

JEMAS(PG)-2023
Subject: Master of Occupational Therapy (MOT)

QB No: 3102800001

Duration: 90 minutes

No of MCQ: 100

Full Marks: 100

INSTRUCTIONS

1. All questions are of objective type having four answer options for each.
2. **Category-1:** Carries **1** mark each and only one option is correct. In case of incorrect answer or any combination of more than one answer, $\frac{1}{4}$ mark will be deducted.
3. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C, or D.
4. Use only **Black/Blue ink ball point pen** to mark the answer by filling up of the respective bubbles completely.
5. Write Question Booklet number and your roll number carefully in the specified locations of the **OMR** sheet. Also fill appropriate bubbles.
6. Write your name (in block letter), name of the examination center and put your signature (as is appeared in Admit Card) in appropriate boxes in the **OMR sheet**.
7. The OMR sheet is liable to become invalid if there is any mistake in filling the correct bubbles for Question Booklet number/roll number or if there is any discrepancy in the name/ signature of the candidate, name of the examination center. The OMR sheet may also become invalid due to folding or putting stray marks on it or any damage to it. The consequence of such invalidation due to incorrect marking or careless handling by the candidate will be sole responsibility of candidate.
8. Candidates are not allowed to carry any written or printed material, calculator, pen, log-table, wristwatch, any communication device like mobile phones, bluetooth devices etc. inside the examination hall. Any candidate found with such prohibited items will be **reported against** and his/her candidature will be summarily cancelled.
9. Rough work must be done on the Question Booklet itself. Additional blank pages are given in the Question Booklet for rough work.
10. Hand over the OMR sheet to the invigilator before leaving the Examination Hall.
11. Candidates are allowed to take the Question Booklet after examination is over.

Signature of the Candidate: _____

(As in Admit Card)

Signature of the Invigilator: _____

1. The root value of radial nerve is _____:
(A) C5 to T1.
(B) C6 to T1.
(C) C7 to T1.
(D) C8 to T1.

2. Specific Gravity of average human body is approximately _____:
(A) 0.85.
(B) 0.974.
(C) 1.01
(D) 1.024.

3. Which of the following would be considered fast fatigue muscle fibers?
(A) White fibers.
(B) Red fibers.
(C) Fast oxidative glycolytic fibers.
(D) Slow oxidative fibers.

4. In hemiplegia, the lower extremity flexor synergy pattern includes all of the following components except?
(A) Hip external rotation.
(B) Hip abduction.
(C) Ankle dorsiflexion.
(D) Ankle eversion.

5. Oedema that is in acute inflammation and secondary to increase in vascular permeability defines _____:
(A) Pitting oedema.
(B) Exudate.
(C) Transudate.
(D) Lymph edema.

6. An inability to perform rapid alternating movements are known as _____:
(A) Dysmetria.
(B) Dysdiadochokinesia.
(C) Apraxia.
(D) Dysphagia.

7. An inability to recognize part of one's body is denoted by _____:
(A) Asomatognosias.
(B) Anosognosia.
(C) Hemispatial Neglect.
(D) All of the above.

8. Which of the following nerve fiber shows greatest decrease in nerve conduction velocity after cold application?
(A) A α (alfa) fibres.
(B) A δ (delta) fibres.
(C) A β (beta) fibres.
(D) C-fibres.

9. The value of normal patella-femoral angle with the knee in extended position is _____:
- (A) 18 to 30°.
 - (B) 13 to 18°.
 - (C) 7 to 12°.
 - (D) 0 to 7°.
10. Which of the following muscle will be paralyzed in Axillary nerve lesion?
- (A) Deltoid.
 - (B) Biceps.
 - (C) Triceps.
 - (D) Trapezius.
11. Classification of Levers are based on:
- (A) The load and effort located with respect to the fulcrum.
 - (B) Fulcrum and effort are located with respect to the load.
 - (C) Where the load and fulcrum are located with respect to the effort.
 - (D) None.
12. Lower branch of brachial plexus injury leads to:
- (A) Erb's Palsy.
 - (B) Klumpke's Palsy.
 - (C) Wrist Drop.
 - (D) Shoulder Dislocation.
13. As you stand on your tip toes your foot is acting as what type of lever?
- (A) Class –I.
 - (B) Class –II.
 - (C) Class –III.
 - (D) All of the above.
14. A fundamental principle of early intervention is that:
- (A) It should begin as early in life as possible.
 - (B) It should target poor children.
 - (C) It should begin after infancy, around 18 months to 2years.
 - (D) It should begin working with pregnant women prior to the birth of the child.
15. Flat foot is most commonly seen in:
- (A) Toddlers.
 - (B) Os calcis fracture.
 - (C) Congenital vertical talus.
 - (D) Spastic Peroneal muscles.
16. The level of the constricting nodule in case of a trigger finger is at:
- (A) Neck of the corresponding meta carpal bone.
 - (B) Meta carpophalangeal joint.
 - (C) Proximal interphalangeal joint.
 - (D) Distal interphalangeal joint.

17. “Gunstock” deformity occurs as a complication of which fracture:
(A) Capitulum fracture.
(B) Fracture neck of radius.
(C) Supra condylar fracture.
(D) Fracture lateral epicondyle of Humerus.
18. Known factors for “ Idiopathic scoliosis”:
(A) Congenital.
(B) Unknown.
(C) Postural.
(D) Polio.
19. Clinical test of hip dysplasia in New Born is:
(A) Trendelenburg sign.
(B) Faber’s test.
(C) Ortolani’s sign.
(D) Telescopic test.
20. A neonate has an asymmetric Moro’s reflex, Social smile is normal. On examination weak or absent abduction of shoulder and supination of forearm. The lesion lies at:
(A) C 3 -6.
(B) C 3 -4.
(C) C 7 -8.
(D) T 1- 4.
21. At which age should a child be able to roll from prone to supine?
(A) 0-3 months.
(B) 3-5 months.
(C) 4-6 months.
(D) 6-8 months.
22. The deformities seen in Rheumatoid hand are all except:
(A) Swan neck deformity.
(B) Boutonniere’s deformity.
(C) Radial deviation.
(D) Adduction, External rotation, Flexion.
23. Lesion in Pyramidal tract causes:
(A) Rigidity.
(B) Athetosis.
(C) Flaccidity.
(D) Spasticity.
24. The normal angle of the acetabulum is:
(A) 5- 7 degree.
(B) 30- 32 degree.
(C) 35- 40 degree.
(D) 50- 55 degree.

25. The Commonest cause for neuralgic pain in foot is:
(A) Compression of communication between medial and lateral plantar nerves.
(B) Exaggeration of longitudinal arches.
(C) Injury of deltoid ligaments.
(D) Shortening of Plantar aponeurosis.
26. In cerebral palsy the intelligence quotient is:
(A) Very Low.
(B) Always borderline.
(C) May or May not be normal.
(D) High.
27. The in-charge nurse on a cardiac unit tells you a patient is exhibiting signs of right-sided heart failure. Which of the following would indicate right-sided heart failure?
(A) Nausea.
(B) Anorexia.
(C) Rapid weight gain.
(D) Shortness of breath.
28. One of this trait is not seen in a children with Down Syndrome:
(A) Small stature.
(B) Upward slant eye.
(C) Short neck.
(D) Increase muscle tone.
29. What age does the Rooting reflex become integrated?
(A) 3 months.
(B) 6 months.
(C) 8 months.
(D) 10 months.
30. Name of Rotator cuff muscles are:
(A) Deltoid, supraspinatus, trapezius & Triceps.
(B) Supraspinatinatus, Infraspinatus, Teres minor & pectoralis major.
(C) Supraspinatinatus, Infraspinatus, Teres minor & Subscapularis.
(D) None of these.
31. Wrist drop is due to:
(A) Ulnar nerve lesion.
(B) Median nerve lesion.
(C) Sciatic nerve lesion.
(D) Radial nerve lesion.
32. Parts of Mid brain are:
(A) Colliculi, tegmentum & cerebral peduncles.
(B) Frontal lobe, pons& spinal cord.
(C) Cauda equina, thalamus & putamen.
(D) None of these.

33. Muscles of mastication are:
(A) Temporalis, buccinators, masseter & orbicularis oris.
(B) Medial & lateral pterygoid, orbicularis oris & zygomatic major.
(C) Masseter, medial & lateral pterygoid & temporalis.
(D) None of these.
34. Smallest bone of Human skeleton:
(A) Stapes.
(B) Hamate.
(C) Pisiform.
(D) Capitate.
35. Function of Olfactory nerve:
(A) Sense of smell.
(B) Sense of taste.
(C) Visual.
(D) Auditory.
36. How many Bones in axial skeleton (adult)?
(A) 70.
(B) 80.
(C) 126.
(D) 90.
37. Hip joint is an example of:
(A) Saddle joint.
(B) Synovial joint.
(C) Hinge joint.
(D) None of these.
38. Popliteus muscle in the leg is used for.....while walking:
(A) Locking of knee.
(B) Unlocking of knee.
(C) Ankle dorsiflexion.
(D) None of these.
39. Mechanical advantage of lever is equal to:
(A) Length of effort arm divided by length of weight arm.
(B) Length of weight arm divided by length of effort arm.
(C) Length of weight arm multiplied by length of effort arm.
(D) Length of effort arm subtracted from length of weight arm.
40. Intrinsic muscles of hand are supplied by:
(A) Median nerve.
(B) Radial nerve.
(C) Musculo-cutaneous nerve.
(D) Femoral nerve.

41. Function of Patella in the movement of knee:
- (A) Anatomic pulley for quadriceps.
 - (B) Anatomic pulley for Hamstring.
 - (C) Anatomic pulley for calf muscle.
 - (D) None of these.
42. Nodding movement of head means:
- (A) Downward & upward movement of head.
 - (B) Side to side movement of head.
 - (C) Movement just like answering No.
 - (D) None of these.
43. Trendellenburg test is done to detect:
- (A) Weakness of hip abductor muscles.
 - (B) Weakness of hip adductor muscles.
 - (C) Weakness of hip flexor muscles.
 - (D) Weakness of hip rotator muscles.
44. Iontophoresis means:
- (A) Ion Transfer.
 - (B) Molecule Transfer.
 - (C) Sound Transfer.
 - (D) None of These.
45. Secretions in lungs is cleared by—:
- (A) AROM.
 - (B) PROM.
 - (C) Mobilization of vertebral joints.
 - (D) Postural Drainage.
46. Name of 7th Cranial nerve:
- (A) Vagus.
 - (B) Olfactory.
 - (C) Optic.
 - (D) Facial.
47. McBurney's incision is used to access:
- (A) Appendectomy.
 - (B) Splenectomy.
 - (C) Gall Bladder operation.
 - (D) Pneumonectomy.
48. Which trimester in pregnancy is relatively uneventful?
- (A) 1st Trimester.
 - (B) 3rd Trimester.
 - (C) 4th Trimester.
 - (D) 2nd Trimester.
49. A Boutonniere deformity present as:
- (A) PIP-flexed & DIP- hyperextended.
 - (B) MCP flexed & PIP hyperextended.
 - (C) MCP Hyperextended & DIP Flexed.
 - (D) None of these.

50. Which of the following would show the best conductivity of all tissues to the electrical current?
- (A) Tendons.
 - (B) Muscles.
 - (C) Bones.
 - (D) Skin.
51. A Proximal Interphalangeal (PIP) cylindrical blocking splint encourages?
- (A) Flexor digitorum superficialis (FDS) excursion at PIP joint.
 - (B) Flexor digitorum superficialis (FDS) excursion at DIP joint.
 - (C) Flexor Digitorum Profundus (FDP) excursion at PIP joint.
 - (D) Flexor Digitorum Profundus (FDP) excursion at DIP joint.
52. Orthostatic Hypotension is most common in patients with Spinal Cord Injury:
- (A) At T10 level and above.
 - (B) At T6 level and above.
 - (C) At L2 level and above.
 - (D) All of the above.
53. Isometric contractions are allowed in Rheumatoid arthritis patient:
- (A) At 60 % of maximum voluntary contraction.
 - (B) At 70 % of maximum voluntary contraction.
 - (C) At 80 % of maximum voluntary contraction.
 - (D) Isometrics are not allowed.
54. An occupational therapist observes a child with a learning disability who uses an unusually tight grip when writing with a pencil. This type of problem is most likely caused by inadequate sensory information from the:
- (A) Vestibular system.
 - (B) Auditory system.
 - (C) Somatosensory system.
 - (D) Visual system.
55. Exercise Heart rate range of a 50 year old Individual will be:
- (A) 65-145 beats per minute.
 - (B) 45-145 beats per minute.
 - (C) 75-149 beats per minute.
 - (D) 85-149 beats per minute.
56. The Total Active Motion (TAM) in a patient with MP joint flexion 85 degree with full extension, PIP flexion 100 degree with a lacking of 15 degree extension and DIP flexion is 65 degree with full extension will be:
- (A) 135 degree.
 - (B) 200 degree.
 - (C) 235 degree.
 - (D) 245 degree.

57. The available ROM at elbow joint is 0° - 90° . During Manual Muscle Testing (MMT) it was found that the part moved through full ROM against gravity and took less than moderate resistance. The muscle strength will be graded as:
- (A) 3+.
 - (B) 3-.
 - (C) 4-.
 - (D) 4+.
58. Reversal of Antagonists techniques in Proprioceptive Neuromuscular Facilitation is based on:
- (A) Sherrington's principles of successive induction.
 - (B) Principle of Reciprocal Inhibition.
 - (C) Principle of Irradiation.
 - (D) All of the above.
59. A child running in the playground trips and falls forward, landing on outstretched arms. This behaviour is best described as:
- (A) Primitive reflex.
 - (B) Vertical righting reactions.
 - (C) Protective extension response.
 - (D) Rotary righting reactions.
60. Ability to stand on tip toe indicates:
- (A) Muscle grade 2 of ankle planter flexors.
 - (B) Muscle grade 5 of ankle planter flexors.
 - (C) Muscle grade 2 of ankle Dorsi flexors.
 - (D) Muscle grade 5 of ankle Dorsi flexors.
61. Use of components such as Velcro , Hinges etc. in a splint are example of:
- (A) Serial static splint.
 - (B) Static splint.
 - (C) Static progressive splint.
 - (D) Dynamic splint.
62. Most of the muscles in human body work in ----- lever system when they contract concentrically to produce speed and range of motion:
- (A) First class lever system.
 - (B) Second class lever system.
 - (C) Third class lever system.
 - (D) All of the above.
63. A patient with left homonymous hemianopsia has:
- (A) Decreased or absent vision in the nasal field of the right eye and the temporal field of the left eye.
 - (B) Decreased or absent vision in the nasal field of the left eye and the temporal field of the right eye.
 - (C) Decreased or absent vision in the nasal field of the right eye and the temporal field of the right eye.
 - (D) Decreased or absent vision in the nasal field of the left eye and the temporal field of the left eye.

64. Place and hold exercises are effective in achieving increased range of motion when:
- (A) Active ROM exceeds Passive ROM.
 - (B) Passive ROM exceeds Active ROM.
 - (C) Passive ROM and Active ROMs are equal.
 - (D) None of the above.
65. Strategic planning for Return to work involves putting the injured worker in the following sequence of duties:
- (A) At injury Job, transitional duty, alternative duty, normal duty.
 - (B) At injury job, alternative duty, transitional duty, normal duty.
 - (C) At injury job, Transitional duty, normal duty, alternative duty.
 - (D) At injury job, alternative duty, normal duty, transitional duty.
66. MET level of activities that are allowed in the inpatient phase of cardiac rehabilitation is:
- (A) 4 MET activities.
 - (B) 3.5 MET activities.
 - (C) 4.5 MET activities.
 - (D) 6 MET activities.
67. In Festinating gait seen in Parkinson's disease:
- (A) As client walks, the stride length decreases in length.
 - (B) As client walks, the step length decreases in length.
 - (C) As client walks, the stride length increases in length.
 - (D) As client walks, the step length increases in length.
68. Bringing a hot cup of coffee to the mouth to take a drink and carefully lowering it back down to the table is an example of:
- (A) Closed chain movement with eccentric and concentric contraction.
 - (B) Open chain movement with eccentric and concentric contraction.
 - (C) Closed chain movement with concentric contraction.
 - (D) Open chain movement with eccentric contraction.
69. Kleinert 's flexor tendon injury management protocol includes:
- (A) Passive flexion and active extension.
 - (B) Passive flexion and extension.
 - (C) Active flexion and extension.
 - (D) All of the above.
70. Autonomic dysreflexia is a phenomenon seen in persons with spinal cord injury:
- (A) At C4 –C6 Level.
 - (B) Above C4 –C6 Level.
 - (C) At T4-T6 level.
 - (D) Above T4-T6 level.

71. Which of the following statement is correct:
- (A) A patient with C7-8 level of spinal cord injury will be able to propel a manual wheelchair independently.
 - (B) A patient with C7-8 level of spinal cord injury will be able to propel a power wheelchair independently.
 - (C) A patient with C7-8 level of spinal cord injury will be able to propel a manual wheelchair independent to some assist indoors with non-carpeted, level surface.
 - (D) A patient with C7-8 level of spinal cord injury will be able to propel a manual wheelchair independently with standard arm drive on all surfaces.
72. A patient with Traumatic Brain Injury having initial Glasgow Coma Scale score of 9 to 12, Post Traumatic Amnesia of 1-24 hours has a severity classification of:
- (A) Mild severity.
 - (B) Moderate.
 - (C) Severe.
 - (D) Profound.
73. Measurement by using Manual Muscle Testing is a:
- (A) Standardized Test.
 - (B) Non standardized Test.
 - (C) Ratio level of measurement.
 - (D) Interval level of measurement.
74. In an ergonomically designed chair, the seat pan or back angle should be:
- (A) 80-110 degrees.
 - (B) 90-105 degrees.
 - (C) 90-110 degrees.
 - (D) 80-130 degrees.
75. Forearm pain preceding weakness of Flexor pollicis longus, Flexor digitorum profundus I & II and pronator quadratus indicates presence of:
- (A) Cubital tunnel syndrome.
 - (B) Carpal tunnel syndrome.
 - (C) Pronator syndrome.
 - (D) Thoracic outlet syndrome.
76. In Duchene's muscular dystrophy the child is unable to walk by:
- (A) 3 to 4 years.
 - (B) 8 to 11 years.
 - (C) 13 to 20 years.
 - (D) 13 to 15 years.
77. -----If persists interferes with standing and walking may evoke toe walking:
- (A) Rooting.
 - (B) Crossed extension.
 - (C) Flexor withdrawal.
 - (D) Plantar grasp.

78. The child plays with toys similar to those used by other children near him or her but plays beside rather than with children is a:
- (A) Onlooker play.
 - (B) Solitary independent play.
 - (C) Parallel play.
 - (D) Associative play.
79. Senile Dementia is a psychotic condition resulting in part from:
- (A) Brainstem deterioration.
 - (B) Cerebral Deterioration.
 - (C) Cortex Deterioration.
 - (D) None of the above.
80. In progressing Job Simulation activities, if the program is predicted to last four weeks the program should equal approximately:
- (A) 1/4th of the goal each week.
 - (B) 1/2 of the goal each week.
 - (C) 1/3rd of the goal each week.
 - (D) 1/6th of the goal each week.
81. When evaluating a child who is at risk for shunt malfunction, it is MOST important for the therapist to observe for:
- (A) Increased tone.
 - (B) Decreased tone.
 - (C) Back pain.
 - (D) Irritability and nausea.
82. A high school teacher diagnosed with a right-hemisphere CVA is given a paper with letters of the alphabet displayed in random order across the page and is instructed to cross out every "M." The individual misses half of the "M"s in a random pattern, which MOST likely indicates:
- (A) A left visual field cut.
 - (B) A right visual field cut.
 - (C) Functional illiteracy.
 - (D) Decreased attention.
83. During an initial interview, parents described their child as having severe difficulty communicating and interacting with others. The OT also observes that the child exhibits many repetitive and ritualistic behaviours. The behaviours described are MOST likely to be associated with:
- (A) Attention deficit hyperactivity disorder.
 - (B) Childhood conduct disorder.
 - (C) Obsessive-compulsive disorder.
 - (D) Pervasive developmental disorder of childhood.

84. An OT practitioner is treating an individual who demonstrates progressive weakness and atrophy of the thenar muscles and numbness and tingling in the thumb, index and middle fingers. The individual is not experiencing proximal upper extremity limitations so the practitioner will MOST likely suspect problems with which of the following:
- (A) Ulnar nerve.
 - (B) Median nerve.
 - (C) Radial nerve.
 - (D) Brachial plexus.
85. The OT practitioner has just completed observing a child eating lunch. Which of the following statements BEST describes an objective observation?
- (A) The child did not appear to like the food presented.
 - (B) The child demonstrated tongue thrust.
 - (C) The child was uncooperative and kept pushing the food out of his/her mouth.
 - (D) The child was obviously not hungry at the time.
86. An individual is able to complete the full range of shoulder flexion while in a side-lying position during an evaluation. However, against gravity, the individual is not quite able to achieve 75% of the range for shoulder flexion. This muscle should be graded as:
- (A) Good (4).
 - (B) Fair (3).
 - (C) Fair minus (3-)
 - (D) Poor plus (2+).
87. Minnesota rate of manipulation test(MRMT) assesses:
- (A) Finger dexterity.
 - (B) Gross motor coordination.
 - (C) Manual or gross motor dexterity.
 - (D) Hand function in terms of ADL.
88. Kleinerts protocol for flexor tendon injury uses:
- (A) Passive digital flexion and extension within the protective splint.
 - (B) Passive flexion-active extension with rubber band attachments to finer nails.
 - (C) Active flexion and extension of digits.
 - (D) Immobilization of digits.
89. Early intervention describes services for children from:
- (A) 1 year to 3 years.
 - (B) 9 year to 12 years.
 - (C) Birth to 5 years.
 - (D) All of the above.
90. Tactile defensiveness is a disorder of:
- (A) Sensory registration.
 - (B) Sensory modulation.
 - (C) Sensory discrimination.
 - (D) All of the above.

91. Dysthymia is a type of:
(A) Mood disorder.
(B) Eating disorder.
(C) Anxiety disorder.
(D) Thermoregulatory disorder of body.
92. Semmes-Weinstein Monofilaments are used to assess:
(A) Cutaneous pressure thresholds.
(B) Light touch sensation.
(C) Vibration.
(D) Tactile discrimination.
93. Normal two point discrimination at the finger tip is:
(A) 8 mm.
(B) 6 mm or less.
(C) 10 mm.
(D) 8 to 12 mm.
94. If active range of motion (AROM) is less than Passive Range of Motion (PROM), then there is a problem of:
(A) Ligament tightness.
(B) Capsular tightness.
(C) Muscle tightness.
(D) Muscle weakness.
95. Use of velcros, hinges, turn-buckle screws in fabricating orthosis to create a mobilizing force to regain motion is a:
(A) Static splint.
(B) Serial static splint.
(C) Static progressive splint.
(D) Dynamic splint.
96. According to Brunnstrom Stages of Motor Recovery (Hand), palmer prehension is possible in:
(A) Stage II.
(B) Stage III.
(C) Stage IV.
(D) Stage V.
97. Sensory Reeducation can begin when the patient first can appreciate:
(A) Vibration.
(B) Pressure.
(C) Deep, moving touch.
(D) Touch localization.
98. Codman's pendulum exercises may be contraindicated if the upper extremity has:
(A) Stiffness.
(B) Sensory loss.
(C) Muscle weakness.
(D) Oedema.

99. Mobile arm support is commonly used in:
- (A) C1 to C4 level of complete tetraplegia.
 - (B) C5 tetraplegia.
 - (C) C6 and C7 tetraplegia.
 - (D) C8 tetraplegia.
100. An occupational therapist is working on pre writing skills with an 11 month old child. Which of the following activities would be most appropriate for the therapist to instruct the child to perform?
- (A) Scribble on a piece of paper.
 - (B) Copy a triangle.
 - (C) Copy a horizontal line on a paper.
 - (D) Copy numerals on a sheet of paper.

ROUGH WORK ONLY