

MEDICAL**[BSCN 0823]****AUGUST 2023****Sub. Code: 2302****(APRIL 2023 EXAM SESSION)****B.Sc. (Nursing) DEGREE EXAMINATION****(Revised Regulations for the candidates admitted from 2022-2023 onwards)****FIRST SEMESTER****PAPER II – APPLIED ANATOMY & APPLIED PHYSIOLOGY****Q.P. Code: 652302****Time : Three Hours****Maximum : 75 Marks****Answer Section A and Section B Separately****Answer all the Questions****SECTION – A (37 Marks)****(APPLIED ANATOMY)****I. Multiple choice Questions:****(6 x 1 = 6)****Choose one correct answer in the Answer Script. No overwriting should be done.
Choice should be given in Capital Letters.**

1. Coronary arteries are the branch of
A) Arch of aorta B) Ascending aorta C) Descending aorta D) Pulmonary artery
2. Example for Ball and Socket joint
A) Knee joint B) Shoulder joint C) Elbow joint D) Wrist joint
3. Which of the following nerve supply the Biceps muscle?
A) Ulnar nerve B) Median nerve C) Radial nerve D) Musculo Cutaneous nerve
4. Hepatopancreatic duct opens into
A) First part of duodenum B) Second part of duodenum C) Jejunum D) Ileum
5. Cavity present in the hindbrain
A) Lateral ventricle B) Third ventricle C) Fourth ventricle D) Cerebral aqueduct
6. How many pairs of Spinal nerves present in thoracic level of Spinal cord
A) 8 B) 5 C) 12 D) 4

II. Essay:**(1 x 10 = 10)**

1. Describe in detail about the arterial supply and venous drainage of heart with its Applied Anatomy?

III. Short answers:**(3 x 5 = 15)**

1. Gluteus maximus muscle and mention the structures covered by it.
2. External features and relations of Kidney.
3. Features of Synovial joint and its classification.

IV. Very short answers:**(3 x 2 = 6)**

1. Name the paranasal air sinuses.
2. Name the ventricles of Brain.
3. Different positions of Vermiform appendix.

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SECTION – B (38 Marks)
(APPLIED PHYSIOLOGY)**I. Multiple choice Questions:****(7 x 1 = 7)**

Choose one correct answer in the Answer Script. No overwriting should be done. Choice should be given in Capital Letters.

1. If there is an injury in the hypothalamus region of the brain, it is most likely to affect
A) regulation of body temperature B) decision making
C) co-ordination during locomotion D) control of emotions
2. Which has the greatest renal clearance?
A) Para-aminohippuric acid (PAH) B) Glucose C) Inulin D) Urea
3. Which structure regulates the size of the pupil?
A) Sclera B) Iris C) Cornea D) Retina
4. Effects of hypothyroidism include all of the following except
A) Diarrhoea B) Lethargy C) Cold intolerance D) Weight gain
5. On the heart, the impact of adrenaline is all of these except that
A) it increases the cardiac output B) it increases the myocardial contractility
C) it increases blood pressure D) it decreases the heart rate
6. The maximum volume of air contained in the lung after a full forced inhalation is called
A) Tidal volume B) Vital capacity C) Ventilation rate D) Total lung capacity
7. The Sodium- Potassium ATPase pump is
A) An Uniporter B) A Symporter
C) An Antiporter D) An example of Secondary Active transport.

II. Essay:**(1 x 10 = 10)**

1. Define Erythropoiesis. Describe in detail about the stages of Erythropoiesis. Add a note on maturation factors.

III. Short answers:**(3 x 5 = 15)**

1. Explain the composition and Functions of CSF.
2. Oxygen Transport
3. Write about the composition and functions of Saliva.

IV. Very short answers:**(3 x 2 = 6)**

1. Name the Neuroglia.
2. Name the refractory errors of the Eye.
3. Name any four functions of Placenta.

MEDICAL**[BSCN 1223]****DECEMBER 2023****Sub. Code: 2302****(OCTOBER 2023 EXAM SESSION)****B.Sc. (Nursing) DEGREE EXAMINATION****(Revised Regulations for the candidates admitted from 2022-2023 onwards)****FIRST SEMESTER****PAPER II – APPLIED ANATOMY & APPLIED PHYSIOLOGY****Q.P. Code: 652302****Time : Three Hours****Maximum : 75 Marks****Answer Section A and Section B Separately****Answer all the Questions****SECTION – A (37 Marks)****(APPLIED ANATOMY)****I. Multiple choice Questions:****(6 x 1 = 6)**

**Choose one correct answer in the Answer Script. No overwriting should be done.
Choice should be given in Capital Letters.**

1. Principal muscle of respiration
A) Sternocleidomastoid B) Abdominal muscles C) Diaphragm D) Scalenus muscles
2. Name the epithelium lining the urinary bladder
A) Simple epithelium B) Transitional epithelium
C) Columnar epithelium D) Cuboidal epithelium
3. Right side subclavian Artery is a branch of
A) Arch of Aorta B) Carotid Artery C) Brachiocephalic trunk D) Brachial Artery
4. Which of the following nerve supply the Deltoid muscle?
A) Median nerve B) Radial nerve C) Ulnar nerve D) Axillary nerve
5. Which of the following is the feature of cardiac muscle?
A) Multinucleated B) Intercalated disc C) Branched D) Both B and C
6. Lower extend of adult spinal cord.
A) L 1 B) L 3 C) S 2 D) First coccyx

II. Essay:**(1 x 10 = 10)**

1. Mention the Endocrine glands and describe in detail about the Thyroid gland with applied anatomy.

III. Short answer:**(3 x 5 = 15)**

1. Structure and Lymphatic drainage of Mammary gland.
2. Pleura and its recesses.
3. Diaphragm.

IV. Short answers on:**(3 x 2 = 6)**

1. Parts of Fallopian tube.
2. Layers of Skin.
3. Difference between Skeletal muscles and Cardiac muscle.

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SECTION – B (38 Marks)
(APPLIED PHYSIOLOGY)**I. Multiple choice Questions:****(7 x 1 = 7)**

Choose one correct answer in the Answer Script. No overwriting should be done. Choice should be given in Capital Letters.

1. Neurotransmitters are substances
 - A) produced by muscles
 - B) signal molecules released at synapses
 - C) carry electrical impulses
 - D) found in neurons with myelin sheaths
2. The difference in voltage between the inside and outside of a resting cell is called
 - A) Resting potential
 - B) Action potential
 - C) Depolarization
 - D) Repolarization
3. Corpus callosum connects
 - A) Two cerebral hemispheres
 - B) Diencephalon and midbrain
 - C) Medulla and Spinal cord
 - D) Pons and Medulla
4. Which of the following is NOT a plasma protein?
 - A) Fibrinogen
 - B) Albumin
 - C) Globulin
 - D) Fibronectin
5. Name the term given to the failure of bone marrow to produce RBC
 - A) Aplastic anemia
 - B) Hemolytic anemia
 - C) Thalassemia
 - D) Megaloblastic anemia
6. These cells of the testes secrete testosterone
 - A) Sertoli cells
 - B) Cells of germinal epithelium
 - C) Leydig cells
 - D) Secondary spermatocytes
7. In man, Cryptorchidism is the condition when
 - A) testes do not descend into the scrotum
 - B) there are two testes in each scrotum
 - C) testes degenerates in the scrotum
 - D) testes enlarges in the scrotum

II. Essay:**(1 x 10 = 10)**

1. Describe in detail with a help of diagram the mechanism of Skeletal Muscle contraction.

III. Short answers:**(3 x 5 = 15)**

1. What is Glomerular Filtration Rate? Add a note on the factors affecting GFR.
2. Conducting system of the Heart.
3. Write in detail about Visual pathway.

IV. Very short answers:**(3 x 2 = 6)**

1. Define Peristalsis.
2. What is chloride shift?
3. Mention any two clinical features of Acromegaly.
