

BACHELOR OF PHYSIOTHERAPY
First Year SUPPLEMENTARY : WINTER- 2022
SUBJECT : HUMAN ANATOMY

Day : Monday

Date : 26-12-2022

Time : 02:00 PM-05:00 PM

Max. Marks : 80

W-25044-2022

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use **blue / black** pen only
- 4) Draw neat and labelled diagram **WHEREVER** necessary.
- 5) Do not write anything on the blank portion of the question paper. This will be considered an unfair means
- 6) Section - **A** and Section - **B** should be written in **SEPARATE** answer sheets.

SECTION – A

- Q.1** Long answer questions (Solve any **TWO** out of **THREE**) **(20)**
- A)** Describe muscles of mastication under **(5+2+3)**
- i)** Origin and insertion
 - ii)** Nerve supply
 - iii)** Action
- B)** Describe Deltoid muscle under **(3+2+3+2)**
- i)** Origin, insertion & nerve supply
 - ii)** Actions of the muscle
 - iii)** Structures under cover of the muscle
 - iv)** Applied anatomy
- C)** Describe supports of uterus under **(6+2+2)**
- i)** Primary supports
 - ii)** Secondary supports
 - iii)** Applied anatomy
- Q.2** Write short notes (Solve any **FOUR** out of **FIVE**) **(20)**
- a)** Sesamoid bone
 - b)** Triceps muscle
 - c)** Posterior relations of both kidneys
 - d)** First carpometacarpal joint
 - e)** Blood supply of stomach

P.T.O.

SECTION - B

Q.3 Long answer questions (Solve any **TWO** out of **THREE**) (20)

A) Describe sciatic nerve under - (1+4+3+2)

- i) Root value
- ii) Course and relations
- iii) Branches
- iv) Applied anatomy

B) Describe facial nerve under (4+4+2)

- i) Extracranial course and branches
- ii) Muscles supplied by the nerve
- iii) Applied anatomy

C) Describe Fourth ventricle of brain (6+2+2)

- i) Boundaries, floor, roof
- ii) Communications
- iii) Applied anatomy

Q.4 Write short notes (Solve any **FOUR** out of **FIVE**) (20)

- a) Spermatogenesis
- b) Accessory nerve
- c) Histology of bone
- d) Sternocleidomastoid muscle
- e) Intercostal muscles

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BACHELOR OF PHYSIOTHERAPY
First Year SUPPLEMENTARY : WINTER- 2022
SUBJECT : HUMAN PHYSIOLOGY

Day : Tuesday
Date : 27-12-2022

W-25045-2022

Time : 02:00 PM-05:00 PM
Max. Marks : 80

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Section A and Section B should be written on **SEPARATE** answer sheets.
- 3) Draw neat and clean diagrams **WHEREVER** necessary.
- 4) Figures to the right indicate **FULL** marks.

Section A

Q.1 Long Answer Questions (Attempt Any Two): (2 x 10 = 20)

- a) Define cardiac output. Describe various factors determining cardiac output. Add a note on ejection fraction. (1+7+2)
- b) Describe in details chemical regulation of respiration. Add a note on hypoxia. (7+3)
- c) Describe origin and spread of cardiac impulse. Draw a well labelled diagram of normal electrocardiogram in lead II. (7+3)

Q.2 Short Essay Questions (Attempt Any Four): (4 x 5 = 20)

- a) Respiratory changes during moderate exercise.
- b) Deglutition reflex.
- c) Ovarian changes in menstrual cycle.
- d) Physiological actions of growth hormone.
- e) Peculiarities of pulmonary circulation.

Section B

Q.3 Long Answer Questions (attempt Any Two): (2 x 10 = 20)

- a) Enlist various ascending tracts. Describe origin, course and termination of dorsal column tracts. What are the effects of damage to dorsal column tracts? (2+6+2)
- b) Describe the events occurring during transmission of impulse across neuromuscular junction in a skeletal muscle. Add a note on myasthenia gravis. (7+3)
- c) Enlist various functions of hypothalamus. Describe any four functions in detail. (4+6)

Q.4 Short Essay Questions (Attempt Any Four): (4 x 5 = 20)

- a) Functions of basal ganglia.
- b) Micturition reflex.
- c) Action potential in a large myelinated nerve fiber
- d) Types of deafness
- e) Functions of platelets

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BACHELOR OF PHYSIOTHERAPY
First Year SUPPLEMENTARY : WINTER- 2022
SUBJECT : BIOCHEMISTRY

Day : Wednesday

Time : 02:00 PM-04:00 PM

Date : 28-12-2022

W-25046-2022

Max. Marks : 40

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Draw neat diagrams **WHEREVER** necessary.
- 4) Both the sections should be written in **SEPARATE** answer book.

SECTION A

- Q.1** Short Answer Questions (Attempt **ANY FOUR**) **(4X5=20)**
- a) Glycolysis: aerobic and anaerobic with energetics.
 - b) HMP shunt: Important steps and significance.
 - c) β oxidation of Palmitic acid (16 C) with energetics.
 - d) Heme catabolism and excretion of bilirubin.
 - e) Enzymes: Definition and factors affecting enzyme activity.

SECTION B

- Q.2** Short Answer Questions (Attempt **ANY FOUR**) **(4X5=20)**
- a) Laboratory diagnosis and monitoring of Diabetes Mellitus.
 - b) BMR(Basal Metabolic Rate, SDA (Specific Dynamic Action).
 - c) Colorimetry : Principle, working, and application.
 - d) Tyrosine : Metabolism ,important compounds formed
 - e) Calcium: Sources, functions and disorders.

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Repeaters
Babu

BACHELOR OF PHYSIOTHERAPY
First Year SUPPLEMENTARY : 'WINTER- 2022
SUBJECT : FUNDAMENTALS OF ELECTROTHERAPY

Day : Friday

Time : 02:00 PM-05:00 PM

Date : 30-12-2022

W-25048-2022

Max. Marks : 80

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Draw neat diagram **WHEREVER** necessary.
- 4) Both the sections should be written in **SEPARATE** answerbook.

SECTION - A

- Q.1** Attempt **ANY TWO** of the following : (20)
- a) Explain in detail about physiological and therapeutic effects of paraffin wax bath (PWB). Describe various methods of applications of paraffin wax bath. Add a note on its contra-indication.
 - b) What is Cryotherapy? Write down the physiological and therapeutic effects of Cryotherapy. Add a note on various methods of application of cryotherapy.
 - c) Discuss in detail Physiological effects and Therapeutic effects of heat-therapy. Add a note on the construction of a Hydrocollator unit.
- Q.2** Write **ANY FOUR** of the following : (20)
- a) Define Lenz's law and add a note on strength and direction of induced EMF.
 - b) What is piezo and reverse piezo electric effect? Explain methods of testing Ultrasound.
 - c) Write about Kromyer lamp and high pressure mercury vapour lamp.
 - d) Condenser.
 - e) Types of electrodes in Short Wave Diathermy.

SECTION - B

- Q.3** Attempt **ANY TWO** of the following : (20)
- a) Explain in detail about Pain gate theory. Discuss types of TENS.
 - b) Write principles and production of IFT. Draw and label panel diagram for of IFT and explain amplitude modulation in IFT.
 - c) Discuss physical characteristics of IRR. Write about production of Luminous and Non-Luminous generators.
- Q.4** Write **ANY FOUR** of the following : (20)
- a) Explain modes and transmission of heat.
 - b) Electromagnetic induction
 - c) Properties of laser.
 - d) Whirlpool bath
 - e) Electric shock

BACHELOR OF PHYSIOTHERAPY (BPTH)
First Year BPTH : WINTER- 2022
SUBJECT : FUNDAMENTALS OF KINESIOLOGY & KINESIOTHERAPY

Day : Monday

Time : 02:00 PM-05:00 PM

Date : 14-11-2022

W-25047-2022

Max. Marks : 80

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.
- 4) Draw neat labelled diagrams **WHEREVER** necessary.

SECTION-A

Q.1 Write any **TWO** out of **THREE**: (20)

- a) Define Gravity. Discuss Centre of Gravity and Line of Gravity. Discuss Equilibrium with its types in detail.
- b) Explain Standing as a Fundamental Position. Describe any two derived position from standing.
- c) Define Suspension therapy. Describe Vertical Suspension with example. Write uses of ropes and 'S' shaped hook.

Q.2 Write any **FOUR** out of **FIVE**: (20)

- a) Describe Deep Sensation.
- b) Write method of chest expansion measurement.
- c) Discuss First order Lever with examples.
- d) Describe Frontal plane and Frontal axis.
- e) Discuss forces and composition of forces.

SECTION-B

Q.3 Write any **TWO** out of **THREE**: (20)

- a) Define passive Movement. Explain its principles. Enumerate uses of Passive movements.
- b) Define Relaxation. Enumerate different types of relaxation. Explain Jacobson's technique of Relaxation.
- c) Define Yoga. Write principles of Yoga. Describe any two Asanas in standing positions.

Q.4 Write any **FOUR** out of **FIVE**: (20)

- a) Describe Deep Tendon Reflexes.
- b) Discuss technique of Kneading in Massage and its effects.
- c) Describe advantages and disadvantages of Group exercises.
- d) Describe Isometric and Isotonic muscle work with examples.
- e) Describe Shoulder Wheel and its uses.

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