

Questions should be —
 WRITTEN IN LEGIBLE HANDWRITING IN BLACK INK.
 SIGNS, SKETCHES OR FIGURES IF ANY BE DRAWN IN NEAT BLACK INK,
 so as to avoid mistakes in the printed question papers.

Duration 03 Hours.

Total Marks assigned to the paper ... 80 ...

QP code: 24503

Q. No.	N.B. :	Marks	Marks
	<u>Solutions</u> BPO Sem III (CBCAS)		
Q1 (a)	Lever Definition 3 types of levers	0.2 0.3	
(b)	Merlini at-least 5 movements Explanation	2.5 2.5	
(c)	Exoskeletal Prosthesis - Explanation Endoskeletal Prosthesis - Explanation	2.5 2.5	
(d)	Shape Memory Effect - Diagram Explanation	2.5 2.5	
(e)	Non Dynamic Response foot Single Axis Multi Axis	2.5 2.5	

Q. No.	Marks
Q II (a) Equilibrium, Locomotion, Musculoskeletal Integrity Neurological Control	(04)
(b) Gait Cycle - Diagram " " - Explanation	(05)
(c) Distance Variables stride length width Degree of Toe out Explanation	(06)
Q III (a) Orthosis - Definition	(02)
Principle:- Three point pressure Diagram and Explanation	(04)
Total Contact	(02)
Partial weight Relieving	(02)
(b) SOMI Brace - Diagram	(05)
" " - Explanation	(05)

Q. No.

Marks

- Q IV (a) Explanation about Ti-Ti band alloys (03)
- Applications as implant (04)
- Properties (03)
- (b) Ceramics - Definition (02)
- Classification (03)
- Applications in detail (05)
- Q V (a) In-vivo types of Biological Testing. (05)
- ~~Explain~~ ~~in~~ ~~points~~ Cover all the points (05)
- Explanation:
- (b) Surface Property - Diagram of SIMS (05)
- Explanation: (05)

Q. No.

Marks

- Q VI
- | | | |
|-----|---|----------------|
| (a) | Explanation, Diagram, Application | (02-02-01) |
| (b) | Transradial prosthetic system - Diagram
Explanation | 03
02 |
| (c) | Biodegradable Polymers - Defn and Explanation
Characteristics and Applications | (03)
(02) |
| (d) | Synovial joint.
- Diagram
Explanation | (03)
(02) |
| (e) | Corrosion and wear
Corrosion - Explanation
Wear - Explanation | (2.5)
(2.5) |

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