Course No: DNTS 2309
Course Title: Physiology 1
Date: 12/01/2015
No. of Questions: (1)
Time: 90 minute
Using Calculator (No)

University of Palestine

Final Exam
1st Semester 2014/2015
Total Grade: 60

Instructor Name: Dr.Mahmoud Alsh. Ali
Student No.: _____
Student Name: _____
College Name: _____
Dep. / Specialist: _____
Using Dictionary (No)

Question One: Choose one most correct answer:

1. Which of the following is one of the kidney functions?
    a) Erythropoiesis
    b) Blood sugar control
    c) Lipids profile control
    d) Albumin synthesis

2. The control of blood pressure by the kidneys includes?
    a) Renin secretion
    b) Aldosterone production
    c) Calcium re-absorption
    d) ADH destruction

3. The **1,25** vitamin D produced in the ?
    a) Liver
    b) Spleen
    c) Kidneys
    d) Parathyroid glands

4. The **25** vitamin D produced in the ?
    a) Liver
    b) Spleen
    c) Kidneys
    d) Parathyroid glands

5. The kidney controls the Acid-Base balance by?
    a) HCO3 re- absorption in proximal tubules and H+ excretion in distal and collecting tubules
    b) HCO3 re- absorption in distal and collecting tubules and H+ excretion in the proximal tubules
    c) Potassium excretion
    d) By ADH action

6. Which of the following increases the glomerular filtration rate?
    a) Adrenalin
    b) Noradrenaline
    c) Endothilin
    d) Angiotensin II

7. The rise of intra-glomerular pressure leads to?
    a) Decrease in GFR
    b) No effect on GFR
    c) Increases BP
    d) None is true

8. the largest surface area for reabsorbtion in renal tubule presents in which of the following part?
    a) Collecting ducts
    b) Distal tubules
    c) Proximal tubules
    d) Loop of Henle

9. Which of the following parts of renal tubules is impermeable for water?
    a) Proximal tubules
    b) Descending part of loop of Henle
    c) Ascending part of loop of Henle
    d) Ascending part of loop of Henle and early distal tubules

10. The triple co-transporter presents in which part of renal tubules?
    a) Proximal tubules
    b) loop of Henle
    c) collecting ducts
    d) distal tubules

11. The ADH (anti-diuretic Hormone) target is?
    a) Proximal tubules
    b) loop of Henle
    c) collecting ducts
    d) distal tubules

12. The ANP (Atrial Natreuric Peptide) action leads to?
    a) Increase water re-absorption
    b) decrease water re-absorption
    c) increase in Na (sodium) excretion
    d) Decrease in Na (sodium) excretion

13. The insulin is?
    a) A polypeptide hormone
    b) A Cholesterol based hormone
    c) An Amino-acid hormone
    d) A catabolic hormone

14. Insulin is ?
    a) A catabolic hormone
    b) Anabolic Hormone
    c) Is one of the multiple hormones which reduces blood sugar
    d) Controlled by pituitary hormones

15. Which of the following sentences is true?
    a) Insulin produced by Alpha cells
    b) Somatostatin produced by Delta cells (D cells)
    c) Glucagon produced by Beta cells
    d) Pancreatic polypeptide produced by D cells

16. Which of the following hormones promotes glycogenesis (glycogen synthesis)?
    a) Glucagon
    b) Insulin
    c) Thyroxin
    d) Amylin

17. Which of the following hormones stimulates Glycogenolysis (Glycogen lyses)?
    a) Glucagon
    b) Insulin
    c) Thyroxin
    d) Amylin

18. The effect of steroid hormones in fat metabolism includes?
    a) Lipolysis in peripheral parts of the body with fat deposition in central body part
    b) Lipid synthesis overall the body
    c) Destruction of the abdominal fat
    d) No effect on fat metabolism

19. Which of the following statements is true regarding Aldosterone ?
    a) It is produced by Zone faciculata of suprarenal gland
    b) Its targets is in the loop of Henle
    c) Its stimulates potassium (K+) Re-absorption in renal tubules
    d) Angiotensin II (ATII) stimulates its (Aldosterone) secretion

20. Which of the following hormones have target mainly in the collecting tubules?
    a) Anti diuretic hormone (ADH)
    b) Parathyroid hormone (PTH)
    c) Insulin
    d) Aldosterone

21. Which of the following hormones is responsible for the entrance for glucose into the cells?
    a) Glucagon
    b) Insulin
    c) Steroids
    d) Somatostatin

22. Which one of the following hormones leads to a decrease in exocrine glands secretion ?
    a) Insulin
    b) Somatostatin
    c) Aldosterone
    d) Pancreatic polypeptide

23. Vitamin D leads to which of the following actions in the intestine? (Choose Most true answer)
    a) Increases Calcium absorption
    b) decreases Calcium absorption
    c) Increases Calcium absorption and decreases Phosphate absorption
    d) Increases Calcium and Phosphate absorption

24. Vitamin D leads to which of the following actions in the kidneys? (Choose the most correct answer)
    a) decreases Calcium re-absorption
    b) Increases Calcium and Phosphate re- absorption
    c) Increases Calcium re-absorption and decreases Phosphate re-absorption
    d) Increases Calcium re-absorption

25. The parathyroid hormone leads to which of the following actions in the kidneys?
    a) decreases Calcium re-absorption
    b) Increases Calcium and Phosphate re- absorption
    c) Increases Calcium re-absorption and Phosphate excretion
    d) Increases phosphate re-absorption

26. The mineralization of the bones is stimulated by which of the following hormones?
    a) PTH
    b) Vit D
    c) Aldosterone
    d) Insulin

27. The bone demineralization could be induced by which of the following hormones ?
    a) PTH
    b) Vit D
    c) Aldosterone
    d) Calcitonin

28. The respiratory Centre is located in ?
    a) Midbrain
    b) Medulla
    c) Occipital pole
    d) Hypothalamus

29. The ACE (angiotensin converting enzyme) which converts AT I to AT II is presents in?
    a) Lungs
    b) Kidneys
    c) Skin
    d) Liver

30. The surfactant is produced by?
    a) Pneumocytes type I
    b) Pneumocytes type II
    c) Macrophages
    d) Hepatocytes

31. The surfactant action leads to?
    a) Increases surface tension of alveoli
    b) Decreases surface tension
    c) Has no effect on ventilation
    d) Is vital for gas exchange

32. The lung blood flow is characterized by?
    a) High pressure and fast flow
    b) High pressure and slow flow
    c) High speed and low pressure
    d) Equal to 10 % of cardiac output per minute

33. The medullary inspiratory center is stimulated mainly by?
    a) CO2
    b) O2
    c) CO
    d) HCO3

34. The main stimulants of respiratory centers are ?
    a) CO2, O2, pH
    b) CO
    c) BP
    d) pH

35. The main respiratory muscle is ?
    a) Diaphragm
    b) Internal intercostals muscles
    c) External intercostals muscles
    d) Sternocleidomastoid muscle

36. The thyroid hormone is?
    a) Amino acid based
    b) Cholesterol based
    c) Polypeptide hormone
    d) None is true

37. The control of thyroid hormones is by?
    a) By negative feedback
    b) By humeral control
    c) By neuronal control
    d) Spontaneous

38. The first step in synthesis of thyroid hormones is?
    a) Coupling
    b) Thyroglobulin formation
    c) De-iodination
    d) Iodination

39. The site of the coupling stage of thyroid hormones synthesis is ?
    a) Follicular cells
    b) Blood
    c) Para- follicular cells
    d) Colloid

40. Thyroid hormones circulates in plasma bound with?
    a) Thyroid binding globulin(TBG)
    b) Thyroid binding Albumin (TBA)
    c) Thyroid binding pre-albumin (TBPA)
    d) All of the above

41. The Receptors of thyroid hormones are?
    a) Cytoplasmatic
    b) Cell membrane
    c) Nuclear
    d) All of the above

42. The zone fasciculate of adrenal gland produces?
    a) Adrenalin
    b) Androgens and corticosteroids
    c) DHEA (dehydroepiandrosteron)
    d) Aldosterone

43. The reticularis layer produces?
    a) Adrenalin
    b) Corticosteroids
    c) Androgens and DHEA (dehydroepiandrosteron)
    d) Aldosterone

44. The first step in haemostsis is?
    a) Platelets adhesion
    b) Platelets aggregation
    c) Coagulation
    d) Vasospasm

45. The coagulation is defined as ?
    a) Formation of platelets plug
    b) The activation of factor X
    c) The fibrinolysis
    d) The formation of fibrin meshwork

46. The activation of coagulation factor X is mediated by?
    a) Platelets
    b) Extrinsic pathway
    c) Intrinsic pathway
    d) B and C answers

47. The active factor X (Xa) leads to?
    a) Converts plasminogen to plasmin
    b) Converts fibrinogen to fibrin
    c) Converts pro-thrombin to thrombin
    d) Activates factor VII

48. Thrombin activates which of the following?
    a) Plasminogen
    b) Fibrinogen
    c) Factor X
    d) Both Plasminogen and Fibrinogen

49. Which substance is responsible for fibrin band destruction?
    a) Factor XIII
    b) Factor X
    c) Plasminogen
    d) Heparin

50. All blood cells originates from?
    a) Stem cells
    b) Myelocytes
    c) Prothrombocytes
    d) Kupfers cells

51. The erythropoietin is responsible for ?
    a) maturation of RBCs
    b) shifting of stem cells to RBCs
    c) Iron corporation
    d) RBCs growth inhibition

52. Types of hemostasis?
    a) Primary
    b) Secondary
    c) Tertiary
    d) Primary and secondary

53. The first platelets response to bleeding is?
    a) Aggregation
    b) Degradation
    c) Fibrinogenesis
    d) Adhesion

54. The adhesion of platelets leads to activation of which process ?
    a) Aggregation
    b) Coagulation factors
    c) Fibrin formation
    d) Factor X

55. Platelets adhesion is mediated by?
    a) Fibrin
    b) Heparin
    c) Prothrombin
    d) Von Welbrand factor

56. The platelets aggregation is stimulated by?
    a) Fibrin
    b) ADP (Adenosin diphosphate)
    c) Prothrombin
    d) Von Wellbrand factor (vWF)

57. Insulin destructed in which of the following organs?
    a) Pancreas
    b) Liver
    c) Kidney
    d) In both Liver and kidneys

58. Which of the following is a Pure endocrine organ?
    a) Pancreas
    b) Parathyroid Glands
    c) Kidney
    d) Liver

59. Pituitary gland produces?
    a) Trophic hormones
    b) Stimulating hormones
    c) ADH
    d) Somatostatin

60. Posterior pituitary gland hormones ?
    a) ADH and Vasopressin
    b) Prolactin
    c) TSH
    d) ACTH

61. The endocrine glands in the brain?
    a) Pineal gland
    b) Pituitary
    c) Hypothalamus
    d) All of the above

62. The types of hormonal receptors?
    a) Cell membrain
    b) Cytoplasmatic
    c) Nuclear
    d) All of the above

63. The types of hormonal control ?
    a) Neuronal
    b) Self Control
    c) Immune control
    d) None of the above

End of Questions
Good Luck

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Answer Sheet

Question	Answer	Question	Answer	Question	Answer	Question	Answer
1		17		33		49	
2		18		34		50	
3		19		35		51	
4		20		36		52	
5		21		37		53	
6		22		38		54	
7		23		39		55	
8		24		40		56	
9		25		41		57	
10		26		42		58	
11		27		43		59	
12		28		44		60	
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