Registration No:

Total Number of Pages: 01

Course: MPT

SUB_CODE: 23MPT2B2

SUBJECT: Physiotherapy Assessment in Biomechanics

(2ˢᵗ Year MPT) Examination: 2023-24 (Admitted Batch)

Q. CODE: A393

BRANCH: Allied Sciences

Sitting: 1ˢᵗ , 10.00 AM to 1.00 PM

Max Time: 3 Hours   Max Marks: 80

Any Question having parts should be answered as whole at one place only.

Illustrate answer with diagrams wherever relevant / required if any)

The figures in the right-hand margin indicate marks.

Answer any 5 out of 7. Q8 is compulsory

Q 1	Explain the factors affecting performance during the laboratory test	(1 x 15 Marks)
Q 2	Enumerate the methods of assessment of the spatio-temporal parameters of gait	(1 x 15 Marks)
Q 3	Describe the assessment of posture in the sagittal plane, explaining the normal postural alignment and common deviations observed during clinical evaluation	(1 x 15 Marks)
Q 4	Analyze the biomechanical risk factors associated with prolonged sitting and repetitive tasks.	(1 x 15 Marks)
Q 5	Demonstrate how AI-based motion analysis systems can be used to assess functional movement.	(1 x 15 Marks)
Q 6	Compare traditional biomechanical assessment methods with recent technology-based approaches.	(1 x 15 Marks)
Q 7	Explain the normal gait cycle. Add a note on the deviations commonly in individuals with post-stroke.	(1 x 15 Marks)
Q 8	**Answer all the questions below**	(5 x 1 Marks)
a)	Mention any 2 safety concerns while assessing gait	
b)	Define cadence	
c)	Illustrate the LOG axis on the knee joint	
d)	Define Ergonomics	
e)	Give 2 biomechanical adaptation factors to exercise	

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