

TANTA UNIVERSITY----- Internal Medicine Exam
FACULTY OF MEDICINE ----- MD degree of applied physiology
INTERNAL MEDICINE DEPARTMENT-----NO. OF QUESTIONS: 25 MCQ , 4 short assay
12/2/, 2017 -----TIME ALLOWED: 3 h
Five pages



All questions must be answered :(Total : 90 Marks , MCQ:50 marks,
short assay: 40 marks).

A) MCQ :

1- The chief determinant of serum osmolarity is: (2 Marks)

- a- Sodium (Na)
- b- Albumin
- c- Potassium
- d- Urea

2- Which of following contributes less to plasma osmolarity: (2 Marks)

- a. Sodium
- b. Albumin
- c. Glucose
- d. Urea

3- Which of the following is incorrectly match: (2 Marks)

- a. Na-K atpase: antiport
- b. H- atpase: uniport
- c. SGLT: symport
- d. Ca- atpase: biport

4- Which of the following exerts the greatest osmotic effect on mole- mole basis: (2 Marks)

- a. Dextran
- b. Hydroxyethyl starch
- c. Albumin
- d. Fibrinogen

5- Which G- protein activate adenylyl cyclase: (2 Marks)

- a. Gs
- b. Gq
- c. C—Gi
- d. G1

6- The resting cardiac muscle cell is most permeable to: (2 Marks)

- a. Na
- b. K
- c. Ca
- d. Cl

7- Which of the following hormones is not a glycoprotein: (2 Marks)

- a. TRH
- b. FSH
- c. LH
- d. hCG

8- A human growth hormone variant is mainly expressed in: (2 Marks)

- a. Liver
- b. Spleen
- c. Kidney
- d. Placenta

9- With sensitive radioimmunoassay, hCG can be detected in serum of how many days after conception? (2 Marks)

- a. 2 days
- b. 6 days
- c. 10 days
- d. 14 days

10- The types of contraction that normally occur only at the colon is/ are: (2 Marks)

- a. Peristalsis
- b. Anti-peristalsis
- c. Segmentation
- d. Mass action contraction

11- Which of the following is absorbed in intestine independent of sodium: (2 Marks)

- a. Glucose
- b. Amino acids
- c. Galactose
- d. Fructose

12- The most frequent small intestinal movement during digestion is: (2 Marks)

- a. Peristalsis
- b. Anti-peristalsis
- c. Slow wave
- d. Segmentation contraction

13- Which of following clot factor is not vitamin K dependent: (2 Marks)

- a. II
- b. V
- c. VII
- d. IX
- e. X

14- Red cell antigens A and B are also present in: (2 Marks)

- a. Saliva
- b. Semen
- c. Amniotic fluid
- d. Pancreas
- e. All

15- Most iron in the body is present in: (2 Marks)

- a. Hemoglobin
- b. Myoglobin
- c. Ferretin
- d. Transferrin

16- Hypocalcemia is associated with prolonged Qt interval because: (2 Marks)

- a. It is associated with bundle branch block
- b. It increases ventricular activation time
- c. It lengthens duration of ventricular repolarization
- d. It accelerates opening of potassium channels

17- Which of the following varies from cardiac beat to beat: (2 Marks)

- a. Venous return
- b. Stroke volume
- c. Cardiac output
- d. RR interval
- e. All

18- The major constituent of surfactant is: (2 Marks)

- a. Neutral lipid
- b. Dipalmitoyl phosphatidyl choline
- c. Phosphatidyl glycerol
- d. Surfactant protein a and d

19- The gold standard for estimation of glomerular filtration is the clearance of: (2 Marks)

- a. Inulin
- b. Creatinine
- c. Urea
- d. Mannitol
- e. Glucose
- f. Para-amino-hippuric acid

20- Which ion is secreted and absorbed by the nephron: (2 Marks)

- a. Na
- b. K
- c. Cl
- d. Ca

21- The most abundant androgen in male and female plasma is: (2 Marks)

- a. Androstenedione
- b. DHEA
- c. Testosterone
- d. Dihydrotestosterone

22- In humans, the hormone that is mainly secreted by adrenal medulla is: (2 Marks)

- a. Epinephrine
- b. Norepinephrine
- c. Dopamine
- d. Adrenomedullin

23- All are true for glucagon like peptide 1 except: (2 Marks)

- a- Normally secreted in type 2 DM
- b- Low in type 2 DM
- c- Rapidly degraded within 2 minutes after secretion
- d- Slow gastric emptying

24- Insulin resistance is associated with the following except of: (2 Marks)

- a- Atherosclerosis
- b- Hypertension
- c- Type 1 DM
- d- Fatty liver disease

25- Growth hormone secretion is increased by: (2 Marks)

- a- Hypoglycemia
- b- Hypyerglycemia
- c- Sedentary life
- d- Type 1 DM

B) Short assay :

- 1) Management of hyperkalemia. (10 Marks)
- 2) Management of pulmonary hypertension. (10 Marks)
- 3) Oral anticoagulants. (10 Marks)
- 4) Pathophysiology of septic shock. (10 Marks)

GOOD LUCK

يعقد الامتحان الشفوى بمستشفى الامراض الباطنة يوم الثلاثاء الموافق 2017/2/21

الساعة التاسعة صباحاً .