

B.Sc. (N) 1st Semester
Applied Anatomy & Applied Physiology

Time: 3 Hrs

Max. Marks: 75 Marks

- Note**
- 1) Attempt all questions. illustrate your answer with suitable diagram where applicable.
 - 2) Use separate answer book for each part
 - 3) the student must write separate QP code in the space provided on the title page of the respective answer book.

SECTION-A
APPLIED ANATOMY

Marks -37

Q.1 MCQ

10X1=10

- i. The type of epithelial cells which line the inner surface of fallopian tube, bronchioles and small bronchi are known as-?
 - A. Squamous epithelium
 - B. Transitional epithelium
 - C. Ciliated epithelium
 - D. Cubical epithelium
- ii. Which of following is **NOT** a part of membranous labyrinth?
 - A. Spiral organ of corti
 - B. Crista ampullaris
 - C. Organ of maculae
 - D. Modiolus
- iii. Muscle used in quiet respiration are all **except**?
 - A. Internal intercostals muscle
 - B. External intercostals muscle
 - C. Diaphragm
 - D. Sternocleidomastoid muscle
- iv. The innermost layer of epidermis is called as?
 - A. Corneum
 - B. Lucidum
 - C. Granulosum
 - D. Germinative
- v. Anatomical position has the following feature **except**?
 - A. Person standing position
 - B. Feet together
 - C. Eye looking forward
 - D. Fore arm are pronated
- vi. Which of following organ have lymph capillaries?
 - A. Brain
 - B. Splenic Pulp
 - C. Epidermis
 - D. Intestine
- vii. Which of following is a holocrine gland?
 - A. Sebaceous gland
 - B. Mammary gland
 - C. Simple sweat gland
 - D. Goblet cell
- viii. Which of following feature is not related with left lung?
 - A. Three lobe
 - B. Two lobe
 - C. Ten segment
 - D. Lingula
- ix. The blood from glomerulus is carried away by?
 - A. Efferent arterioles
 - B. Renal vein
 - C. Afferent arterioles
 - D. Peritubular capillaries
- x. Which of following is a Hinge synovial joint?
 - A. Hip joint
 - B. Wrist joint
 - C. Elbow joint
 - D. Symphysis Pubis

Q.2 (i) Describe in detail structure and ligaments of uterus?

1X6=6

OR

(ii) Describe the gross structure of Heart?

Q.3 Describe the followings:

3X5=15

- a) Structure of Stomach.
- b) Structure of Adrenal gland.
- c) Structure of Larynx.

Q.4 Write short note on **any three** of following:

3X2=6

- a) Microscopic structure of bone.
- b) Male urethra
- c) Transitional epithelium
- d) Deltoid muscle
- e) Circulation of CSF

SECTION -B
APPLIED PHYSIOLOGY

Marks -38

Q.1 Multiple choice questions

10x1=10

- i. A type of Proteolytic enzyme is found in infants' gastric juices which help in the digestion of milk proteins. The name of the enzyme is?
A. Peptide B. Rennin
C. Amylases D. Lipase
- ii. A person has difficulty breathing due to inflammation of the bronchi and bronchioles. What does he or she has?
A. Emphysema B. Occupational respiratory disorders
C. Asthma D. Pneumothorax
- iii. The right sequence of formation of urine is?
A. Secretion, reabsorption, filtration
B. Reabsorption, filtration, secretion
C. Filtration, reabsorption, secretion
D. Secretion, glomerulus, filtration
- iv. The hair cells in the spiral organ are supported by?
A. The Basilar membrane B. Vestibule
C. The utricle D. The Tectorial membrane
- v. Which one of the following organs will not feel any pain on being pricked by a needle?
A. Skin B. Brain
C. Heart D. Eyes
- vi. Sperms are nourished and activated through?
A. Vas deferens B. Seminal vesicle
C. Semen D. Prostate gland
- vii. Which of the following hormones are expected to increase in the body after consuming a banana split?
A. Prolactin B. Glucagon
C. Insulin D. Thyroid hormone
- viii. Which white blood cell component engulfs pathogens or debris in tissues?
A. Basophils B. Lymphocytes
C. Neutrophils D. Monocytes
- ix. The smallest bone called stapes found in the human body is located in the:
A. Eustachian tube B. Helix

- C External ear D. Middle ear
- x. Which portion of the regulatory centres that control breathing is located in the pons and promotes inspiration?

A. Apneustic area B . Pneumotaxic area
C.Rhythmicity centre D .Aortic and carotid bodies

- Q.2 Explain clotting mechanism along with intrinsic and extrinsic pathways of coagulation? $1 \times 7 = 7$

OR

Discuss regulation of respiration?

- Q.3 Write short answer of the following:

$3 \times 5 = 15$

- a. Coronary circulation
- b. Vestibular apparatus
- c. Regulation of renal function

- Q.4 Write Very short answer (**any three**) of the following:

$3 \times 2 = 6$

- a. Composition of pancreatic juice
- b. Repair of tissue
- c. Function of thyroid gland
- d. Nerve impulse
- e. Bone healing

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