

BACHELOR OF PHYSIOTHERAPY
Fourth Year : SUMMER : 2025
SUBJECT: NEURO-PHYSIOTHERAPY

Day : Wednesday
Date : 10/09/2025

S-25067-2025

Time : 10:00 AM-01:00 PM
Max. Marks : 80

NB :

1. All questions are **COMPULSORY**.
2. Figures to the right indicate **FULL** marks for the question.
3. Draw neat labelled diagrams **WHEREVER** necessary.
4. **Section -I and Section-II** has to written on separate Booklets.

SECTION - I

- Q. 1** Attempt ANY TWO of the following: (Long Answer) (10x2)
- a) A 45 year old house wife had history of right hemorrhagic stroke two days back . Presently she is admitted in ICU with 5 score on GCS and non ambulatory. Vitals are stable.
 - a) Describe ICF with clinical reasoning
 - b) Describe the physiotherapy management with treatment techniques.
 - b) A 12 year old ataxic Cerebral Palsy having difficulty in transition, ambulation and loses balance frequently. Also difficulty in hand function.
 - a) Describe ICF with clinical reasoning
 - b) Describe the physiotherapy management with treatment techniques.
 - c) A 55 years old business man having slowness in waking , mask like face, resting tremors.
 - a) Describe ICF with clinical reasoning
 - b) Describe the physiotherapy management with treatment techniques
- Q. 2** Attempt ANY FOUR of the following: (Short Answer) (5x4)
- a) Discuss spastic bladder and describe its management
 - b) Discuss sign and symptoms and management of Motor Neuron Disease.
 - c) Write a note on Motor relearning program.
 - d) Describe brain stem level reflexes
 - e) Explain the difference between UMN & LMN Facial Palsy

SECTION - II

- Q. 3 Attempt ANY TWO of the following: (Long Answer) (10x2)
- a) A 22 years college going male students having high steppage gait since two months. Having history of fall from bike and fracture of tibia and fibula managed orthopedically.
 - a) Describe ICF with clinical reasoning
 - b) Describe the physiotherapy management with treatment techniques
 - b) A 10 year old boy having difficulty in bed mobility and walking, shows Gower's sign positive, hypertrophy of deltoid and calf muscle. EMG shows Myogenic picture.
 - a) Describe ICF with clinical reasoning
 - b) Describe the physiotherapy management with treatment techniques
 - c) A 34 year old female suffering from acute Gastroenteritis followed by weakness in bilateral upper and lower limb diagnosed with Gullian Barrie Syndrome two month back.
 - a) Describe ICF with clinical reasoning
 - b) Describe the physiotherapy management with treatment techniques
- Q. 4 Attempt ANY FOUR of the following: (Short Answer) (5x4)
- a) Discuss abnormal EMG patterns
 - b) Discuss sign and symptoms Brown Sequard Syndrome
 - c) Discuss principles of NDT approach
 - d) Describe the Management for Syringomyelia
 - e) Describe facilitatory techniques of Rood's Approach

Total No. of Questions: 4

SUMMER - 2025

Seat No.:

BACHELOR OF PHYSIOTHERAPY (BPTH)
FOURTH YEAR BPTH

SUBJECT : (25066) MUSCULOSKELETAL PHYSIOTHERAPY

Day: Monday

Date: 08.09.2025

S 25066 - 2025

Time: 10.00 A.M. To 1.00

Max Marks: 80

P.M.

NB :

1. All questions are COMPULSORY.
2. Figures to the right indicate FULL marks for the question.
3. Section -I and Section-II has to written on separate Booklets.
4. Draw neat labelled diagrams WHEREVER necessary.

SECTION - I

- Q. 1 Attempt ANY TWO of the following: (Long Answer) (10x2)
- a) A 65-year-old retired school teacher sustained a Colles' fracture on her right dominant hand due to a fall at home. She was managed with closed reduction and immobilization in a cast for 6 weeks. Now referred to physiotherapy post-cast removal with pain, swelling, and restricted ROM at the wrist. NPRS is 5/10 at rest and 8/10 on wrist movements.
 - a) Discuss Functional diagnosis (2M).
 - b) Write in detail Short term & Long term Physiotherapy Management (8M).
 - b) 72-year-old male underwent Total Hip Replacement (THR) for severe osteoarthritis of the hip. He presents on postoperative day 3 with pain and difficulty performing bed mobility and transfers.
 - a) Discuss Functional diagnosis (2M).
 - b) Write in detail Short term & Long term Physiotherapy Management (8M).
 - c) 24-year-old football player underwent ACL reconstruction 3 weeks back. Complains of pain, swelling, and difficulty regaining ROM and strength.
 - a) Discuss Functional diagnosis (2M).
 - b) Write in detail Physiotherapy management for Moderate and minimum protective phase. (8M)
- Q. 2 Attempt ANY FOUR of the following: (Short Answer) (5x4)
- a) Explain the management of DeQuervain's Tenosynovitis.
 - b) Explain stump care after below knee amputation.
 - c) Explain aims of physiotherapy management with techniques during immobilization post fracture management.
 - d) Discuss Physiotherapy management of Tennis Elbow
 - e) Explain the role of protective devices in preventing sports injuries.

SECTION - II

- Q. 3 Attempt ANY TWO of the following: (Long Answer) (10x2)
- a) 62-year-old male farmer presents with hip pain, stiffness, and difficulty walking, Not able to Squat down. X-ray reveals osteoarthritis of the hip joint.
 - a) Discuss Functional diagnosis (2M).
 - b) Write in detail Short term Physiotherapy Management (6M).
 - c) Prescribe assistive device with rationale (2M)
 - b) 30-year-old male software engineer presents with low back pain, morning stiffness, and reduced spinal mobility. Radiograph suggests Ankylosing Spondylitis.
 - a) Discuss Functional diagnosis (2M).
 - b) Write in detail Short term Physiotherapy Management (6M).
 - c) Discuss risk factors and diagnostic tests. (2M)
 - c) A 50-year-old male farmer with a history of spinal tuberculosis at T11-T12 presents with increasing kyphotic deformity and difficulty in performing daily activities due to pain and fatigue. He is under anti-tubercular therapy for 3 months and managed conservatively. No neurological signs are present.
 - a) Write the functional diagnosis. (2 M)
 - b) Formulate a physiotherapy management (6M)
 - c) Prescribe orthosis with rationale(2M)
- Q. 4 Attempt ANY FOUR of the following: (Short Answer) (5x4)
- a) Describe clinical features of OA knee.
 - b) Explain pathomechanics of Genu valgum
 - c) Discuss torticollis in brief. Describe physiotherapy Management of torticollis.
 - d) Discuss risk factors for osteoporosis. Give rationale for weight bearing exercises for the same.
 - e) Enumerate 3 Yogasana to correct posture. Describe any one with diagram.

BACHELOR OF PHYSIOTHERAPY
Fourth Year : SUMMER : 2025
SUBJECT: COMMUNITY PHYSIOTHERAPY

Day : Monday
Date : 15/09/2025

S-25069-2025

Time : 10:00 AM-01:00 PM
Max. Marks : 80

NB :

1. Section -I and Section-II has to written on separate Booklets.
2. Draw neat labelled diagrams WHEREVER necessary.
3. Figures to the right indicate FULL marks for the question.
4. All questions are COMPULSORY.

SECTION - I

- Q. 1 Attempt ANY TWO of the following: (Long Answer) (10x2)
- a) A 15-year-old school boy with poor posture spends 5-6 hours daily on online classes. He is overweight with a BMI of 26, complains of frequent tiredness, poor concentration in class, and avoids participation in sports.
 - a) Discuss the health risks of a sedentary lifestyle in adolescents.
 - b) Plan fitness program for this case. (4+6=10 marks)
 - b) A 50-year-old male school teacher with cervical spondylosis presents with radiating pain in the left upper limb. He experiences increased pain while writing on the board, and when grading assignments. On observation he has a forward head posture.
 - a) Write the short term and long term goals for the case .
 - b) Plan physiotherapy management considering his occupation . (4+6=10 marks)
 - c) A traffic policeman, working for 8-10 hours daily in a high-pollution, high-traffic zone, complains of fatigue, low back pain, and varicose veins. He stands for prolonged periods with minimal breaks
 - a) Discuss the impact of environmental factors on his health.
 - b) Describe the physiotherapy and ergonomic management plan of traffic police officers.(4+6=10 marks)
- Q. 2 Attempt ANY FOUR of the following: (Short Answer) (5x4)
- a) Enlist the performance related fitness components and application of the Frequency, Intensity, Time, Type (FITT) principle in muscular strength training.
 - b) Explain Diastasis Recti and its assessment technique.
 - c) Define Sarcopenia and give physiotherapy management for the same.
 - d) Explain any two national legislations for the rehabilitation of Persons with Disabilities (PWDs) in India.
 - e) Explain how Job Demand Analysis contributes to injury prevention in a workplace.

SECTION - II

- Q. 3 Attempt ANY TWO of the following: (Long Answer) (10x2)
- a) A 30-year-old primiparous woman delivered a baby girl via LSCS two days ago. She reports lower back pain and pain at the suture site (NPRS 7/10), worsened by sitting, lying supine. She is avoiding lifting the baby, fearing increased pain. She plans to return to her bank job in four months.
 - a) Discuss short-term and long-term physiotherapy goals.
 - b) Discuss the management and suggest the ergonomic modifications at home. (4+6=10 marks)
 - b) A 76-year-old retired engineer, underwent post-right hemiarthroplasty of hip two months ago following a bathroom fall. He has good family support and belongs to a middle-class background. He avoids outdoor ambulation due to fear of falling.
 - a) Write short- and long-term physiotherapy goals.
 - b) Plan an appropriate rehabilitation protocol. (4+6=10 marks)
 - c) A 62-year-old woman has been experiencing urge urinary incontinence for four months. She has limited her fluid intake significantly. She avoids attending community events due to fear of leakage.
 - a) Outline physiotherapy assessment for urge incontinence.
 - b) Describe the physiotherapy management (4+6=10 marks)
- Q. 4 Attempt ANY FOUR of the following: (Short Answer) (5x4)
- a) Explain the structure of the healthcare delivery system in India as a flow chart, and explain the role of a Physiotherapist at various levels.
 - b) Discuss any three schemes for ante-natal and post-natal women in India.
 - c) Explain the age-related physiological changes in Musculoskeletal and sensory system with their associated functional challenges
 - d) Discuss the role of N.G.O. in rehabilitation and provide 2 examples.
 - e) Explain any Five Physical principles of ergonomics.

BACHELOR OF PHYSIOTHERAPY
Fourth Year : SUMMER : 2025
SUBJECT: RESEARCH METHODOLOGY & BIOSTATISTICS

Day : Wednesday
Date : 17/09/2025

S-25070-2025

Time : 10:00 AM-12:00 PM
Max. Marks : **40**

NB :

1. All questions are COMPULSORY.
2. Figures to the right indicate FULL marks for the question.
3. Draw neat labelled diagrams WHEREVER necessary.
4. Section -I and Section-II has to written on separate Booklets.

SECTION - I

- Q. 1 Attempt ANY FOUR of the following: (Short Answer) (5x4)
- a) Describe briefly the different distribution patterns of data.
 - b) Explain applications of non-parametric tests using examples
 - c) Describe various graphical methods of representing quantitative data
 - d) Differentiate between type I and type II errors.
 - e) A physiotherapy student wants to evaluate the effectiveness of a newly designed core strengthening exercise protocol on reducing lower back pain in athletes. Describe how the student should:
 1. Formulate a research question using the PICO format. (1 mark)
 2. Formulate Null and alternate hypothesis for the above. (2 marks)
 3. Choose an appropriate study design. (1 mark)
 4. Select suitable statistical tests for analyzing pre- and post-intervention pain scores. (1 Marks)

SECTION - II

- Q. 2 Attempt ANY FOUR of the following: (Short Answer) (5x4)
- a) Explain the process of formulating a research question.
 - b) Explain the levels of measurement using suitable examples.
 - c) Mr X is designing a research study to assess the effectiveness of a six-week proprioceptive training program in improving balance among elderly individuals with a history of falls.
 - 1) Define inclusion and exclusion criteria. (2 marks)
 - 2) Propose two suitable inclusion criteria and two exclusion criteria, justifying your choices. (3 marks)
 - d) What are the essential components of an ethically valid informed consent in human research?
 - e) Explain the various types of experimental studies

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BACHELOR OF PHYSIOTHERAPY
Fourth Year : SUMMER : 2025
SUBJECT: CARDIOVASCULAR RESPIRATORY PHYSIOTHERAPY

Day : Friday

Date : 12/09/2025

S-25068-2025

Time : 10:00 AM-01:00 PM

Max. Marks : 80

NB :

1. Both the sections should be written in separate answer book.
2. Figures to the right indicate full marks.
3. All questions are compulsory.

SECTION - I

Q. 1 Attempt ANY TWO of the following: (Long Answer)

(10x2)

- a) 50 year old businessman underwent CABG two days ago for LAD and LCx. He is shifted to recovery room with drains in situ. He complains of pain at suture site during transition in bed. His chest x-ray shows minimal pleural effusion on right side.

1. Discuss phase I Cardiac Rehabilitation
 2. Write the long term goals and management
- (6+4)

- b) A 45 year old male sustained acute anterior wall MI a week back, he has been thrombolysed with streptokinase. He is a known case of type II DM and hypertension since past ten years. His DM and hypertension are controlled. His BMI is 30kg/m² and has a sedentary lifestyle.

1. Discuss the risk stratification for him
 2. Plan a lifestyle modification for him.
- (5+5)

- c) 54 years old male patient who is sales executive in a corporate firm; comes with complains of pain in right lower calf. His pain increases on walking and relieves on rest. He is a chronic smoker.

1. Discuss various special tests indicated
 2. Plan vascular rehabilitation for him
- (5+5)

Q. 2 Attempt ANY FOUR of the following: (Short Answer)

(5x4)

- a) Describe the clinical significance of various Cardiac bio markers
- b) Explain in detail jet nebulizer
- c) Discuss in detail Respiratory Muscle Training
- d) Write Wallace rule of nine. Enumerate the short term goals of management of burns.
- e) Write a short note on autogenic drainage