



# **TECHNICAL UNIVERSITY OF MOMBASA**

***Faculty of ENGINEERING & TECHNOLOGY***

DEPARTMENT OF MEDICAL SCIENCES

FACULTY OF APPLIED AND HEALTH SCIENCES

DMLS 12 S MID ENTRY

## **AML 2141 : HUMAN ANATOMY AND PHYSIOLOGY II**

END OF SEMESTER EXAMINATIONS

**SERIES:** AUGUST 2013

**TIME:** 2 HOURS

### **INSTRUCTIONS:**

1. This paper consists of Two sections, Answer all questions in A and B.
2. This paper consists of Eight printed pages

## SECTION A

1. The following are the main predisposing factors for cardiac disease except.
  - A. Smoking
  - B. Exercise
  - C. Eating lifestyle
  - D. Hypertension
  - E. All the above
2. Which of the following are included in the lower respiratory system.
  - A. Larynx, trachea, bronchi lung
  - B. Bronchioles, Alveoli, saca
  - C. Trachea, lungs, bronchioles, alveoli
  - D. Pharynx, larynx, bronchi, lungs
  - E. All the above
3. Iron is stored in the liver as.
  - A. Iron salt
  - B. Ferrous sulphate
  - C. Ferric Hydroxide
  - D. Ferritin
  - E. Tranferitin
4. Muscles are often classified in groups by principle action which they have at a particular joint: Which one is not?
  - A. Flexors
  - B. Activators
  - C. Extensors
  - D. Abductors
5. Which one of the following type of muscles is not found in the abdomen.
  - A. External oblique
  - B. Psoars
  - C. Servratus muscles
  - D. Transversus abdominis
6. Membranes are layers of tissue lining the body cavities. Which one of these lines the Lungs.
  - A. Peritonium
  - B. Pleura
  - C. Pericardium
  - D. Epithelium

7. Which of the following are names of long bones.
- A. Carpals, tarsals, fibula
  - B. Ribs, sternum, Ulna
  - C. Tibia, Humerus, fibula
  - D. Vertebrae, sesamoid bones, skull.
8. The following are organs associated with the respiratory system except.
- A. Nose
  - B. Pharynx
  - C. Tongue
  - D. Lungs
9. Tissues are groups of cells performing specific functions which one is not:
- A. Serous
  - B. Connective
  - C. Muscular
  - D. Epithelium
  - E. Nervous.
10. Ball and socket joints have rounded head or ball which articulates in a socket. Which one of these is not?
- A. Wrist joint, knee joint
  - B. Elbow joint, Hip joint.
  - C. Shoulder joint and Hip joint
  - D. Ankle joint, Elbow joint
11. The ovaries like any other gland produce hormones. Which of the following is one of these?
- A. Glucagon
  - B. Progesterone
  - C. Androgenic alopecia
  - D. Insulin
12. The major-work cells of the pancreas are
- A. Alpha – cells
  - B. Beta – cells
  - C. Ductular cells
  - D. Acinar cells
13. Gastric acid secretion is stimulated by.
- A. Angiotensinogen
  - B. Nitric oxide
  - C. Dopamine

- D. Histamine
14. Which of the following is not a function of the blood.
- A. Carry oxygen from the lungs to the tissues
  - B. Carry food from the organ of digestion to the tissues
  - C. Carry lymph from the glands to the brain.
  - D. Help defending the body against invasions
15. Eyes have different conditions and diseases which one of the following is not among them?.
- A. Myopia
  - B. Calaract
  - C. Eyebrows
  - D. Tumours
16. The walls of the eye consists of three layers of tissues. Which one is not.
- A. Scalera and cornes
  - B. Chroid
  - C. Retina
  - D. Pupil
  - E. None of the above.
17. Gastric acid is important mainly for.
- A. Ionization of ionic salts
  - B. Protetion of stomach cells
  - C. Destruction of microbes
  - D. Stimulating of gastric Emptying
  - E. None of the above.
18. The following substances must be present for blood clotting to occur except.
- A. Prothrombin
  - B. Calcium
  - C. Platelets
  - D. Fibrinogen
  - E. None of the above
19. Ductular cells of the pancrease releases one of the following. Which one.
- A. Amylase
  - B. Lymp
  - C. Aldosterone
  - D. Bombesin
  - E. All of the above.
20. The structure of blood vessels consists of several; Which one is not in the group.
- A. Endothelium
  - B. Circular muscle
  - C. Smooth muscle
  - D. None of the above

21. Endocrine system is made up of glands which secrete hormones. Identify the gland with the correct hormone produced
- A. vasopressin
  - B. oxytocin
  - C. pancreas-Glucose
  - D. None of the above
22. The nervous system has its conditions and diseases which one is not.
- A. Epilepsy
  - B. Meningitis
  - C. Cerebral haematoma
  - D. All above
23. The skeletal system is connected to the bones, circulatory system to the heart, Urinary system is connected to which organ?
- A. Genitals
  - B. Kidneys
  - C. Lymph nodes
  - D. Brain
24. Compound epithelium tissues with no basement membrane but has various layers of cells with different shape is?
- A. Keratinized stratified
  - B. Non keratinized
  - C. Ciliated epithelium
  - D. Transitional epithelium
25. The human skin has different layers. Which one is not.
- A. Granulosum
  - B. Lymph
  - C. Lucidium
  - D. Cornium
26. The skeleton is made up of long bones, irregular flat bones and sesamoid bones. Which of the following is not a function of bones.
- A. Cavity boundary formation
  - B. Storage of calcium salts
  - C. Muscle attachment
  - D. Formation of the lymph.

27. The Bile in the liver has a task of emulcification of facts as Lipase from the pancrease has does what?
- A. Converts fats to fatty acids
  - B. Acts on protein
  - C. Acts on carbohydrates
  - D. Converts starch to maltose.
28. The liver performs different functions : Which one is not a liver function?
- A. Deamination of fats
  - B. Changes glucose to glycogen
  - C. Helps in absorption and mixing of food
  - D. Production of heat.
29. The excretory system comprises several components. Which one is not?
- A. Kidneys
  - B. Cortex
  - C. Ureters
  - D. Urinary bladder
30. Which one is not part of the Kidney structure?
- A. Capsule
  - B. Medulla
  - C. Pevis
  - D. Urethra
31. The pineal gland is located in which part of the human body.
- A. Neck
  - B. Brain
  - C. Liver
  - D. Kidney
32. The Islets of Langerhans produces Insulin which is used by body to control
- A. Diabetes
  - B. Blood sugar
  - C. Ulcers
  - D. Renal failure

33. The skull is a very important part of the human body. Which one is not its functions?
- A. Gives shape to the head
  - B. Protect the brain
  - C. Contain sinuses
  - D. Helps in movements
34. There are five sensory organs which the brain uses to communicate with outside information which one is not a sensory organ?
- A. Eyes
  - B. Skin
  - C. Heart
  - D. Tongue
35. Which one of these is a condition or disease of the unproductive system.
- A. Sterility
  - B. Cysts
  - C. Fibrosis
  - D. Amenorrheas
  - E. All the above
36. Which of the following is the product of the liver?
- A. Albumin
  - B. Prothrombin
  - C. Lipoproteins
  - D. Calcitonin
  - E. Hemosderin
37. The layers of the heart wall is made up to of the following except.
- A. Epicardium
  - B. pericandium
  - C. Endocardium
  - D. Myocardium
  - E. Myometrium
38. Blood supply to the ovaryis mainly through .
- A. Pudental artery
  - B. Ovarian artery
  - C. Cephalic artery
  - D. Cystic artery
  - E. All the above

39. Blood supply to the gall bladder is via

- A. Subclavian artery
- B. Cephalic artery
- C. Circumflex artery
- D. Cystic artery
- E. All the above.

40. Control of blood pressure is influenced by high levels of circulating hormone such as .

- A. Prolactin
- B. Aldosterone
- C. Renin
- D. Insulin
- E. All the above

**SECTION B ANSWER ALL QUESTIONS.**

- 1.a) Enumerate the functions of the cell the head (10marks)
- b) How is urine Acidified? (5marks)
- c) List all the Endocrine associated glands found in. (5marks)
- 2a) Homeostasis has a very important function in the human body. Define Homeostasis and with an aid of a sketch describe the flow of function. (20marks)
3. The spleen is an important organ in the body. Discuss the spleen and enumerate its function (20marks)