

AMREF INTERNATIONAL UNIVERSITY

SCHOOL OF MEDICAL SCIENCES

DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES

BACHELOR OF SCIENCE IN NURSING

SUPPLEMENTARY EXAMINATION

UNIT CODE: BSN 122 / BSM 121

UNIT NAME: HUMAN ANATOMY II

DATE:

TIME: 2 HOURS

INSTRUCTIONS

1. This Examination comprises **THREE** Sections. Section I: Multiple Choice Questions, Section II: Short Answer Questions and Section III: Long Answer Questions
2. Answer **ALL** Questions

SECTION A: MULTIPLE CHOICE QUESTIONS:

20 MARKS

1. A patient with a trigeminal lesion would have the greatest difficulty with: -
 - A. Chewing
 - B. Swallowing
 - C. Receptive relaxation of the upper esophageal sphincter
 - D. Secondary peristalsis in the esophagus
2. The liver cell that line intrahepatic bile ductules is: -
 - A. Hepatocytes
 - B. Endothelial cells
 - C. Cholangiocytes
 - D. Kupffer cells
3. The correct path of flow of bile is: -
 - A. Cystic duct – hepatic duct – common hepatic duct – common bile duct
 - B. Hepatic duct – common hepatic duct – cystic duct – gall bladder
 - C. Common hepatic duct – hepatic duct – common bile duct – cystic duct
 - D. Hepatic duct – common bile duct – gall bladder – cystic duct
4. The unique features of the small gut over the colon include: -
 - A. Haustrations
 - B. Circular folds
 - C. Taenia
 - D. Mesentery

5. The cells of the pancreas that produce the digestive enzymes are the: -
 - A. Beta cells
 - B. Centro-acinar cells
 - C. Alpha cells
 - D. Acinar cells

6. Urine is transported to the bladder by: -
 - A. Peristaltic contraction of the ureters
 - B. Voluntary control
 - C. Pumping action of the heart
 - D. Active transport system

7. Secretion of renin by the juxtaglomerular cells of the kidney is stimulated by: -
 - A. Increased parasympathetic activity
 - B. A drop in the blood pressure
 - C. High sodium levels in the distal convoluted tubule
 - D. Inactivity of the macula densa cells

8. The urachal fistula represents the remnant of the: -
 - A. Urogenital sinus
 - B. Cloaca
 - C. Mesonephric duct
 - D. Allantois

9. Anterior relations of the right kidney include: -
 - A. Left liver lobe
 - B. Colic flexure
 - C. Head of pancreas
 - D. Duodenum

10. The vagina receives lubrication from: -
 - A. Body of uterus
 - B. Mucus glands associated with its epithelium
 - C. Glands of the labia majora
 - D. Transudate from its lamina propria

11. The squamo-columnar junction is present in the: -
 - A. Cervix
 - B. Fallopian tube
 - C. Vaginal canal
 - D. Ovary

12. Each major calyx receives urine from the: -
 - A. Major calyx
 - B. Renal pelvis
 - C. Renal papillae
 - D. Renal column

13. Androgenic hormones from the testis are produced by the: -
- A. Seminiferous tubules
 - B. Interstitial cells
 - C. Sertoli cells
 - D. Rete testis
14. The vas deferens receives duct from the seminal vesicles and opens into urethra as: -
- A. Ureter
 - B. Efferent ductule
 - C. Epididymis
 - D. Ejaculatory duct
15. The fallopian tube: -
- A. Has an infundibulum that passes into the uterine wall
 - B. Lacks a lamina propria
 - C. Is lined by simple squamous epithelium
 - D. Has a short narrow thick-walled isthmus
16. The following structure opens on the upper part of the vestibule: -
- A. Vaginal orifice
 - B. Urethral orifice
 - C. Bartholin's glands
 - D. Greater vestibular glands
17. A number of hormonal secretions begin to increase during puberty. The hormone that appears to initiate the process of puberty is: -
- A. Testosterone
 - B. Gonadotropin-releasing hormone
 - C. Luteinizing hormone
 - D. Follicle stimulating hormone
18. A pheochromocytoma is an adrenaline secreting tumor. This tumor arises from _____ of the adrenal gland.
- A. Zona fasciculata
 - B. Zona reticularis
 - C. Zona glomerulosa
 - D. Chromaffin cells
19. Oxyntic cells secrete: -
- A. Trypsinogen
 - B. Hydrochloric acid
 - C. Zymogen granules
 - D. Pepsinogen
20. Hypothalamic releasing and release-inhibiting hormones are transported from the hypothalamus to the pituitary gland by way of the: -
- A. The hypothalamo-hypophyseal tract
 - B. The general bloodstream

- C. Diffusion through the interstitial fluid
- D. Hypothalamo-hypophyseal portal system

SECTION B: SHORT ANSWER QUESTIONS:

40 MARKS

1. Describe the location and functions of three Juxtaglomerular Complex (JGC) cells. (5 marks)
2. Describe the structure and functions of the ovary. (5 marks)
3. Briefly describe development of the urinary system . (5 marks)
4. Explain three factors that determine the anatomical sex of the fetus. (5 marks)
5. Name the parts of the pituitary gland and indicate the hormones secreted by each. (5 marks)
6. Describe the structural organization of the fallopian tube wall. (5 marks)
7. Describe the structural organization of the wall of colon. (5 marks)
8. Use a labelled diagram to illustrate the components of the biliary tree. (5 marks)

SECTION C: LONG ANSWER QUESTIONS:

40 MARKS

1. The female reproductive system has the following functions: production of gametes, hormones and providing a safe environment for the developing fetus.
 - a) Describe the structural organization of the walls of the uterus. (8 marks)
 - b) Describe six (6) different varieties of the Mullerian duct malformations (12 marks)
2. The endocrine system has diverse functions that enable growth and metabolism optimally.
 - a) Describe six (6) hormones produced by the hypothalamus and state a function of each. (12 marks)
 - b) Discuss any four (4) clinical problems that occur due to excessive or too little production of hormones. (8 marks)

END