BOWEN UNIVERSITY, IWO
COLLEGE OF HEALTH SCIENCES
ANATOMY PROGRAMME
RESIT COMPREHENSIVE EXAMINATION 2019/2020 SESSION
PAPER II (ESSAY)

TIME ALLOWED: 3 HOURS ANSWER ALL QUESTIONS

1. a. Briefly describe THORACIC DUCT in relation to its:
   i. Origin **(2 Marks)**
   ii. Course **(3 Marks)**
   iii. Tributaries **(2 Marks)** and
   iv. Applied anatomy **(3 Marks)**
   b. i. Write on the boundaries and mention five (5) contents of the superior mediastinum **(7 Marks)**
   ii. List the borders of the heart **(3 Marks)**
2. a. State three reasons for prenatal cytogenetical analysis **(3 Marks)**
   b. What are the indications for invitro fertilization **(3 Marks)**
   c. What are the characteristics of a multifactorial disease **(4 Marks)**
3. a. List the structures that assist to reduce friction at elbow joint. **(2 Marks)**
   b i. The nerve prone to trauma at the medial epicondyle of the humerus is called? **(1 Mark)**
   ii. Trauma to nerve in bi above result in_____ and _____ **(2 Marks)**
   c. Highlight the anatomy of the radial fossa? **(5 Marks)**
   d. Highlight the anatomical basis of Klumpke paralysis? **(4 Marks)**
   e. What are the borders and contents of the cubital fossa. State 2 clinical importance of the fossa? **(6 Marks)**
4. a. Classify surface epithelia tissues giving example **(5 Marks)**
   b. Classify the types of tissue that covers articular surfaces of Synovial joints. Give five places each class is located **(5 Marks)**
5. a. What muscles are responsible for medial rotation of the thigh **(3 Marks)**
   b. Mention the nerve supply to them **(1 Mark)**
   c. Name the clinical condition that may result when the nerve is injured **(1 Marks)**
   d. Describe the subsartorial/adductor canal and list its contents **(5 Marks)**
6. a. What is the name given to the general epithelium of the respiratory tract? **(1 Mark)**
   b. List the cells present in the respiratory epithelium **(4 Marks)**
   c. Mention the functions of clara cells **(2 Marks)**
   d. Where are Clara cells located in the respiratory tract **(1 Mark)**
   e. Mention the cells present in the olfactory epithelium **(2 Marks)**
7. a. Briefly describe the formation of the atrioventricular valves **(2 Marks)**
   b. List the defects in the tetralogy of Fallot **(4 Marks)**
   c. Write brief notes on Formation of the primitive gut **(4 Marks)**
8. List and briefly explain the processes involved in the first week of embryonic development **(10 Marks)**

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FACULTY OF BASIC MEDICAL SCIENCES
DEPARTMENT OF ANATOMY
COMPREHENSIVE EXAMINATION (RESIT) 2020/2021SESSION 13/12/2021
INSTRUCTIONS: ANSWER ALL QUESTIONS. PAPER II (ESSAY) TIME: 3 HOURS
ANSWER EACH QUESTION IN A SEPARATE SHEATH OF PAPER

1. a) In a tabular form with criterion, state detailed differences between the Right and Left bronchi (5 marks)
   b) State the anatomical features of the Sternal Angle (5 marks)

2. Explain how an infection in the hand can move to the heart (10 marks)

3. Classify neurons based on morphology, state their locations (10 marks)

4. a) Mention the histological function of the fibrous skeleton of the heart (5 Marks)
   b) List the main component of the specialised myocardial cells (5 Marks)

5. Discuss barriers which the sperm have to penetrate before fusing with the ovum (10 marks)

6. Adding well-labeled diagrams, explain the embryological establishment of fingerprints (10marks)

7. Describe briefly the:
   i. Femoral canal, adding a note on its clinical significance (5marks)
   ii. List the factors that maintain the integrity of the foot arches (5 marks)

8. Classify chromosomes based on the location of the kinetochore **using diagrams only** (10 marks)

BOWEN UNIVERSITY, IWO
COLLEGE OF HEALTH SCIENCES
DEPARTMENT OF ANATOMY
2019/2020 ACADEMIC SESSION
COMPREHENSIVE EXAMINATION
PAPER II (ESSAY)

TIME ALLOWED: 3 HOURS **ANSWER ALL QUESTIONS**

1a. Describe briefly the formation of the cardiac loop; add a note on its abnormalities (4 marks)
b. List the hormones that influence the production of surfactant by Type II cells (3 marks)
c. Mention 3 developmental abnormalities with mechanical factors as teratogens (3 marks)

2. a. Highlight important lymph nodes of the lower limb (5 marks)
b. Mention any three ligaments of the knee joint and their importance (3 marks)
c. Describe locking and unlocking of the knee (2 marks)

3. a. List the processes involved in In vitro fertilization (5 marks)
b. Discuss the stages involved in fertilization (5 marks)

4a. What are the structures that assist to reduce friction at glenohumeral joint are called? List them (2 marks)
bi. Name the nerve prone to trauma at the surgical neck of humerus (1 mark)
bii. Trauma to nerve in bi above result in _____ and _____ (2 marks)
biii. List 4 factors that contribute to the stability of the glenohumeral joint? (4 marks)
c. Highlight the anatomical basis of carpal tunnel syndrome? (7 marks)
d. Claw hand presentation can be caused by? (2 marks)
e. Wrist drop presentation can be caused by? (2 marks)

5a. Classify connective tissue giving examples (5 marks)
b. Draw and label a diagram showing histological features of the connective tissue that plays a vital role in calcium metabolism (5 marks)

6. ai. Mention the functions of the fibrous skeleton of the heart (2 marks)
aii. List the main components of the specialized myocardial cells (1.5 marks)
b. Arrange the epithelial cells of the epidermis into 2 zones of 5 strata (2.5 marks)
c. List the histological layers of the wall gastrointestinal tract (2 marks)
d. List the structures of the Juxtaglomerular apparatus (2 marks)

7. a. Itemize 4 possible aspirations from the pleural cavity (4 marks)
b. State 6 structural importance of the Angle of Louis (6 marks)
c. List the contents of the superior mediastinum (10 marks)

8.a. State three reasons for prenatal cytogenetical analysis (3 marks)
b. List the structural chromosomal aberrations (2 marks)
c. What are the indications for In Vitro Fertilization (5 marks)

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FACULTY OF BASIC MEDICAL SCIENCES

DEPARTMENT OF ANATOMY

COMPREHENSIVE EXAMINATION 2021/2022SESSION 01/08/2022

INSTRUCTIONS: ANSWER ALL QUESTIONS. PAPER II (ESSAY) TIME: 3 HOURS

ANSWER EACH QUESTION IN A SEPARATE SHEATH OF PAPER

1. Write short note on; (i). Klumpke's paralysis (ii). Wrist drop (iii). Erb's palsy (iv). Nerve damage following fracture of the mid shaft of the humerus [10 MKS]
2. In tabular form enumerate factors responsible for instability and stability of the glenohumeral joint [10 MKS]
3. Kiki, a 21-year-old lady was screened out of the Women's Africa Cup of Nations because her buccal smear was chromatin negative.
   (a) Why was she screened out?
   (b) What could be her karyotype?
   (c) She was diagnosed of a chromosomal aberration, what is it likely to be?
   (d) Sketch non-disjunction in second meiotic division in KIKI. [10 MKS]
4. Describe the gross anatomy of the thoracic diaphragm, add a note on its clinical significance [10 MKS]
5. Write a short note on the lumbosacral plexus under the following heading:
   a. Rami
   b. Divisions
   c. Branches
   d. One lesion to any branch [10 MKS]
6. With a well labeled schematic diagram of a human cell, highlight **TEN (10)** cellular inclusions with respective functions [10 MKS]
7. List the epithelial and non-epithelial cells of the epidermis of the skin [10 MKS]
8. Discuss the changes in the endometrium during the menstrual cycle [10 MKS]
9. "Epidermal ridges are embryologically the basic foundations for fingerprint impressions", discuss [10 MKS]
10. A 24hours old neonate was born in a hilly village in Adamawa state at 35weeks gestational age. She was admitted in neonatal intensive care unit, and was found to have difficulty in breathing with bluish coloration of the palate and lips. She was diagnosed to have a congenital heart defect. The doctor gave oral indomethacin and she became better after few weeks
    a) What congenital abnormality is this? [2mks]
    b) Highlight its embryologic basis [3mks]
    c) State the etiological factors in this case [2mks]
    d) Why was indomethacin given? [3mks]

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FACULTY OF BASIC MEDICAL SCIENCES

DEPARTMENT OF ANATOMY

COMPREHENSIVE EXAMINATION (RESIT) 2020/2021SESSION 13/12/2021

INSTRUCTIONS: ANSWER ALL QUESTIONS. PAPER II (ESSAY) TIME: 3 HOURS

ANSWER EACH QUESTION IN A SEPARATE SHEATH OF PAPER

1. a) In a tabular form with criterion, state detailed differences between the Right and Left bronchi (5 marks)
   b) State the anatomical features of the Sternal Angle (5 marks)

2. Explain how an infection in the hand can move to the heart (10 marks)

3. Classify neurons based on morphology, state their locations (10 marks)

4. a) Mention the histological function of the fibrous skeleton of the heart (5 Marks)
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6. Adding well-labeled diagrams, explain the embryological establishment of fingerprints (10marks)

7. Describe briefly the:
   i. Femoral canal, adding a note on its clinical significance (5marks)
   ii. List the factors that maintain the integrity of the foot arches (5 marks)

8. Classify chromosomes based on the location of the kinetochore **using diagrams only** (10 marks)

BOWEN UNIVERSITY, IWO
COLLEGE OF HEALTH SCIENCES (COHES)
DEPARTMENT OF ANATOMY
COMPREHENSIVE EXAMINATION 2020/2021 (ESSAY)

DATE: 27TH SEPTEMBER, 2021 DURATION: 3 HRS

Instructions: a) Attempt ALL Questions
b) Answer EACH SECTION in different booklets

SECTION A

1. Describe the classification of Epithelia tissue of the human body with examples **(10Marks)**
2. a) Mention the histological function of the fibrous skeleton of the heart. **(5Marks)**
   b) List the main component of the specialized myocardial cells. **(5Marks)**

SECTION B

3. Classify the chromosome types you know and write briefly on threshold liability **(10marks)**
4. a) In a tabular form with criterion, state detailed differences between the Right and Left bronchi **(10marks)**
   b) Give detailed relationship of the oesophagus in the thorax **(10marks)**

SECTION C

5. Describe using only annotated diagrams the process of cleavage and blastocyst formation **(10marks)**

SECTION D

6. Adding well-labeled diagrams, explain the embryological establishment of fingerprints **(10marks)**

SECTION E

7. a. i) Briefly describe Femoral canal, adding a note on its clinical significance **(6marks)**
      ii) List the factors that maintain the integrity of the foot arches **(2marks)**
      iii) Mention any four structures that pass through the cribriform fascia **(2marks)**
   b. List the arteries that make up the three collateral circulations in the lower limb **(10marks)**

SECTION F

8. Describe the blood supply of the upper limb **(20marks)**