

SEMESTER II, 2022/2023 EXAMINATIONS

Programme: DIPLOMA IN CLINICAL MEDICINE AND COMMUNITY HEALTH

Course Code: DCM 1201

Course Name: SYSTEMIC ANATOMY AND PHYSIOLOGY

Time: 2:00 – 5:00 PM

Date: Monday 5th June, 2023

Instructions to Candidates:

1. Read Instructions carefully.

- 2. Mobile phones even when switched off are prohibited in the examination room.
- 3. Write your Index number ONLY on all pages of your answer booklet(s).
- 4. Do not write on the question paper and Examination card.
- 5. Write all your answers in the answer booklet provided.
- 6. Do not take any paper outside the examination room.
- 7. All rough work should be done in the answer booklet and then crossed out. Pages must not be removed from the answer booklet.
- 8. Use a blue/black pen for writing and a pencil for drawing where necessary.
- 9. Candidates must not take into the examination hall or have in their possession any unauthorized apparatus, books, notes or paper of whatever nature or size.
- 10. The Paper is divided into three sections: A Multiple-Choice questions, B Short Answer Questions and C Essay questions. Attempt all questions

| SECTION A: MULTIPLE-CHOICE QUESTIONS (20 MARKS) Select and write in your answer booklet the letter representing the correct answer | | | | | | | |
|--|---|---------|----|--------------------|-------------------|--|--|
| 1. The connective tissue that covers each bundle of nerve fibres within a nerve is called: | | | | | | | |
| 1 | A. Endoneurium | C. | N | Ayelin sheath | | | |
| | B. Epineurium | | | Perineurium | | | |
| 2. A lumbar puncture is used to access the cerebral spinal fluid that is found in the: | | | | | | | |
| | A. Central canal | C. | S | Subarachnoid space | ce | | |
| | B. Epidural space | D. | S | Subdural space | | | |
| 3. | The sequence of movement of bile after its release the hepatic duct then: A. Common bile duct B. Cystic duct, gall bladder, common bile duct C. Cystic duct, gall bladder, cystic duct, comm D. Common bile duct, gall bladder, common bile | on duct | t | | odenum is through | | |
| 1 | Which of the following cells are characterized by microvilli? | | | | | | |
| 4. | | C. | 9 | Secretory | | | |
| | A. Absorptive B. Endocrine | | | Neurotransmitter | | | |
| 5. | The commonest site for ectopic implantation is the: | | | | | | |
| | A. Cervix | C. | | Uterine tubes | | | |
| | B. Recto uterine pouch | D | • | Uterus | | | |
| 6. | Which of the following statements concerning: A. It ends at about age 55 years B. Spermatids are haploid cells with haploid D. C. Spermatogonia are present prior to puberty D. Spermatozoa are present after puberty | NA | to | genesis is false? | | | |
| 7 | Sound is perceived by the: | | | | | | |
| ,, | A. Auditory canal | | | Inner ear | | | |
| | B. Cochlear hair cells | D |). | Temporal lobe o | f the cerebrum | | |
| | | | | | | | |
| 8. | The following are optical components of the ey | ye, exc | ep | ot the: | | | |
| 0. | A. Cornea | C | ٠. | Lens | | | |
| | B. Humour of the eye | I |). | Retina | | | |
| 9. | Taste is mediated by the following cranial nerves, except: | | | | | | |
| 9. | A. Facial | (| Ξ. | Trigeminal | | | |
| | B. Glossopharyngeal | Ι | Э. | Vagus | | | |
| 1Λ | . Which of the following hormones lowers the b | | | | | | |
| 10 | A. Calcitonin | (| C. | Thyroxine | | | |
| | B. Parathyroid | | D. | Tri-iodothyroni | ne | | |
| | D. raidily. | | | | | | |

| 11. The limbic system is involved in the following, exA. Gastrointestinal movementB. Pupillary dilatation | C. | Sexual behaviours Voluntary motor control | | | |
|---|-------|---|--|--|--|
| | | | | | |
| 12. The space between the labia minora is the: A. Hymen | C. | Symphysis pubis | | | |
| B. Perineum | | Vestibule | | | |
| . Which surface of the uterus is not covered with peritoneum? | | | | | |
| A. Anterior fundus | C. | Posterior body | | | |
| B. Lateral body | D. | Superior fundus | | | |
| 14. During the first half of the ovarian cycle, ovulation is triggered by a surge of: | | | | | |
| A. Follicle stimulating hormone | C. | Oestrogen and progesterone | | | |
| B. Luteinizing Hormone | D. | Progesterone | | | |
| 15. The middle layer of the eye ball is called: | | | | | |
| A. Cornea | C. | Sclera | | | |
| B. Retina | D. | Uveal tract | | | |
| 16. The ability to judge the speed and distance of an approaching vehicle is impaired in: | | | | | |
| A. Binocular vision | C. | Glaucoma | | | |
| B. Dark adoption | D. | Monocular vision | | | |
| 17. The following is not part of the inner ear: | | | | | |
| A. The vestibule | | The cochlea | | | |
| B. Semicircular canal | D. | Pharyngotymphanic tube | | | |
| 18. The most abundant glucocorticoid secreted by the zonal fasciculate is: | | | | | |
| A. Corticosterone | | Cortisone | | | |
| B. Cortisol | D. | Hydrocortisone | | | |
| 19. After drinking a large volume of fluid, the blood | level | of ADH will: | | | |
| A. Decrease | | | | | |
| B. Remain unchanged | | | | | |
| C. Increase and then decrease shortly after | | | | | |
| D. Decrease and then increase shortly afterwards | S 😅 | | | | |
| 20. Hair cells for balance are located in the | | | | | |
| A. Basilar membrane | | Spiral organ | | | |
| B. Semicircular canals | D. | Utricle | | | |

SECTION B: SHORT ANSWER QUESTIONS (20 MARKS)

| 21. Name four (4) parts of the Limbic system. | (2 marks) |
|--|------------|
| 22. Outline five (5) functions of testosterone | (5 marks) |
| 23. State the structural classification of neurons | (3 marks) |
| 24. State five (5) differences between the nervous and endocrine system | (5 marks) |
| 25. List five (5) trophic hormones secreted by the adenohypophysis | (5 marks) |
| SECTION C: ESSAY QUESTIONS (60 MARKS) | |
| 26. (a) With the aid of a well labelled diagram, describe the structure of a gas | |
| (b) Stating one (1) function for each, name four (4) components of gastric (c) Explain two (2) protective mechanism of the stomach from its highly a | |
| 27. a) Define each of the following terms: | |
| i. Oogenesis | (2 marks) |
| ii. Ovulation | (2 marks) |
| b) State six (6) differences between spermatogenesis and oogenesis. | (12 marks) |
| c) Explain how the scrotum regulates the temperature of the testes. | (4 marks) |
| 28. a) Define accommodation of the eye.b) With the aid of a well labelled diagram, describe each of the following: | (1 mark) |
| 1. Mechanism of accommodation | (9 marks) |
| ii. Visual pathway | (10 marks) |
| END | |