

**MASTER OF PHYSIOTHERAPY
THIRD SEMESTER
BIOENGINEERING & REHABILITATION
PRINCIPLES
MPT – 302**

**SET
A**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

(Objective)

Marks: 20

Choose the correct answer from the following:

1×20=20

1. In which prosthesis a window is cut at the end of bulbous types
 - a. Syme's prosthesis
 - b. Dynamic response
 - c. Multi Axis feet
 - d. Patellar tendon bearing socket
2. When was RCI Act launched in India?
 - a. 1982
 - b. 1992
 - c. 1892
 - d. 1990
3. The pelvic band in suspension mechanisms provides
 - a. Anterolateral stability
 - b. Posterolateral stabilirt
 - c. Mediolateral stability
 - d. All
4. What is the formula used for calculating disability
 - a. $a+b$
 - b. $\frac{a+b(90-a)}{a}$
 - c. $a+b+c$
 - d. $(a \times b) \times 90$
5. Which system uses the patient's own residual limb or body strength to control the prosthesis
 - a. Passive system
 - b. Body powered system
 - c. Externally powered system
 - d. Hybrid system
6. Mallet finger orthosis is given when there is an injury to.....
 - a. PIP
 - b. DIP
 - c. None
 - d. Both
7. This type of knee joint in knee orthosis allows free flexion and extension
 - a. Straight set knee joint
 - b. Polycentric knee joint
 - c. Posterior offset knee joint
 - d. All
8. National Trust Act was founded in
 - a. 1997
 - b. 1998
 - c. 1999
 - d. 1899
9. This is the opening of shoe located at base of toungue
 - a. Vamp
 - b. Throat
 - c. Toe box
 - d. Toungue

10. Which among the following is a physical scheduled disability among children
 - a. Cerebral palsy
 - b. Dwarfism
 - c. Muscular dystrophy
 - d. All of the above
11. Silselian bandage is a part of
 - a. Ankle foot orthosis
 - b. Knee ankle foot orthosis
 - c. Hip knee ankle foot orthosis
 - d. Foot orthosis
12. In which year the Rights of person with Disabilities Bill was passed?
 - a. 2016
 - b. 2012
 - c. 2005
 - d. 2010
13. It has a planter transverse convexity which changes stance phase loading
 - a. Rocker bar
 - b. Metatarsal bar
 - c. Insoles
 - d. Outsoles
14. Splints can perform which action?
 - a. Support
 - b. Assist
 - c. Immobilize
 - d. All
15. Dial lock is adjusted everydegree of flexion
 - a. 4
 - b. 5
 - c. 6
 - d. 7
16. It is a manifestation of a problem at the tissue or organ level
 - a. Disability
 - b. Impairment
 - c. Handicapped
 - d. All
17. Which splint is used for Erb's palsy
 - a. Aeroplane splint
 - b. Knuckle Binder splint
 - c. C splint
 - d. All
18. How many types of disability are present ?
 - a. 1
 - b. 2
 - c. 3
 - d. 4
19. Halo cervical orthosis havepins
 - a. 1
 - b. 2
 - c. 3
 - d. 4
20. It consists of a plastic, spring-controlled device with fingers that are controlled by the control cable of prosthesis
 - a. Terminal devices
 - b. Wrist devices
 - c. Bowden cable
 - d. Plastic laminae cable

(Descriptive)

Time: 2 hrs 30 min

Marks: 50

[Answer question no.1 & any four (4) from the rest]

- | | |
|---|----|
| 1. What is upper limb prosthesis? What are the parts of upper limb prosthesis? Explain in details with diagrams | 10 |
| 2. Explain epidemiology of disability with emphasis on locomotor disability | 10 |
| 3. What is prosthesis? Explain about endoskeleton and exoskeleton prosthesis in details? | 10 |
| 4. Define various legal aspects in disabilities? | 10 |
| 5. What is multi axis feet? Write about solid ankle cushion foot? | 10 |
| 6. Write down the principles and methods of rehabilitation of speech and hearing disability | 10 |
| 7. What is milwaukee brace. Write about the working and indications of brace. Add necessary diagrams. | 10 |
| 8. Describe architectural barrier and possible modifications with reference to CVA and spinal cord injury. | 10 |

= = *** = =