22545

12425 03 Hours / 70 Marks Seat No.

- Instructions (1) All Questions are Compulsory.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
 - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any <u>FIVE</u> of the following

10

- a) Define the term 'Rehabilitation'
- b) Define Selspot
- c) Define Prosthesis
- d) State the two functions of mobility aids.
- e) State the application of foot switches.
- f) Name the type of orthosis that encircles the neck and supports the chin and back of the head only.
- g) Identify the advanced rehabilitation technique which provides multiaxial and intelligent movement for hand.

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Attempt any **THREE** of the following

2.

	a)	Give the significance of intelligent prosthetic knee.	
	b)	List various phases of gait cycle.	
	c)	Explain the concept of Jaipur foot in detail.	
	d)	Enlist the parts of wheel-chair.	
3.		Attempt any THREE of the following 12	
	a)	Draw a sketch of self alighting orthotic knee joint.	
	b)	Explain sensory rehabilitation in detail.	
	c)	Describe the concept of Delivery of 'Rehabilitation Care.'	
	d)	Draw a labelled diagram of Tripods and parallel bar.	
4.		Attempt any THREE of the following 12	
	a)	Suggest on Orthosis to protect and support the muscular and bony structures of your spine. Describe it with neat diagram.	
	b)	Classify orthosis on the basis of function and anatomical area.	
	c)	Explain the structure and application of walking stick and crutches.	
	d)	State the need of Self alighting orthotic knee joint.	
	e)	Draw a labelled diagram of Hierarchically controlled prosthetic hand.	
5.		Attempt any <u>TWO</u> of the following 12	
	a)	Enlist any six rehabilitation team members and give one function of each member.	
	b)	Name the device used to measure joint angles. Explain joint angle measurement system in detail.	
	c)	A person is having disability related to upper limbs. Suggest a suitable prosthesis and explain it in detail.	

Marks

12

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		Marks
6.	Attempt any TWO of the following	12

- a) Explain design of powered wheel chair.
- b) Describe anatomical lever system with suitable diagram.
- c) Describe the concept if FES.