

Question Paper

Exam Date & Time: 12-Jan-2023 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER BACHELOR OF OCCUPATIONAL THERAPY DEGREE EXAMINATION - JANUARY 2023
SUBJECT: OCT2101 - BIOMECHANICS AND KINESIOLOGY
(2020 SCHEME)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Explain various types of levers with examples. Explain the concept of mechanical advantage along with some examples. (20)
(10+10 = 20 marks)
- 2) Explain all the phases of scapulohumeral rhythm with suitable diagrams. (20)
(10+10 = 20 marks)
- 3) List the functions of the vertebral column. Explain various structures of cervical vertebrae with a labeled diagram. (10)
(4+6 = 10 marks)
- 4) Explain the anatomical structures involved in the static and dynamic stabilization of the knee joint. (10)
(5+5 = 10 marks)
- 5A) Explain the characteristics of the rolling accessory motion. (5)
- 5B) Explain the skeletal factors that influence joint motion. (5)
- 5C) Explain the isometric length-tension relationship of a skeletal muscle. (5)
- 5D) Explain various prehension patterns of the thumb. (5)
- 5E) Explain 'stride length' and 'cadence' in a normal gait cycle with an example. (5)
- 5F) Explain the formation of the longitudinal arch of the foot. (5)
- 6A) List two features of the ball and socket joint. (2)
- 6B) Enumerate the movements of the pectoral girdle. (2)
- 6C) List two characteristics of angular motion. (2)
- 6D) Explain 'tenodesis grasp'. (2)
- 6E) Define 'step duration' with a diagram. (2)

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Question Paper

Exam Date & Time: 14-Jan-2023 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER BOT DEGREE EXAMINATION - JANUARY 2023
SUBJECT: OCT2102 - ASSESSMENTS IN OT - II
(2020 SCHEME)

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1) Explain the types of power grip and precision grip with suitable example for each. Describe the procedure of grip strength assessment. (20)
(14+6 = 20 marks)
- 2) Explain the types of attention and their influence on occupational performance with an example for each. (20)
- 3) Explain the procedure to evaluate trunk control. (10)
- 4) Explain the purposes of 'occupation based' and 'functional based' job analyses. (10)
(5+5 = 10 marks)
- 5A) Explain 'Borg scale of Perceived Exertion' to evaluate cardiovascular endurance. (5)
- 5B) Explain the method of screening 'smooth pursuits'. (5)
- 5C) Explain 'bizarre' and 'incongruent' delusions seen in psychiatric conditions with an example of each. (5)
- 5D) Describe 'safety' as a contextual factor in the assessment of activity of daily living. (5)
- 5E) Describe the role of context in occupation and human function based on the Person-Environment-Occupation Model of Occupational Performance. (5)
- 5F) Explain the 'inter' and 'intra' rater reliability of an assessment. (5)
- 6A) Describe the term 'basal metabolic rate'. (2)
- 6B) Mention the typical developmental age of 'combines syllables: da-da, ba- ba' and 'one word with meaning' milestones. (2)
- 6C) Name two assessment checklists to evaluate leisure. (2)
- 6D) Define the term 'spirituality'. (2)
- 6E) List the types of criterion validity. (2)

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