[AHS 0321]   MARCH 2021   Sub. Code: 2472
(AUGUST 2020 EXAM SESSION)
BACHELOR IN PROSTHETICS AND ORTHOTICS
THIRD YEAR (Regulation 2017-2018)
PAPER II – BIOMECHANICS III
Q.P. Code : 802472

Time: Three hours   Answer ALL Questions   Maximum: 100 Marks

I. Elaborate on: (3 x 10 = 30)

1. Explain about different types of TR socket biomechanics.
2. Biomechanics of normal spine.
3. Biomechanical principle of spine braces.

II. Write notes on: (8 x 5 = 40)

1. Biomechanics of inter vertebral disk.
2. Lumbar spine loading during normal activities.
3. Biomechanics of corset.
4. Biomechanics of thoracolumbar orthosis.
5. Shear force and bending moment diagram.
6. Open and closed helical spring.
7. Theorem of parallel axis.
8. Airplane splint biomechanics.

III. Short answers on: (10 x 3 = 30)

1. Functional of IV disk.
2. Biomechanical principles of lumbar pa
3. Five point pressure system.
4. Intra cavity pressure.
5. Pelvic stabilization in spine brace.
6. Stress concentration.
7. Biomechanical principles of fracture bracing.
8. Fluid mechanics.
9. Beam deflection.
10. Force system in LS corset.

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