

Reg. No: .....

**First Semester B.Sc Nursing Degree Regular/Supplementary  
Examinations April 2025  
Paper II – Applied Anatomy and Applied Physiology  
(2021 Scheme)**

**Time: 3 Hrs**

**Total Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Section A – Applied Anatomy**

**Q.P. CODE: 122010**

**Max. Marks: 37**

**(6x1=6)**

**1. Multiple Choice Questions**

**(choose the most appropriate answer from the options given)**

**The Answers to MCQ questions (Q.No. i to Q.No. vi) shall be written continuously on the first writing sheet (ie Page No.3) only**

- Apex of the heart is formed by
  - Right atrium
  - Right ventricle
  - Left atrium
  - Left ventricle
- White pulp and red pulp is seen in
  - Liver
  - Lymph node
  - Spleen
  - Pancreas
- Thickest layer in the wall of arteries is
  - Tunica adventitia
  - Tunica intima
  - Tunica vasculosa
  - Tunica media
- Accessory pancreatic duct opens into
  - Major duodenal papilla
  - Minor duodenal papilla
  - Fungiform papilla
  - Circumvallate papilla
- All of the following structures form stomach bed EXCEPT
  - Body of pancreas.
  - Splenic artery
  - Right crus of diaphragm
  - Transverse mesocolon
- Hormone secreted by pars -anterior of pituitary gland
  - Oxytocin
  - Growth hormone
  - Vasopressin
  - Melanocyte stimulating hormone

**Essay**

**(1x10=10)**

- Name any four endocrine organs. Describe thyroid gland in detail

**(2+8)**

**Short notes**

**(3x5=15)**

- Lateral wall of nose
- Testis
- Thoracoabdominal diaphragm

**Differentiate between**

**(3x2=6)**

- Hyaline cartilage and Elastic cartilage
- Small intestine and Large intestine
- Right and Left ventricle

**(PTO)**

## Section B – Applied Physiology

Q.P. CODE: 123010

Max. Marks: 38

### 1. Multiple Choice Questions

(7x1=7)

(choose the most appropriate answer from the options given)

The Answers to MCQ questions (Q.No. i to Q.No. vii) shall be written continuously on the first writing sheet (ie Page No.3) only

- i. Deficiency of Vitamin D leads to
  - a) Scurvy
  - b) Nyctalopia
  - c) Beri beri
  - d) Rickets
- ii. Insulin is released from which cells of islets of pancreas
  - a) Alpha
  - b) Beta
  - c) Delta
  - d) None
- iii. Thrombocytopenia leads to
  - a) Recurrent infections
  - b) Bleeding tendency
  - c) Reduced oxygen carrying capacity
  - d) Allergy
- iv. Mass peristalsis occurs in
  - a) Stomach
  - b) Jejunum
  - c) Ileum
  - d) Colon
- v. Baro-receptor reflex arises from
  - a) Carotid body
  - b) Carotid sinus
  - c) Atrial wall
  - d) Afferent arteriole
- vi. Testosterone is produced by which cells
  - a) Sertoli cells
  - b) Leydig cells
  - c) Theca cells
  - d) Spermatozoa
- vii. Which hypothalamic nucleus is concerned with circadian rhythm
  - a) Supra optic
  - b) Periventricular
  - c) Suprachiasmatic
  - d) Ventromedian

### Essay

(1x10=10)

2. Describe erythropoiesis with the help of neat, labelled diagram. Add a note on anaemia

(7+3)

### Short notes

(3x5=15)

- 3. Functions of growth hormone. Add a note on Acromegaly (3+2)
- 4. Role of Surfactant. Add a note on periodic breathing (3+2)

- 5. Glomerular Filtration Rate (GFR)

### Give reasons for the following (3x2=6)

- 6. Mental retardation occurs in cretinism

- 7. Cardiac muscle cannot be tetanized

- 8. Neutrophil count increases in bacterial infection

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