



Reg. No. : .....

Name : .....

**First Year B.D.S. Degree Examination, April 2009**  
**Paper – I : HUMAN ANATOMY**

Time : 3 Hours

Max. Marks : 100

- Instructions :** 1) Answer Part A and Part B in *separate* answer books.  
2) Illustrate your answer with *suitable* diagrams.  
3) **MCQ** answer sheets to be attached along with appropriate Parts.  
4) Both **MCQ** sheets to be returned at the end of first 30 minutes.

PART – A

**(General Anatomy, General Embryology, Osteology and Genetics)**

- I. Name the paranasal air sinuses specifying their openings. Describe the maxillary air sinus in detail. (4+6=10)
- II. Name the types of cartilages. Describe hyaline cartilage giving the sites of occurrence. (3+5+2=10)
- III. Describe the process of spermatogenesis. Draw a labelled diagram of sperm. 5
- IV. Briefly describe the hyoid bone. 5
- V. Define karyo typing. Add a note on the procedure used and significance. 5
- VI. Multiple choice questions : 15

Encircle the letter against the best response and attach the sheet to Part A answer book. Each question carries 1 mark.

- 1) Infratemporal fossa communicates with pterygopalatine fossa through :
- |                             |                              |
|-----------------------------|------------------------------|
| A) Inferior orbital fissure | B) Superior orbital Fissure  |
| C) Sphenopalatine foramen   | D) Pterygo maxillary fissure |
- 2) Epithelium lining the large vein is
- |                    |                        |
|--------------------|------------------------|
| A) Simple cuboidal | B) Simple columnar     |
| C) Simple squamous | D) Stratified squamous |
- 3) The clinical condition having 45, XO pattern of chromosomes is
- |                     |                          |
|---------------------|--------------------------|
| A) Turners syndrome | B) Klienfelters syndrome |
| C) Edward syndrome  | D) Down's syndrome       |



- 4) Embryo enters the uterine cavity at stage of  
A) Morula                      B) Gastrula                      C) Neurula                      D) Blastocyst
- 5) Average motility of sperm is \_\_\_\_\_ MM/Mt  
A) 0–1                      B) 2–3                      C) 4–5                      D) 5–6
- 6) Largest cell in spermatogenesis is  
A) Spermatid                      B) Spermatogonia  
C) Spermatozoon                      D) Primary spermatocyte
- 7) The following structures pass through superior orbital fissure EXCEPT  
A) Lacrimal nerve                      B) Frontal nerve  
C) Superior ophthalmic vein                      D) Infra orbital nerve
- 8) Anterior fontanellae fuses at  
A) 6 Months                      B) 1 Year                      C) 1  $\frac{1}{2}$  Years                      D) 2 Years
- 9) Muscle hooking pterygoid hamulus is  
A) Tensor tympani                      B) Tensor palati  
C) Levator palati                      D) Stapedius
- 10) Umbilical cord at term contains  
A) One artery and one vein                      B) Two veins and one artery  
C) Two arteries and one vein                      D) Two arteries and two veins
- 11) Urogenital system develops from \_\_\_\_\_ mesoderm.  
A) Extraembryonic                      B) Paraxial  
C) Intermediate                      D) Lateral plate
- 12) Buccopharyngeal membrane is derived from  
A) Cloacal membrane                      B) Primitive streak  
C) Prochordal plate                      D) Notochord
- 13) Which gland exhibits holocrine secretion  
A) Sweat gland                      B) Sebaceous gland  
C) Mammary gland                      D) Prostate
- 14) The following are examples of fibrous joints EXCEPT  
A) Sutures                      B) Symphysis  
C) Syndesmosis                      D) Gomphosis
- 15) The tegmen tympani is a part of the following bone  
A) Frontal                      B) Temporal                      C) Parietal                      D) Occipital



PART – B

**(Head and Neck, Brain, Special Embryology and histology)**

VII. Describe the thyroid gland under the following headings :

- a) Capsule
- b) Position and relations
- c) Blood supply
- d) Applied anatomy
- e) Microscopic structure. (1+3+2+2+2=10)

VIII. Briefly describe the cartilages and interior of larynx. (5+5=10)

IX. Describe the development of face. 5

X. Write briefly on third ventricle of brain. 5

XI. Describe the origin, course and branches of facial artery. 5

XII. Multiple choice questions : 15

Encircle the letter against the best response and attach the sheet to Part B answer book. Each question carries 1 mark.

- 1) Subcapsular sinus is present in the section of  
A) Spleen                      B) Thymus                      C) Lymph node                      D) Tonsil
- 2) Taste sensations from posterior  $\frac{1}{3}$  of tongue are carried through which nerve,  
A) Glossopharyngeal                      B) Chorda tympani  
C) Lingual                      D) Vagus
- 3) Tympanic membrane develops from  
A) Ectoderm and endoderm                      B) Ectoderm alone  
C) All three germ layers                      D) Endoderm and mesoderm
- 4) Trachea bifurcates at  
A) T<sub>4</sub> – T<sub>5</sub>                      B) T<sub>5</sub> – T<sub>6</sub>                      C) T<sub>6</sub> – T<sub>7</sub>                      D) T<sub>7</sub> – T<sub>8</sub>
- 5) Nerve supplying superior oblique muscle of orbit is  
A) Trochlear                      B) Abducent                      C) Oculomotor                      D) Facial
- 6) Which of the following gives rise to muscles of tongue ?  
A) Copula                      B) Occipital myotomes  
C) Tuberculum impar                      D) Dorsal tongue buds

