-P
c) Aspartate
d) Histamine
e) Popamine
B (Ref: Guyton 11th Page-563)

16. Which of the following factor affect synaptic transmission
a) Alkalosis transmission decreases
b) Caffein decreases
c) Tetanus decreases
d) Hypoxia increase
e) Hypocalcemia increase
E (Ref: Guyton 25th Page-125)

17. Function of extra pyramidal pathways except
a) It controls swinging of answer denying
b) It controls autonomic visceral activities through hypothalmas
c) Gives background of purposeful skilled activities excreted by pyramidal
d) Maintains tone, posture tract
e) Skillful activities
E(Ref: Ghost & Sahana 2nd Page-967)

18. Physiological effects of sleep on functional system of body except
a) Hearst rate decrease
b) Respiratory rate increases
c) Muscle tone decreased
d) 10-30% decrease in BMR
e) Active dreaming occurs in REM sleep
B (Ref: Lecture Sheet genesis Page-45)

Renal physiology

19. Which of the following does not form part of the glomerular filtration barrier?
a) Endothelial cell fenestration
b) Sub-endothelial space
c) Glomerular basement membrane
d) Podocyte foot process slit diaphragm
e) Sub-podocyte space
B (gnong 25th 673)

20. In urine which substance concentration is higher than plasma
a) Na
b) Bicarbonate
c) Glucose
d) Urea
e) Albumin
D. (see substanceexcreted by kidney in Genesis lec)

21. Sodium clearance is decreased by:
a) Increased reabsorption
b) Decrease aldosterone
c) Osmotic diuresis
d) Water osmosis
e) Decreased reabsorbtion
A

22. Patients with renal artery stenosis may present with very high blood pressures due to increased renin secretion. Which of the following structures in the kidney is responsible for sensing inadequate perfusion and secreting renin?
a) Afferent arteriole
b) Collecting duct
c) Distal convoluted tubule
d) Efferent arteriole
e) Loop of Henle
A

23. For the acidification of urine which part of nephron plays an important role significantly
a) PCT
b) Loop of henl
c) Early distal CT
d) Late distal CT
e) CD
D

Metabolism

24.Homo Cystine level decreased by
a) Vit B 1
b) Vit B 2
c) Vit b 3
d) Vit B 12
e) Biotin

D

25.During prolong starvation , metabolic fuel for brain

a) fatty acid
b) Glucose
c) Ketone body
d) Lactate
e) Protein

C

26. Following substance is not Fate of Pyruvate

a) Lactate
b) Alanine
c) Acetyl Co A
d) ketone body
e) Oxaloacetate

D

27. Pentose Phosphate pathway is of great importance because it produces

a) NADH
b) ATP
c) NADPH
d) Acetyl Co A
e) Fatty acid

C

28. Zinc deficiency can cause

a) HTN
b) Dwarfism
c) Lichen planus
d) Constipation
e) peripheral neuropathy

B

29. Adding ___to a breakfast of cereal will help your body absorb iron.

a) Milk
b) Orange juice
c) Coffee
d) Water
e) Cocacola

B

30 .Ketone body cant be utilized by

a) Heasrt
b) Skeletal muscle
c) Brain
d) Liver
e) Exercising muscle

D

31.Following vitamin acts as co enzyme

a) Retinol
b) Panothenic acid
c) Retinoic acid
d) Cupper
e) Tocopherol

B

32. Which of the following vitamin is responsible for post translational hydroxylation

a) Vit K
b) Vit A
c) Vit C
d) Vit B 1
e) Vit B 3

C

33. Highest TAG containing lipoprotein is

a) VLDL
b) IDL
c) LDL
d) Chylomicron
e) Cholesterol esters

D

Head& Neck

34. The stylopharyngeus muscle is developed from the

a)1st arch
b) 2nd arch
c) 3rd arch
d) 4th arch
e) 6th arch

C [Ref: Langman 13th /P-279]

35. Foramen ovale passing through following content except

a) Maxillary nerve
6) Mandibular nerve
c) Accessory meningeal artery
d) Lesser petrosal nerve
e) Emissary vein

A[Ref: BD 7th /P-56]

36. Action of the posterior crico arytenoid muscle is to
a) Adduct the arytenoid cartilage
b) Abduct the vocal proces of the arytenoid cartilage
c) Relax the local ligaments
d) Assist in closure of the vestibules
e) Elevate the vocal ligament
B[Ref: BD 7th /P-270]

37. Where should inferior thyroid artery be ligated during thyroidectomy
a) Away from the gland
b) As its terminal part
c) As its distal part
d) Any where in its course
e) The branches ligated separately
A**[Ref: BD 7th /P-163]**

38. The submandibular ganglion
a) Is easily related to the mandibular nerve
b) Is situated medial to the hypoglossus muscle
c) Distributes secret motor fibres to the sublingual gland
d) Gives passage to taste fibre from the circumvallate papillae
e) Distribute fibres from the lesser petrosal nerve to the submandibular gland
C**[Ref: lumley /Q-377]**

39. Most superficial structure within parotid gland
a) External carotid artery
b) Internal carotid artery
c) Facial nerve & its terminal branch
d) Retromandibular vain
e) Common carotid artery
C**[Ref: Bishram 2nd /P-118]**

40. Peripheral heart in region of head & neck
a) Lateral pterygoid
C) Medial pterygoid
c) Temporalis
d) Messeter
e) Digastric
A**[Ref: Bishram 2nd /P-155]**

Respiratory system

41. Factors shifting O_2-Hb dissociation curve to Right-
a) ↑P^H
b) ↓ P_{50}
c) Sickle cell anaemia
d) Thalassamia
e) When affinity of Hb to O_2 increase
C [ref:genesis 22]

42. During quiet breathing-
a) Intra esophageal pressure lowest at mid inspiration
b) Intra alveolar pressure highest at end of expiration
c) Intra pleural pressure lowest at mid inspiration
d) Intrapulmonary pressure highest at end of expiration
e) Rate of air entry highest at mid inspiration
E [ref:genesis 9]

43. In case of reverse chloride shift-
a) ↓P^h of blood
b) Cl^- influx into RBC
c) CO_2 influx into RBC
d) HCO_3^- influx into RBC
e) Occurs in tissue level
D [ref: genesis 28]

44. In case of acclimatization following is decreased
a)Cerebal blood flow
b) Hb concentration
c) Red blood cell
d) Tissue vascularity
e) Circulatory blood volume
A[ref:genesis 29]

45. Pneumotaxic centre –
a) Increase duration of inspiration
b)↓ rate of respiration
c) Increase depth of respiration
d) Damage causes slower respiration
e) Stimulate apneustic centre
D [ref:genesis 33]

46. Direct stimulation of brainstem chemoreceptor is
a) O_2
b) CO_2
c) H^+
d) Ca^+
e) K^+
C
GIT

47. Gastric emptying is primarily controlled
a) During chewing
b) During swallowing
c) When chyme enters the stomach
d) When chyme enters the intestine
e) During the interodigestive period
D

48. Secretin is released by
a) Acid in duodenum
b) Acid in stomach
c) Cells in the liver
d) Distention of colon
e) Distension of stomach
A

49. Two basic types of electrical waves in smooth muscle of the gastrointestinal tract are:
a) Fast waves and spikes
b) Short and long spikes
c) Slow waves and spikes
d) Slow waves and fast waves
e) Fest waves & slow waves
C

50. In case of Early dumping which is true?
a) Occurs about 20% patient ē gastrectomy
b) It occurs due to hypovolumia
c) Occurs due to reactive hypoglycaemia
d) Aggravated by exercise
e) Major symptoms is tremor
B