GENESIS

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FGPS PART-I MOCK TEST-II

SUBJECT: Surgery

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. Positive feedback mechanism are

- a) Regulation of acid base balance
- b) Child birth
- c) Blood clotting
- d) Regulation of electrolytes balance
- e) Generation of nerve signals

2. At a high altitude where atmospheric pressure is halved, there is an increased in

- a) Pulmonary ventilation
- b) Alveolar H₂O vapor pressure
- c) Arterial PO₂
- d) Arterial pH
- e) Cerebral blood flow

3. Biologically active substance metabolized by lungs

- a) Epinephrine
- b) Prostaglandin
- c) Serotonin
- d)Histidine
- e) Acetylcholine

4. If the carotid and aortic chemoreceptor are denervated

- a) Increasing alveolar PCO₂ by 25% fails to stimulate ventilation
- b) Halving the alveolar PCO₂ by 25% fails to stimulate ventilation
- c) The resting ventilation rate is depress by more than 40%
- d) Ventilation does not increase during exercise
- e) The ability to adapt to life at high altitude is impaired

5. Cardiac output is increased by

- a) Pregnancy
- b) Epinephrine
- c) Exercise
- d) Rapid arrhythmias

6. Factor causing vasodilatation

- a) Kinins
- b) Prostacyclin
- c) Neuropeptide Y
- d) Norepinephrine
- e) Nitric oxide

7. Regarding fresh frozen plasma which one is false

- a) Rich in coagulation factor
- b) Removed from stored blood
- c) Stored at- 40 to -50°C
- d) 2 year shelf life
- e) First line therapy in the treatment of coagulopathy haemorrhage

8. In hypokalemia ECG shows

- a) Prolong PR interval
- b) ST depression
- c) Prolong QT interval
- d) Prominent U
- e) Tall and slender T

9. Agent causing relaxation of mesangial cells

- a) ANP
- b) Vasopressin
- c) PGF₂
- d)Histamin
- e) Dopamine

10. Following statements are true regarding calcium

- a) Remains in four forms in body
- b) Respiratory alkalosis is responsible for increased serum Ca²⁺ level
- c) Acidosis leads to decreased calcium level
- d) Hyperthyroidism lead to hypercalcaemia
- e) Normally 98% calcium reabsorption occurs in PCT which is PTH dependent

11. Most of the CO₂ transported in the blood is

- a) Dissolved in plasma
- b) In carbamino compound formed from plasma protein
- c) Bound to Cl-
- d) In carbamino compound formed from haemoglobin
- e) In HCO3-

12. Factors regulating transmembrane potassium influx

- a) β-blocker
- b) ∞-blocker
- c) β-agonist
- d) ∝-agonist
- e) Acidosis

13. Factors stimulating insulin secretion

- a) K⁺ depletion
- b) Phenytoin
- c) β- Adrenergic blocker
- d) β- Keto acids
- e) Acetylcholine

14. Hormones that act through cyclic AMP?

- a) ACTH
- b) TRH
- c) TSH
- d) GnRH
- e) FSH

15. Stimuli that increased growth hormone secretion

- a) Fasting
- b) Hyperglycemia
- c) Protein meal
- d) REM sleep
- e) Cortisol

16. Vasopressin

- a) Secreting neurons are found in the suprachiasmatic nuclei
- b) It is also synthesized in the gonads & adrenal cortex
- c) There are at least 15 kinds of vasopressin receptor
- d) Principal physiologic effects in the retention of water
- e) It increase the permeability of the distal convoluted tubule

17. Horner's syndrome

- a) Resulting from solely interruption of postganglionic sympathetic innervations
- b) Can result from injury to the carotid artery or a tumor in the lung
- c) In most case the problem is bilateral
- d) Symptoms occur only on the contra lateral side of the damage
- e) Hallmark is the triad of anhydrosis ptosis and enopthalmos

18. Factor stimulate gastric motility

- a) Substance K
- b) Serotonin
- c) Angiotensin
- d) Substance P
- e) Encephalin

19. Global end point of resuscitation of shock patient is determined by

- a) Pulse rate
- b) Blood pressure
- c) Serum lactate
- d) Base deficit
- e) Urine output

20. Absolute measure of dispersion

- a) Range
- b) Coefficient of variation
- c) Coefficient of mean deviation
- d) Mean deviation
- e) Variance

21. P- value

- a) It is the quantitative estimation of probability
- b) Measure of chance of a definite outcome to occur
- c) Range from 0 to 100
- d) P=1 means 1% chance of an event to occur
- e) P=O means No chance of an event to occur

22. Natural anti coagulants are

- a) Argatroban
- b) Dabigatron
- c) Protein S
- d) ∞2 macroglobulin
- e) Anti plasmin

23. Morphine-

- a) Causes mydriasis
- b) Depress cough reflex
- c) Stimulate vomiting centre
- d) Contraindicated in head truma
- e) Prolong 2nd stage of labour

24. Vomiting

- a) Causes breath is held in expiration
- b) Reverse peristalsis empties in material form upper part of stomach
- c) Contract lower oesophageal sphincter
- d) Centre is located in hypothalamus
- e) Vomiting start with salivation

25. Erythropoietin

- a) Mostly comes from liver
- b) Liver contains mRNA for it
- c) Can be extracted spleen and salivary gland
- d) Salivary gland contain mRNA for it
- e) Spleen produce the hormone

FTTFF (Ref: Ganong 25th/Page-706)

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

26. Severe diarrhoea causes a decrease in except

- a) Body potassium
- b) Body sodium
- c) Extracellular fluid volume
- d) Total peripheral resistance
- e) Blood pH

27. In surgical practice, whichone is the best option of monitoring blood loss?

- a) Measuring blood clot
- b) Blood loss in femur fracture 2L
- c) Blood loss in tibia fracture 1.5L
- d) Hb%
- e) Pulse and Blood pressure

28. Component of semen derived from seminal vesicle except

- a) Fructose
- b) Zinc
- c) Flavin
- d) Prostaglandin
- e) Ascorbic acid

29. Dehydration increases the plasma concentration of all the following hormone except

- a) Vasopressin
- b) Angiotensin II
- c) Aldosterone
- d) Norepinephrine
- e) ANP

30. In case of raised intracranial pressure. Which nerve most commonly affected?

- a) 3rd
- b) 5th
- c) 6th
- d) 7th
- e) 8th

31. The most frequently occurring number in a set of values called the

- a) Mean
- b) Median
- c) Mode
- d) None
- e) Range

32. The cross bridges of the sarcomere in skeletal muscle are made up of

- a) Actin
- b) Myosin
- c) Troponin
- d) Tropomyosin
- e) Myelin

33. Which of the following local anaesthetic agent is more cardiotoxic

- a) Lignocaine
- b) Bupivacaine
- c) Prilocaine
- d) Ropivacaine
- e) Levobupivacaine

34. A patient ē thalassimia with hyperspleenism gone through spleencetomy operation. With organism is not responsible for post –spleenectomy

- a) Streptococcus pneumonia
- b) Neisseria meningitidis
- c) Haemophilus influenzae
- d) E. coli
- e) Influenza virus

35. During prolong starvation the brain usuable fuel is

- a) Glucose
- b) Lactose
- c) Fatty acid
- d) Galactose
- e) Ketone body

36. Compared to hepatic bile gall bladder bile contains a reduced concentration of which of the following

- a) Bile acid
- b) Chloride ions
- c) Proteins
- d) Glucose
- e) Calcium ions

37. A patient underwent total gastrectomy because of a proximal gastric cancer. Which of the following digestive enzymes will be produced in inadequate amounts after the surgery in this patient?

- a) Amylase
- b) Chymotrypsin
- c) Trypsin
- d) Pepsin
- e) Prolastase

38. Which of the following has the highest total cross sectional area in the body

- a) Arteries
- b) Arterioles
- c) Capillaries
- d) Venules
- e) Vein

39. The platue phase of the action potential of ventricular muscle fibers due to

- a) Na+ influx
- b) Ca2+ efflux
- c) Ca2+ influx
- d) K⁺ efflux
- e) Na⁺ efflux

40. Endothelin -1 secretion via transcription of gene is stimulated by

- a) NO
- b) ANP
- c) PGE2
- d) Prostacyclin
- e) Insulin

41. During resuscitation of a shock patient's GUT perfusion may be detected by

- a) Serum lactate level
- b) Near infrared spectroscopy
- c) Sublingual capnometry
- d) Hand held doppler
- e) Tissue oxygen electrode

42. Which one of the apical transporter present in the collecting duct

- a) Na/glucose CT
- b) Na/Lactate CT
- c) K+ channels
- d) Na⁺ channels
- e) Na⁺/ H+ exchanger

43. Which one of the following has the highest clearance value

- a) Glucose
- b) Sodium
- c) Insulin
- d)Creatinine
- e) PAH

44. Biologically active substance that is synthesized and used in the lungs

- a) Prostaglandin
- b) Histamine
- c) Surfactant
- d) Serotonin
- e) Acetylcholine

45. An arterial blood gas sample from a 36 years old man show low Po2. If the Po2 in the blood is low, the most likely cause is:

- a) Hypoxic Hypoxia
- b) AnaemicHypoxia
- c) HistotoxicHypoxia
- d) Stagnant Hypoxia
- e) HypaemicHypoxia

46. Which of the following is not involved in regulating plasma Ca²⁺levels

- a) Kidney
- b) Skin
- c) Liver
- d) Lung
- e) Intestine

47. A 46 year old man came into emergency within 12 hours from a burning with 25% burn. During resuscitation of this patient which is the fluid of choice?

- a) 5% DA
- b) 5% DNS
- c) Normal saline
- d) Ringer lactate saline
- e) Human albumin

48. Which one is the source of minimum protein content of lymph in human

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

49. The hormone which stimulates growth initially but terminate growth ultimately

- a) Growth hormone
- b) Cortisol
- c) Insulin
- d) Thyroid hormone
- e) Androgen

50. Drugs causing malignant hyperthermia?

- a) Thiopental sodium
- b) Propofol
- c) Etomidate
- d) Ketamine
- e) Suxamethonium

Surgery Mock-II, Paper-II

1. FTTFT (Ref: Ganong 25th/Page-62)

Other positive feedback mechanism are:

- -LH surge
- -Insulin secretion in response to high blood glucose
- 2. TFFTF (Ref: Rodde/Q-152)
- 3. FTTFT (Ref: Ganong 25th/Table: 34-4/Page-637)
- 4. FTFFT (Ref: Rodde 25th/Q-158)
- 5. TTTFF (Ref: Ganong 25th/Table: 30-3/Page-544)
- 6. TTFFT (Ref: Ganong 25th/Table: 32-1/Page-586)
- 7. FTFFF (Ref: B &L 27th/Page-21)
- 8. TTTTF (Ref: Ganong 25th/Page-534)
- 9.TFFFT (Ref: Ganong 25th/Table: 37-3/Page-678)
- 10. FFFTF (Ref: Ganong 25th/Page-375)
- 11. FFFFT (Ref: Ganong 25th/Page-653)
- 12. FTTFF (Ref: ABC 6th/Page-325)
- 13. FFFTT (Ref: Ganong 25th/Table: 24-4/Page-439)
- 14. TFTFT (Ref: Vision Physiology 7th)
- 15. TFTFF (Ref: Ganong 25th/Table: 18-3/Page-328)
- 16. TTFTF (Ref: Ganong 25th/Page-313)
- 17. FTTFF (Ref: Ganong 25th/Page-263)
- 18. TTTTF (Ref: B &L 27th/Page-1110)
- 19. FFTTF [Ref: Bailey & Love 27th edt/P18]
- 20. TFFTT (Ref: ABC, Biostat 3rd/Page-171)
- 21. TTFFT (Ref: ABC, Biostat 3rd/Page-201)
- 22. FFTTT (Ref: Katzung 13thedition)
- 23. FTTTT (Ref: Lippincot/P-193)
- 24. FFFFT (Ref: Ganong 25th/Page-500-501)
- 25. FTTFF (Ref: Ganong 25th/Page-706)
- 26. D (Ref: Roddie/Q-236)
- 27. E

Explanation: Pulse & BP is reliable for ass—esment for blood coss meag-urement. But others are not much reliable than. In acute hemorrhage, Hb% mag not be decreased due to hem concentration.[im not sure about total eypla-] nation

- 28. B (Ref: Ganong 25th/Page-420/Table-23-1)
- 29. E (Ref: Ganong 25th/Page-707)
- 30. C (Ref: Bailey & Loves 26th/P-605)
- 31. C (Ref: ABC Biostat 3rd/P-165)
- 32. B [Ref: Ganong 25th edition/P-118]
- 33. B (Ref: B &L 27th/Page-273)
- 34. E (Ref: BL 27th/P-1096)
- 35. E (Ref: Abc biochemistry 6th/Page-231)
- 36. B (Ref: Ganong 25th/Page-525)
- 37. D [Ref: Ganong 26th/P-453]

Explanation

Pepsinogen is produced by the Chief cells of the stomach glands.

- 38. C (Ref: Ganong 25th/Page-583)
- 39. C [Ref: BRS Physiology 6th/P-72]
- 40. E (Ref: Ganong 25th/Page-596)
- 41. C (Ref: B & L 27th/Page-17)
- 42. D (Ref: Ganong 25th/Page-680/Table: 37-5)
- 43. E (Ref: Ganong 25th/Page-677/Table: 37-2)
- 44. C (Ref: Ganong 25th/Page-637/Table: 34-4)

- 45. A [Ref: Ganong 25th/P-648-651]
- 46. D (Ref: Ganong 25th/Page-388)
- 47. D (Ref: B & L 27th/Page-624)
- 48. A (Ref: Ganong 25th/Page-567)
- 49. E (Ref: Ganong 25th/Page-567)
- 50. E [Suxamethonium & halothane causes malignant hyperthermia. [Ref: Katzung 14Th Edition/Page-449]