

**BACHELOR OF PHYSIOTHERAPY  
SIXTH SEMESTER  
BIOENGINEERING  
BPT – 604**

**SET  
B**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

( Objective )

Marks: 20

*Choose the correct answer from the following:*

*1×20=20*

1. This type of knee joint in knee ankle foot orthosis allows flexion and prevent hyperextension-
  - a. Straight set knee joint
  - b. Polycentric knee joint
  - c. Drop knee
  - d. Posterior offset knee
2. By pushing foot on the .....a person can turn the wheelchair back , allowing casters to rise
  - a. Spikes
  - b. Backrests
  - c. Wheels
  - d. Tilt Bars
3. Socket construction in lower limbs requires measurement of .....legs
  - a. Affected Leg
  - b. Unaffected Leg
  - c. Both
  - d. All
4. Prof PK Sethi develop which foot
  - a. Sach foot
  - b. Jaipur foot
  - c. Multiaxis feet
  - d. Powered Foot
5. Foot drop mainly occurs due to
  - a. Dorsiflexors
  - b. Planterflexors
  - c. Evertors
  - d. Invertors
6. A window is cut along medial wall of the socket to allow bulbous end.types.
  - a. Symes's prosthesis
  - b. Jaipur Foot
  - c. Dynamic response
  - d. Supracondylar cuff
7. These are devices that are used for safer transfer of patients by raising them with minimal effort of helper
  - a. Hydraulic lift
  - b. Wheelchair lifts
  - c. Anti tip bursae
  - d. Casters
8. Which walker has swivel joints present between vertical and horizontal turns
  - a. Rollator
  - b. Reciprocal walker
  - c. Gutter walker
  - d. Rollater

9. ....maintains thumb in abduction and partial rotation under second metacarpal
- |                   |                      |
|-------------------|----------------------|
| a. C splint       | b. Boston brace      |
| c. Dynamic Splint | d. Helicopter splint |
10. Which of these is a modular orthosis
- |                      |                 |
|----------------------|-----------------|
| a. Knight brace      | b. Boston brace |
| c. Lumbosacral brace | d. All          |
11. The cosmetic appearance is produced by foam covers
- |                          |                         |
|--------------------------|-------------------------|
| a. Endoskeletal cosmesis | b. Exoskeletal cosmesis |
| c. Both                  | d. All                  |
12. This were used for amputees who wanted to be active-
- |                 |                    |
|-----------------|--------------------|
| a. Sach foot    | b. Hybrid foot     |
| c. Dynamic foot | d. Multi axis foot |
13. This belt provdes mediolateral stability
- |                   |                |
|-------------------|----------------|
| a. Silsesian Band | b. Pelvic band |
| c. Socket         | d. Suspension  |
14. What prosthesis is used for transhumeral and transradial amputations?
- |                           |                                   |
|---------------------------|-----------------------------------|
| a. Myoelectric prosthesis | b. Body powered prosthesis        |
| c. Hybrid system          | d. Externally powered body system |
15. This system uses potential muscle strength and joint movement
- |                           |                                       |
|---------------------------|---------------------------------------|
| a. Myoelectric prosthesis | b. Body powered prosthesis            |
| c. Hybrid system          | d. Externally powered body prosthesis |
16. Three point system in orthosis was given by
- |           |              |
|-----------|--------------|
| a. Jordan | b. Milwaukee |
| c. Tyson  | d. All       |
17. This gait pattern is used when one side lower extremity (LE) is unable to bear any weight
- |                 |                 |
|-----------------|-----------------|
| a. 1 point gate | b. 2 point gate |
| c. 3 point gate | d. 4 point gate |
18. Gutter walker is given when patient has problems with
- |             |            |
|-------------|------------|
| a. Shoulder | b. Forearm |
| c. Arm      | d. Wrist   |
19. This splint maintains the metacarpophalangeal joint in 90°flexion and interphalangeal joint in extension
- |                          |                               |
|--------------------------|-------------------------------|
| a. Knuckle bender splint | b. Cock up splint             |
| c. Aeroplane splint      | d. Radial thumb gutter splint |
20. This brace is given for growing children with dynamic scoliosis.
- |                           |                    |
|---------------------------|--------------------|
| a. Milwaukee              | b. Minnerva        |
| c. Halo cervical orthosis | d. Cervical Collar |

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**( Descriptive )**

Time : 2 hrs. 30 min.

Marks : 50

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

1. Write in details about Milwaukee brace. Add all the requisite diagrams of milwaukee brace. 10
2. What is orthosis? Mention about three point system of orthosis? Write the principle of orthosis. 10
3. Write in details regarding the four categories of upper limb prosthetic systems. 10
4. Write in steps for prescribing calipers. Write about the construction and working of above knee prosthesis 10
5. What is wheelchair? Explain about the different parts of wheelchair in details. 10
6. What is crutch? Write about the working of axillary crutch in details? Write about the measurement of shoes on during crutch. 10
7. What is cock up splint? What is dynamic mcp flexion? Explain both in details. 10
8. What is tricycle? Mention about different knee joints in KAFO . 10

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