



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN MEDICAL LABORATORY SCIENCES

AMD 2111 : HUMAN ANATOMY AND PHYSIOLOGY II

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: AUGUST 2017

TIME: 3 HOURS

DATE: Pick Date Sep 2017

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **TWO** Section(s). Attempt ALL questions.

Circle the correct answer in section A.

1. Which of the following is NOT a mode of communication by the cells

A. Connective tissue

B. Hormones

C. Paracrine

D. Adrenal medulla

2. Which of the following hormones is produced in the posterior pituitary glands?

A. Erythropoietin

B. Follicle stimulating hormone

C. Adrenocorticotrophin

D. Vasopressin

3. The.....volume is the amount of air remaining in the lungs after maximum expiration.

A. Residual volume

B. Expiratory reserve

C. Tidal volume

D. Vital capacity

4. Kidney function is accomplished by which of these means?

A. Filtration

B. Secretion

C. Reabsorption

D. All of the above

5. Which of the following is NOT a sign of kidney failure?

A. Blood in urine

B. Proteins in urine especially albumin

C. Low glomerular filtration rate

D. Persistent oedema

6. Which of the following hormone is responsible for calcium control?

A. Calcitonin

B. Calciferol

C. Thyroid

D. Aldosterone

7. What is the role of calcium in heart conduction?

A. It allows the prolongation of the myocardial contraction generating a stronger contraction

- B.It allows the heart muscle to relax
- C.It generates extra forceduring contraction
- D.All the above

8.Another term for swallowing food is

- A.Digestion
- B.Ingestion
- C.Deglutition
- D.Peristalsi

9.The renal system is the principal system for

- A.Removal of CO₂
- B.Water and electrolyte balance
- C.Excretion of toxic nitrogenous compounds
- D.Both B and C

10.Gastric juice is secreted in the following phases EXCEPTphase

- A.Cephalic
- B.Gastric
- C.Intestinal
- D.All are correct

11.In the average adult female,ovulation occurs at day.....of the menstrual cycle.

- A.1
- B.14
- C.28
- D.21

12.Theis the major secretory products of the mature follicle

A.Oestrogen

B.Relaxin

C.Progesterone

D.FSH

13. Which of the following organs is NOT associated with the right kidney superiorly?

A.The thyroid gland

B.Adrenal gland

C.The liver

D.None of the above

14 Which of the following is an artery supplying blood to the liver?

A.Splenic artery

B.Arcuate artery

C.Cystic artery

D.Mysentry artery

15. During.....the diaphragm, thoracic muscles and lungs recoil.

A. Quiet expiration

B. Inspiration

C. Forced inspiration

D. Forced expiration

16. Which of the following is NOT a function of the liver?

A. Thermal regulation

B. Carbohydrate metabolism

C. Heat production

D. Storage of Vitamins (e.g. iron)

17. Which of the following ducts develops into male reproductive organ during sexual differentiation?

A. Mullerian duct

B. Wolfian duct

C. Sex differentiation region

D. All the above

18. Which of the following layers covers the lungs internally?

A. Pleural cavity

B. Parietal

C. Visceral

D. None of the above

19. Which of the following is NOT a component of the cardiac conducting system?

A. Purkinje fibres

B. Atrioventricular node

C. Sinoatrial node

D. Nodal rhythm

20. Which of the following organs is associated with the heart inferiorly?

A. Central tendon of the diaphragm

B. Sternum

C. Lungs

D. The right lobe of the liver

21. Which of the following hormone is released by the posterior pituitary gland?

A. Melatonin

B. Calcitonin

C.Prolactin

D.Oxytocin

22. Which of the following substances increases the chrotrophic effect of the heart/

A.Calcium

B.Potassium

C.Sodium

D.All the above

23. Which of the following salt is regulated by release of aldosterone?

A.Potassium

B.Calcium

C.Sodium

D.Chloride ions

24. Which of the following is NOT a respiratory muscle?

A.Trigone muscle

B.Intercostal muscle

C.Diaphragm muscle

D.Oblique muscle

25. Which of the following organ system is associated with production of hormonal substances?

A.Digestive

B.Respiratory

C.Nervous system

D.All the Above

26. Which of the following cells is responsible for HCL production in the body?

A.Parietal

B.kuffer cell

C.Justaglumerular apparatus

D.All the above

27. Which of the following hormonal substance is important for gastric emptying?

A.G.I.P

B.Pepsin

c.Vasopressin

D.Insulin

28. Which of the following hormones is produced by all tissues in the body except blood tissue?

A.Progesterone

B.Prostaglandins

c.Oxytocin

D.All the above

29. How is the pancreas placed to the stomach?

A.Anteriorly

B.Posteriorly

C.Superiorly

D.Inferiorly

30. Which of the following is NOT a pancreatic juice constituent?

A.Water

B.Mineral salts

C.Enzymes

D.Hydrochloric acid

31. Which of the following is NOT a function of the nose?

A.Warming

B.Filtering

C.Humidification

D.Taste

32. Which of the following is NOT a diabetes mellitus effect?

A.Diarrhoea

B.Hyperglycaemia

C.Glycosuria

D.Polyuria

33. Which of the following is a major work horse cell of the pancreas

A.Ductular cells

B.Alpha cells

C.Acinar cells

D.Beta cells

34. Intercalated disc is a feature in which of the following organ system?

A.Cardio vascular

B.Respiratory

C.Muscular

D.Digestive

35. Which of the following is NOT a blood supplier to the myocardium

A.Circumflex

B.Marginal artery

C.Left Atrioventricular artery

D.Jugular

36. Which of the following is NOT a component of the cardiac conducting system?

- A. Purkinje fibres
- B. Atrioventricular node
- C. Sinoatrial node
- D. Nodal rhythm

37. Which gland produces substances that control immunity?

- A. Pineal
- B. Thymus
- C. Thyroid
- D. Adrenal medulla

38. Which of the following is a disease associated with dysfunctional valves?

- A. Valvular stenosis
- B. Left ventricular failure
- C. Myocardial infarction
- D. Blue eye syndrome

39. Which of the following is NOT a cranium bone?

- A. Occipital
- B. Maxilla
- C. Frontal
- D. Parietal

40. The following conditions cause delay in healing of fractures EXCEPT?

- A. Deficient blood supply
- B. Continued mobility of bone ends
- C. Poor alignment of bone ends

D.Irregular mobility of bone ends.

SECTION B

1a.Give a well labelled diagram of a tooth (10 mks)

b.Explain functions of saliva (10mks)

2a.Describe homeostasis (10mks)

b.Explain any five factors that delay healing of fractures (10 mks)

3.With proper illustration explain the menstrual cycle. (20 mks)