

**JEMAS(PG)-2024**  
**Subject: Master of Occupational Therapy (MOT)**

**QB No: 4102600001**

**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, zero (0) marks 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: \_\_\_\_\_

ROUGH WORK ONLY

# **MOT**

## **Group- A**

1. A child should be able to maintain its head in the midline position by what age?
  - (A) 2 months.
  - (B) 4 months.
  - (C) 6 months.
  - (D) 8 months.
  
2. A hyperextension injury that occurs due to low-velocity trauma that affects primarily the upper extremities is called?
  - (A) Anterior cord syndrome.
  - (B) Central cord syndrome.
  - (C) Brown Sequard syndrome.
  - (D) Cauda equina syndrome.
  
3. As per the American Spinal Injury Association (ASIA) examination, the C8 myotome correlates with which muscle group?
  - (A) Elbow flexors.
  - (B) Elbow extensors.
  - (C) Wrist extensors.
  - (D) Long finger flexors.
  
4. Destruction of which component of the skin leads to hypopigmentation in burn patients?
  - (A) Melanocytes.
  - (B) Keratinocytes.
  - (C) Basement membrane.
  - (D) Hair follicles.
  
5. Heberden's nodes are a common feature in which of the following disease processes?
  - (A) Rheumatoid arthritis.
  - (B) Osteoarthritis.
  - (C) Psoriatic arthritis.
  - (D) Gout.
  
6. In a transient ischemic attack (TIA), the symptoms last for \_\_\_\_
  - (A) < 24 hours.
  - (B) > 24 hours.
  - (C) > 48 hours.
  - (D) > 1 week.
  
7. Most common site of a Morton's neuroma is \_\_\_\_
  - (A) First intermetatarsal space.
  - (B) Second intermetatarsal space.
  - (C) Third intermetatarsal space.
  - (D) Fourth intermetatarsal space.
  
8. The Achilles reflex assesses which nerve root?
  - (A) L4.
  - (B) L5.
  - (C) S1.
  - (D) S3.

9. Unawareness of illness in patients with spatial neglect is called \_\_\_\_\_
- (A) Asomatognosia.
  - (B) Anosodiaphoria.
  - (C) Anosognosia.
  - (D) Apraxia.
10. What level spinal cord injury leads one to be concerned about the risk of developing autonomic dysreflexia?
- (A) T4 and above.
  - (B) T6 and above.
  - (C) T8 and above.
  - (D) T10 and above.
11. Where are the central respiratory control centres located?
- (A) Thalamus.
  - (B) Cortex.
  - (C) Medulla.
  - (D) Hippocampus.
12. Which of these braces is used for low thoracic spine scoliosis?
- (A) Jewett brace.
  - (B) Milwaukee brace.
  - (C) Knight brace.
  - (D) William's brace.
13. Which position causes the highest lumbar intradiscal pressure?
- (A) Standing.
  - (B) Sitting.
  - (C) Walking.
  - (D) Lying supine.
14. Empty Cane Test is performed to assess the lesion of:
- (A) Soleus muscle.
  - (B) Tibialis anterior muscle.
  - (C) Supraspinatus muscle.
  - (D) Brachioradialis muscle.
15. The word "Talipes" refers to:
- (A) Long feet with spidery toes.
  - (B) Flat feet.
  - (C) Club feet.
  - (D) Hammer toes.
16. Tuberculosis of spine is known as:
- (A) Pott's disease.
  - (B) Scheuermann's disease.
  - (C) Perthes disease.
  - (D) Frieberg's disease.
17. A diet deficient in calcium will most commonly results in:
- (A) Osteomalacia.
  - (B) Rickets.
  - (C) Osteoporosis.
  - (D) Osteitis fibrosa.

18. Brown-sequard syndrome is due to?  
(A) Full section of spinal cord.  
(B) Cross section of spinal nerve.  
(C) Hemisection of spinal cord.  
(D) Vertical section of spinal cord.
19. In Seddon's classification, complete division of nerve is:  
(A) Neuropraxia.  
(B) Axonotmesis.  
(C) Neurotmesis.  
(D) Dendrotmesis.
20. Gower's sign is seen positive in?  
(A) Parkinson's disease.  
(B) Adult Hemiplegia.  
(C) Cerebral Palsy.  
(D) Duchenne muscular dystrophy.
21. Which of the following spinal cord pathways is responsible for pain and temperature?  
(A) Dorsal columns.  
(B) Anterior spinothalamic.  
(C) Spinoreticular.  
(D) Lateral spinothalamic.
22. A Bicep curl using a Dumbbell is an example of :  
(A) Isotonic exercise.  
(B) Isokinetic exercise.  
(C) Isometric exercise.  
(D) PNF exercise.
23. Fracture shaft humerus is associated with:  
(A) Axillary nerve injury.  
(B) Radial nerve injury.  
(C) Brachial plexus injury.  
(D) Median nerve injury.
24. Exercises that occur in rounds and consist of continuous training:  
(A) Open kinematic chain.  
(B) Close kinematics chain.  
(C) Circuit training.  
(D) Isometric.
25. Centre of gravity of adult humans in the anatomical position is slightly:  
(A) Anterior to S1 vertebra.  
(B) Posterior to S1 vertebra.  
(C) Anterior to s2 vertebra.  
(D) Posterior to s2 vertebra.
26. Electrical silence(ie., no EMG activity) at rest is:  
(A) Normal.  
(B) Abnormal.  
(C) Denervation.  
(D) Occurs in polymyositis.

27. Which of the following is the most appropriate orthosis for a patient with excessive foot pronation during static standing?
- (A) Scaphoid pad.
  - (B) Metatarsal pad.
  - (C) Metatarsal bar.
  - (D) Rocker bar.
28. For meniscus injury there should be:
- (A) Shear of compressed knee.
  - (B) Torsion of compressed knee.
  - (C) Shear and torsion of knee.
  - (D) Torsion of extended knee.
29. Leg lowering from extended knee position, Quadriceps work?
- (A) Concentrically.
  - (B) Eccentrically.
  - (C) Statically.
  - (D) Isokinetically.
30. Froment's test is done for:
- (A) Intrinsic muscles.
  - (B) Abductor pollicis brevis.
  - (C) Adductor pollicis.
  - (D) Oppenens pollicis.
31. Following is the correct for Chopart's amputation:
- (A) Inter-tarsal.
  - (B) Tarsometatarsal.
  - (C) Carpometacarpal.
  - (D) None of above.
32. 10 RM load refers to:
- (A) A weight that can be lifted less than 10 times as it is too heavy.
  - (B) A maximum weight that can be lifted for minimum 10 times.
  - (C) A minimum weight that can be lifted for maximum 10 times.
  - (D) A weight that can be lifted only 10 times and is too heavy to be lifted more than 10 times.
33. Which muscles bilateral weakness patient use bilateral crutches:
- (A) Gluteus Medius.
  - (B) Gluteus Maximus.
  - (C) Quadriceps.
  - (D) Hamstrings.
34. A patient has just undergone a total hip replacement via a posterior surgical approach. Which of the following combinations of movements of the hip are MOST important to avoid?
- (A) Extension, medial rotation, and abduction.
  - (B) Extension, external rotation, and adduction.
  - (C) Flexion, medial rotation, and adduction.
  - (D) Flexion, external rotation, and abduction.

35. A patient presents with rheumatoid arthritis and finger pain. The 2nd digit has a flexed metacarpophalangeal joint, hyperextended proximal interphalangeal joint, and a flexed distal interphalangeal joint. Which of the following is the MOST accurate description of the position?
- (A) Swan neck deformity.
  - (B) Boutonniere deformity.
  - (C) Mallet finger deformity.
  - (D) De Quervain syndrome.
36. After working for several hours as a mechanic, a patient describes sharp elbow pain over the origin point of the common extensor tendon of the wrist extensors. The pain is alleviated with rest. Which of the following disorders is MOST likely present?
- (A) Medial epicondylitis.
  - (B) Lateral epicondylitis.
  - (C) Anconeus tendonitis.
  - (D) Olecranon bursitis.
37. Absence of sensibility to vibration:
- (A) Dysesthesia.
  - (B) Atopognosia.
  - (C) Thigmanesthesia.
  - (D) Pallanesthesia.
38. VAS is used for:
- (A) Pain.
  - (B) Incontinence.
  - (C) Both.
  - (D) None of the above.
39. A patient presents to the clinic with right shoulder pain and complains of difficulty reaching overhead, with pain especially from 60-120 degrees of shoulder flexion. Which special test would be MOST informative for this set of symptoms?
- (A) Neer Test.
  - (B) Hawkins-Kennedy Test.
  - (C) Crossover Test.
  - (D) Push Off Test.
40. Continuous passive motion apparatus is used to:
- (A) Increase range of motion.
  - (B) Maintain range of motion.
  - (C) Strengthen knee muscles.
  - (D) All of the above.
41. Measurement of axillary crutches?
- (A) 5cm below posterior axillary and 15 cm laterally with patient in supine lying.
  - (B) 7cm below anterior axilla and 10 cm laterally with patient in standing position.
  - (C) 4cm below anterior axilla and 10cm medially with patient supine lying.
  - (D) 5cm below post axilla and 12cm laterally with patient standing.

42. If a magnetic resonance image (MRI) correctly identifies 95% of patients as positive for anterior cruciate ligament tears, then the MRI is:
- (A) Sensitive.
  - (B) Specific.
  - (C) Significant.
  - (D) Stable.
43. Minimum score for GCS scale is:
- (A) 6.
  - (B) 3.
  - (C) 9.
  - (D) 15.
44. Microwaves are strongly absorbed by:
- (A) Water.
  - (B) Fat.
  - (C) Protein.
  - (D) Muscle tissues.
45. Glucosamine is mainly used to treat:
- (A) Arthritis.
  - (B) Diabetes.
  - (C) Pancreatic cancer.
  - (D) Parkinsonism.
46. Low birth baby is one with a birth weight of:
- (A) <1000gms.
  - (B) <3500gms.
  - (C) <2500gms.
  - (D) <1500gms.
47. Reflex which is not present in child at birth is:
- (A) Moro's reflex.
  - (B) Symmetric tonic neck reflex.
  - (C) Crossed extensor reflex.
  - (D) Asymmetric tonic neck reflex.
48. ASH brace is used for:
- (A) Dorsolumbar spine injury.
  - (B) Cervical spine injury.
  - (C) Both.
  - (D) None.
49. After death the time period of eye to be death?
- (A) 5 min.
  - (B) 10 hour.
  - (C) 4 hour.
  - (D) 15 hour.
50. A person of age 60 years has a 40% burn, the survival chance % of that person is:
- (A) 0%.
  - (B) 10%.
  - (C) 50%.
  - (D) 40%.

## Group- B

1. Large weight bearing muscles(thighs, hips)have large number of motor units upto:
  - (A) 100-200
  - (B) 20-40
  - (C) 5-50
  - (D) 500-1000
  
2. All of the enzymes are elevated in myocardial infarction EXCEPT:
  - (A) Alkaline phosphatase
  - (B) Lactate Dehydrogenase
  - (C) Aspartate Transaminase
  - (D) Creatine Kinase
  
3. One of the principal functions of Basal ganglia is:
  - (A) Sensory integration.
  - (B) Short-term memory formation.
  - (C) Planning of motor movements.
  - (D) REM sleep maintenance.
  
4. The therapist is teaching a client to acquire ADL skills. During the first sequence in the session the therapist assists the client to perform an ADL until the last step of the process is reached. The client successfully acquires the last step by himself. In the next sequence of the session the client is able to successfully complete the last two steps. This method of teaching is called.
  - (A) Forward chaining.
  - (B) Back ward chaining.
  - (C) Top down approach.
  - (D) Bottom up approach.
  
5. 'X' Linked Recessive Muscular dystrophy is \_\_\_\_\_.
  - (A) Spinal Muscular Atrophy.
  - (B) Facioscapulo humeral muscular dystrophy.
  - (C) Duchenne muscular dystrophy.
  - (D) Myotonic dystrophy.
  
6. Parkinson's Disease is NOT characterized by:
  - (A) Rest Tremors
  - (B) Rigidity
  - (C) Bradykinesia
  - (D) Fasciculations
  
7. All are monosynaptic reflexes EXCEPT:
  - (A) Ankle jerk.
  - (B) Abdominal reflex.
  - (C) Knee jerk.
  - (D) Tricep jerk.
  
8. TOWER work sample Test has all of the following occupational areas for assessment EXCEPT:
  - (A) Lettering.
  - (B) Plumbing.
  - (C) Mail Clerk.
  - (D) Drawing.

9. Hallucination is a disorder of:  
(A) Thought.  
(B) Perception.  
(C) Impulse.  
(D) Idea.
10. Jean Piaget identified the following categories of plays EXCEPT:  
(A) Practice.  
(B) Symbolic.  
(C) Dramatic.  
(D) Constructional.
11. 'Calcaneal gait', pattern characterized by greater than normal amounts of dorsiflexion and knee flexion during stance phase and a shorter than normal step length on affected side, is seen in weakness of which muscles:  
(A) Dorsiflexors of ankle.  
(B) Knee flexors.  
(C) Knee extensors.  
(D) Plantarflexors of ankle.
12. The linear forces mainly cause:  
(A) Floating effect.  
(B) Directional effect.  
(C) Tension effect.  
(D) Rotational effect.
13. As identified by Mosey, all of the following elements should be present for therapeutic use of self, EXCEPT.  
(A) Humor.  
(B) Perception of individuality.  
(C) Authoritative behaviour.  
(D) Respect for dignity.
14. The use of 'trial and error learning' and 'inductive reasoning', is part of which stage of Allen's cognitive levels:  
(A) Level 3 -manual actions.  
(B) Level 4-goal directed actions.  
(C) Level 5-exploratory actions.  
(D) Level 6-planned actions.
15. To develop interest and stimulate co-ordinated movements in children with Intellectual disability, which of the following method is MOST used:  
(A) Encourage delicate movement.  
(B) Skipping exercise.  
(C) Improving fine motor co-ordination.  
(D) Dancing to music.
16. These muscles act during screw movement of the knee joint. They are:  
(A) Hamstrings, gastrocnemius.  
(B) Gastrocnemius, popliteus.  
(C) Popliteus, quadriceps.  
(D) Quadriceps, soleus.

17. All of the following behavior are associated with impaired decision making, EXCEPT:
- (A) Ambivalence.
  - (B) Dependence.
  - (C) Indecisiveness.
  - (D) Assertiveness.
18. The most common position of dislocation for shoulder joint is:
- (A) Anterior.
  - (B) Inferior.
  - (C) Posterior.
  - (D) Antero inferior.
19. A wrist driven wrist hand orthoses is indicated in clients having wrist extensor strength:
- (A) 2 or greater.
  - (B) 2+ or greater.
  - (C) 3 or greater.
  - (D) 3+ or greater.
20. All of the following are progressive phases in physiologic stages during sexual response cycle EXCEPT:
- (A) Volition.
  - (B) Plateau.
  - (C) Excitement.
  - (D) Resolution.
21. Which of the following pathways occurs partly in mitochondria and partly in cytoplasm?
- (A) TCA cycle.
  - (B) Glycolysis.
  - (C) Glycogenesis.
  - (D) Urea cycle.
22. The following frame of reference is applicable to a patient of all ages and diagnoses:
- (A) Acquisitional.
  - (B) Model of human Occupation.
  - (C) Psychodynamic.
  - (D) Sensory Integration.
23. Which nerve injury shows 'Pointing index' sign?
- (A) Median nerve.
  - (B) Ulnar nerve.
  - (C) Radial nerve.
  - (D) Axillary nerve.
24. Endurance in human body is greatly enhanced by:
- (A) Protein diet.
  - (B) Carbohydrate diet.
  - (C) Mixed diet.
  - (D) High fat diet.

25. Following theory of aging states that aging occurs due to Accumulation of replication of errors and reduced metabolism:
- (A) Psychological.
  - (B) Environmental.
  - (C) Social.
  - (D) Biological.
26. For claw hand deformity in leprosy, following splint is recommended?
- (A) Resting Pan.
  - (B) Radial cock up.
  - (C) Knuckle bender.
  - (D) Finger gutter.
27. Patient experiences shortness of breath during continued tasks. Therapist should ideally advice the patient the following breathing technique as part of work simplification and energy conservation.
- (A) Diaphragmatic Breathing.
  - (B) Pursed lip Breathing.
  - (C) Intercostal Breathing.
  - (D) Normal Breathing.
28. Following activity is not permitted when a cardiac patient is categorized under functional classification of grade III:
- (A) Walk on a slope.
  - (B) Getting in and out of bed.
  - (C) Walk in the room.
  - (D) Shaving.
29. In above Elbow body powered prosthesis, control training is started with:
- (A) Elbow (lock / unlock).
  - (B) Forearm Lift.
  - (C) Terminal Device.
  - (D) Turn Table operation.
30. Difficulty with the planning and execution of movement patterns that are skilled or nonhabitual in nature and originate in childhood is called as:
- (A) Developmental Dyspraxia.
  - (B) Sensory Modulation Dysfunction.
  - (C) Bilateral Integration and sequencing dysfunction.
  - (D) Sensory Discrimination Dysfunction.
31. According to Brunnstrom's stages of recovery of the hand - "mass grasp or hook grasp with no voluntary finger extension or release" is graded as following stage:
- (A) II
  - (B) III
  - (C) IV
  - (D) V
32. Ten readings of BP (Blood Pressure) taken before and after treatment are compared by applying:
- (A) Paired 't' Test.
  - (B) 'Z' Test.
  - (C) Students 't' Test.
  - (D) Correlation Test.

33. The frequently occurring value in a data is:  
(A) Median.  
(B) Mode.  
(C) Standard Deviation.  
(D) Mean.
34. The primary area of the residual limb used for weight bearing in a transtibial prosthesis is the -----  
(A) Patella tendon.  
(B) Distal end of the residual limb.  
(C) Lateral tibial condyle.  
(D) Fibular head.
35. A therapist modifies a wheelchair to allow the rear wheels to be moved backward by approximately two inches. This type of modification would be most beneficial to a patient with:  
(A) Tetraplegia.  
(B) Paraplegia.  
(C) Flaccid hemiplegia.  
(D) Bilateral lower extremity amputations.
36. Which of the following tendons is most commonly ruptured in RA?  
(A) Abductor pollicislongus  
(B) Extensor pollicisbrevis  
(C) Extensor pollicislongus  
(D) Extensor indicis
37. Cob's angle is measured in  
(A) Kyphosis.  
(B) Scoliosis.  
(C) Lordosis.  
(D) Lateral flexion.
38. Myositis ossificancetrumatica is commonest in which of the following joints?  
(A) Hip.  
(B) Knee.  
(C) Elbow.  
(D) Shoulder.
39. Paraplegia in tuberculosis is most common in which region of the spine?  
(A) Cervical spine.  
(B) Dorsal spine.  
(C) Lumbar spine.  
(D) Sacral spine.
40. Pyramidal tract neurons lie in the:  
(A) Precentralgyrus.  
(B) Postcentralgyrus.  
(C) Superior temporal gyrus.  
(D) Inferior temporal gyrus.

41. It is not a sign of injury to lower motor neuron:
- (A) Hypertonia.
  - (B) Reduced tendon reflexes.
  - (C) Flexor plantar response.
  - (D) Fasciculation.
42. Contraction is slow in which type of muscle fiber:
- (A) Type I.
  - (B) Type II A.
  - (C) Type II B.
  - (D) All of the above.
43. Clasp knife rigidity is seen in:
- (A) Upper motor neuron lesion.
  - (B) LMN lesion.
  - (C) Parkinsonism.
  - (D) All of the above.
44. While evaluating extension range of motion of shoulder the axis of the movement lies where?
- (A) 1" above the acromion process through the lateral aspect of GH joint.
  - (B) Acromion process through the lateral aspect of GH joint.
  - (C) 1" below the acromion process through the lateral aspect of GH joint.
  - (D) Any where in the GH joint.
45. The built environment that enhances optimal function and convenience for everyone, regardless of ability is known as-----
- (A) Accessible design.
  - (B) Universal design.
  - (C) Barrier free design.
  - (D) Reasonable accommodation.
46. Movement of an object or segment around a fixed axis in a curved path is:
- (A) Translatory motion.
  - (B) Linear motion.
  - (C) Curvilinear motion.
  - (D) Rotatory motion.
47. The mechanical work done by a muscle during ----- is called negative work
- (A) Concentric contraction.
  - (B) Eccentric contraction.
  - (C) Isometric contraction.
  - (D) Isokinetic contraction.
48. Delusion of persecution, relatively a rare disorder is known as -----
- (A) Mania.
  - (B) Depression.
  - (C) Catatonia.
  - (D) Paranoia.

49. In hanging the dislocation occurs at which joint?

- (A) Atlanto axial joint.
- (B) Atlanto occipital joint.
- (C) C2-C3 joint.
- (D) None of the above.

50. SOMI brace is:

- (A) Sterno-occipial mandibular immobilization.
- (B) Scapula-occipital manubrium immobilization.
- (C) Supraobturator muscle immobilization.
- (D) Scapula-occipital manipulation instrument.