



JEPAS(PG)-2020
Master of Physiotherapy (MPT- Sports Medicine/ Neurology/ Orthopaedics)-2020

Duration: 90 minutes

Full Marks: 100

Instructions

1. All questions are of objective type having four answer options for each. Only one option is correct. Correct answer will carry full marks 1. In case of incorrect answer or any combination of more than one answer, $\frac{1}{4}$ mark will be deducted.
2. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C, or D.
3. Use only **Black/Blue ball point pen** to mark the answer by complete filling up of the respective bubbles.
4. Mark the answers only in the space provided. Do not make any stray mark on the OMR.
5. Write your roll number carefully in the specified locations of the **OMR**. Also fill appropriate bubbles.
6. Write your name (in block letter), name of the examination centre and put your full signature in appropriate boxes in the OMR.
7. The OMR is liable to become invalid if there is any mistake in filling the correct bubbles for roll number or if there is any discrepancy in the name/ signature of the candidate, name of the examination centre. The OMR 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, docu-pen, log table, wristwatch, any communication device like mobile phones etc. inside the examination hall. Any candidate found with such items will be **reported against** & his/her candidature will be summarily cancelled.
9. Rough work must be done on the question paper itself. Additional blank pages are given in the question paper for rough work.
10. Hand over the OMR to the invigilator before leaving the Examination Hall.

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1) The reflex/reaction can be used to facilitate tone by lying a person prone or supine.

- a) ATNR
- b) STNR
- c) TLR
- d) TLmR

2) Which of the following carpal bones is not found in the proximal row?

- a) Capitate
- b) Scaphoid
- c) Lunate
- d) Triquetrum

3) Long handled reacher are used when the patient are having

- a) Limited JROM of shoulder and elbow
- b) Weak Grasp
- c) Weak Pinch
- d) None

4) The ergonomics program includes

- a) Work site analysis
- b) Hazard prevention and control
- c) Training and education
- d) All of the above

5) Which condition would not be considered a contraindication for TENS?

- a) Placement over carotid sinus
- b) Use during labor and delivery.
- c) Patient with cardiac pacemaker
- d) Placement over pregnant uterus.

6) Baker's cyst is

- a) Prepatellar bursitis
- b) Infrapatellar
- c) Synovial cavity extension
- d) Suprapatellar bursitis

7) Absence of which of the following predicts poor recovery of motor control:

- a) Kinaesthesia, proprioception, temperature
- b) Stereognosis, localization of pressure, proprioception
- c) Localization of light touch, temperature, proprioception
- d) Stereognosis, Kinaesthesia , Taste

8) 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

9) What reflex is developmentally appropriate until 5 months, vital for newborns, and can be seen when the corner of the infant mouth's is stroked?

- a) Sucking Reflex
- b) Tongue thrust
- c) Primary righting action
- d) Rooting

10) Inability to insert a key in door due to tremor is an example of

- a) Intention tremor
- b) Postural tremor
- c) Resting tremor
- d) None of the above

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- 11) At birth following structure is of adult size
- Maxillary sinus
 - Ear
 - Frontal sinus
 - Eustachian tube
- 12) A person who runs into objects due to difficulty in judging distance has deficits in:
- Position in space
 - Spatial relations
 - Topographical disorientation
 - Anosognosia
- 13) Waddling gait seen in Duchenne's Muscular Dystrophy is due to weakness of
- Gluteus maximus muscles
 - Gluteus medius muscles
 - Gluteus minimus muscles
 - All of the above
- 14) Which grades of oscillation are the most appropriate for stretching maneuvers for glenohumeral capsule?
- I, II
 - I, III
 - II, III
 - III, IV
- 15) The muscle which opens the mouth is
- Medial pterygoid
 - Lateral pterygoid
 - Masseter
 - Temporalis
- 16) Inversion and eversion movements occur at _____ joint
- Ankle joint
 - Inferior tibiofibular
 - Subtalar
 - All of the above
- 17) Which physical components of movement are first selected for retraining?
- Those components that are easiest to change
 - The components that are most essential to the movement
 - The largest muscles that make up the movement
 - Muscles whose tone is most deviant
- 18) Paper test is used to test the action of
- Adductor pollicis
 - Palmar interossei
 - Dorsal interossei
 - Opponens pollicis
- 19) Which of the following would be most effective to increase collagen extensibility in a case of fully healed burn?
- Pulsed ultrasound
 - Continuous ultrasound
 - Fluidotherapy
 - Hydrotherapy.
- 20) A middle aged woman wakes up in a sleep with pain and tingling in hand. This is due to entrapment of _____ nerve in hand
- Median
 - Ulnar
 - Radial
 - Musculocutaneous

21) All of the following are indications for mechanical traction, except

- a) Joint instability
- b) Spinal nerve root impingement
- c) Hypomobility of spinal joints
- d) Muscle spasm or guarding

22) Which anatomical landmark should be palpated when determining the subtalar neutral?

- a) Medial tubercle of talus
- b) Head of talus
- c) Sustentaculum tali
- d) Sinus tarsi

23) A patient presents with severe weakness of deltoid muscle and wrist extensors. Where would you suspect the lesion to be located?

- a) C6 nerve root
- b) C7 nerve root
- c) Middle trunk of brachial plexus
- d) Posterior cord of brachial plexus

24) Which of the following movement patterns is not likely to be seen among children with cerebral palsy?

- a) Scissors gait
- b) Circumductory gait
- c) High Stepping gait
- d) Bunny hopping

25) While standing and holding on to furniture a 3 year old boy with delayed motor development shifts his weight onto one leg and steps to the side with the other. This movement pattern is best described as:

- a) Creeping
- b) Crawling
- c) Cruising
- d) Clawing

26) The most desirable position of splint in carpal tunnel syndrome is

- a) wrist in 10 degrees of flexion
- b) Wrist in neutral extension
- c) wrist in neutral extension and radial deviation
- d) wrist in flexion and radial deviation

27) The patient with recent hip replacement should avoid the following?

- a) Bending while sitting
- b) Supported Walking
- c) Crossed legs
- d) Abducted legs

28) A fracture at floor of snuffbox most likely involves:

- a) Hamate
- b) Lunate
- c) Scaphoid
- d) Pisiform

29) According to Rood, patients are evaluated to determine:

- a) ROM, Sensation, and level of development
- b) Muscle tone and level of motor control
- c) ROM, sensation, and muscle tone
- d) Level motor control, ROM, sensation

30) Which of the following clinical findings is not typically associated with cerebellar degeneration?

- a) Athetosis
- b) Dysmetria
- c) Nystagmus
- d) Dysdiadochokinesia.

31) Strongest ligament of the body is _____

- a) Pubofemoral
- b) Iliofemoral
- c) Isthiofemoral
- d) All of above

32) What is the most common primary malignant tumour of bone?

- a) Ewing's sarcoma
- b) Osteosarcoma
- c) Chondrosarcoma
- d) Giant cell tumour

33) Vestibular stimulation when used to treat a child with autism is least effective for improving which of the following?

- a) Communication
- b) Hypo-responsiveness
- c) Self-stimulation
- d) Muscle tone

34) Which of the following condition would be considered as contraindication for aquatic therapy?

- a) Chronic Pain
- b) Cerebral palsy
- c) Urinary tract infection
- d) Multiple sclerosis

35) Which of the following is not a relative precaution for the use of Trendelenburg position?

- a) Nausea
- b) Obesity
- c) Pulmonary oedema
- d) Secretion retention

36) Which of the following findings are not associated with cerebellar disease?

- a) Intention tremor
- b) Ataxia
- c) Resting tremor
- d) Dysmetria

37) Weakness of which muscle would make it particularly difficult to ambulate with crutches?

- a) Middle deltoid
- b) Latissimus dorsi
- c) Rhomboids
- d) Erector spinae

38) A sensory examination reveals light touch impairment to the anterolateral thigh, lateral calf and sole of the foot. When recording these findings what are the corresponding dermatomes respectively?

- a) L2, L4, S2
- b) L1, L3, S1
- c) L2, L5, S1
- d) L3, L5, S1

39) Trouble in saying or writing by patient what he means:

- a) Expressive aphasia
- b) Receptive aphasia
- c) Global aphasia
- d) Anomic aphasia

40) Which of the following isolation categories would require only the use of a mask?

- a) Strict isolation
- b) Contact isolation
- c) Respiratory isolation
- d) Enteric precaution.

41) Maximal resistance refers to:

- a) The maximal effort the therapist is capable of giving.
- b) The maximal resistance a patient can receive with no pain.
- c) The maximal resistance a patient can receive and still move smoothly through full range of motion
- d) The maximal amount of time a patient can sustain the maximal effort of the therapist

42) For postural drainage which of the following lung segments would not require the foot end of the bed to be elevated?

- a) Anterior segment of upper lobe
- b) Lateral basal segment of lower lobe
- c) Posterior basal segments of lower lobe
- d) Right middle lobe

43) Seat depth measurement for a wheel chair is

- a) Measure across the widest part of either thighs or hips while the patient is sitting while the patient is sitting in a chair
- b) Measure from the rear of the buttocks to the inside of the bent knee
- c) Measure the top of the seat post to the floor and the popliteal fossa to the bottom of the heel.
- d) Measure from the top of the seat post to the top of the shoulders

44) Irregular, repetitive, jerking movements are otherwise termed as

- a) Athetosis
- b) Chorea
- c) Dystonia
- d) Myoclonus

45) Perceiving the form of an object by the sense of touch:

- a) Athetosis
- b) Stereognosis
- c) Cyanosis
- d) Dyskinesia

46) What activity is best to encourage co-contraction in children with low tone?

- a) Playing statue
- b) Going through an obstacle course
- c) Pretending to skate around the room
- d) Finger painting

47) Which of the following antigens associated with Ankylosing Spondylitis?

- a) HLA-B31
- b) HLA-B27
- c) HLA-B25
- d) HLA-B19

48) The most common mechanism for anterior talofibular ligament sprain is:

- a) Inversion and dorsiflexion
- b) Inversion and plantar flexion
- c) Eversion and dorsiflexion
- d) Eversion and plantar flexion.

49) When testing for Kinesthesia:

- a) The therapist moves the patient's involved extremity rapidly in small ranges
- b) The therapist moves the patient's involved extremity rapidly in large ranges
- c) The therapist moves the patient's involved extremity rapidly in large and small ranges
- d) The patient moves his extremity slowly in large and small ranges

50) Unable to perform tasks or movements when asked:

- a) Apraxia
- b) Alexia
- c) Aphasia
- d) Dyspraxia

51) A COPD patient suddenly develop dyspnea, anxiety and becomes disoriented. What is the likely cause of this:

- a) Respiratory alkalosis.
- b) Respiratory acedosis.
- c) Orthostatic Hypotension.
- d) Panic attack.

52) Stabilization exercises typically consists of _____ contraction:

- a) Isometric.
- b) Isometric with resistance.
- c) Low intensity isometric.
- d) None of the above.

53) Patients with multiple sclerosis experience an electric shock-like sensation running down the spine during flexion of the neck, which is known as:

- a) Neuropathic pain.
- b) Kernig's sign.
- c) Lhermitte's sign.
- d) Brudzinski's neck sign.

54) Which of the following arterial blood gas values indicates a patient may be experiencing a condition of metabolic acidosis:

- a) PaO₂ (91%).
- b) Bicarbonate 159.
- c) CO(2) 48 mm Hg.
- d) pH 7.33.

55) The sign/reflex is used to diagnose meningitis:

- a) Hoffman.
- b) Brudzinski.
- c) Startle.
- d) Anterior Drawer.

56) While examining Biceps jerk (DTR) you are basically testing the _____ nerve roots:

- a) C5 - C6.
- b) C5 - C7.
- c) C5 - C8.
- d) C5 - T1.

57) Which spinal brace is appropriate for scoliosis with apex below T6:

- a) Miami.
- b) Boston.
- c) Milwaukee.
- d) None of the before.

58) Which of the following muscle weakness produce scapular winging:

- a) Serratus anterior.
- b) Supraspinatus.
- c) Deltoid.
- d) Long head of triceps.

59) Type-II afferent nerve also known as A-Beta fiber carries touch/pressure afferent with a conduction velocity of:

- a) 70-120 m/sec.
- b) 4-30 m/sec.
- c) 30-70 m/sec.
- d) 0.5-2 m/sec.

60) Which of the following is not a contraindication for chest physical therapy:

- a) Pulmonary edema.
- b) Immediately after chest tube removal.
- c) Fractured Rib.
- d) Dyspnea.

- 61) **House maid's knee refers to:**
- Suprapatellar bursitis.
 - Prepatellar bursitis.
 - Infrapatellar bursitis.
 - Quadricеп tendinitis.
- 62) **Which one of the following is not associated with HLA B27:**
- Ankylosing Spondylitis.
 - Reiter's syndrome.
 - Sjogren's syndrome.
 - Psoriatic arthritis.
- 63) **All of the following are considered as type of PNF stretching exercise except:**
- Hold-Relax.
 - Reciprocal Inhibition.
 - Agonist contraction.
 - HR with agonist contraction.
- 64) **During standing to sitting, quadriceps muscle act:**
- Concentrically.
 - Ecentrically.
 - Statically.
 - Doesn't work.
- 65) **What is the expected outcome of effective exercise training in a pulmonary rehabilitation program for patients with chronic obstructive pulmonary disease (COPD):**
- Reduced need for supplemental oxygen.
 - Reduced dyspnea.
 - Improved radiologic status of the lung fields.
 - Slowed loss of forced expiratory volume.
- 66) **Which of the following muscles do not attach to the greater tuberosity of the humerus:**
- Supraspinatus.
 - Teres Minor.
 - Teres Major.
 - Infra Spinatus.
- 67) **Lower branch of brachial plexus injury leads to:**
- Erb's Palsy.
 - Klumpke's Palsy.
 - Wrist Drop.
 - Shoulder Dislocation.
- 68) **A 45 year old male presents to the burn unit with partial thickness burns over the entire right arm, left arm, front of head, and front of chest. Approximately what percentage of his body is burned:**
- 31.5%.
 - 36%.
 - 40.50%.
 - 45%.
- 69) **Negativity of resting membrane potential is due to:**
- Potassium is more permeable than sodium.
 - Three sodium ejected for two potassium.
 - Potassium is brought into the cell and sodium expelled out of the cell.
 - All of the above.
- 70) **Neonatal Jaundice can be treated by:**
- Red light.
 - Blue Light.
 - Infra Red.
 - UV Ray.

- 71) To measure the flexion ROM of cervical spine the fulcrum of goniometer is placed at _____:
- Mastoid process.
 - External auditory meatus.
 - Middle of forehead.
 - Occipital protuberance.
- 72) What is the name of skin graft that uses cadaver skin:
- Autograft.
 - Allograft.
 - Xenograft.
 - Homograft.
- 73) _____ Prior to manual muscle testing an examiner must check _____ joint range of motion (ROM):
- Active.
 - Passive.
 - Both of the above.
 - None of the above.
- 74) Dissociative sensory loss occurs in:
- Multiple sclerosis.
 - Tabes dorsalis.
 - Syringomyelia.
 - TB of Spine.
- 75) Beam nonuniformity ratio (BNR) in ultrasound refers to the ratio of _____:
- Spatial peak intensity to the spatial average intensity.
 - Spatial average intensity to the spatial peak intensity.
 - SATP to SATA.
 - None of the above.
- 76) An example of closed kinetic chain exercise for the quadriceps is:
- A partial squat.
 - an isometric quadriceps set.
 - knee extension on Quadriceps Table.
 - knee extension on an isokinetic machine.
- 77) Thoracic outlet syndrome may be produced by all of the following except:
- Cervical rib.
 - Scalenus anticus syndrome.
 - Hyperabduction syndrome.
 - Sternoclavicular syndrome.
- 78) Autonomic dysreflexia occurs in spinal cord injury:
- At L5-S1 level.
 - Below T6 level.
 - Above T6 level.
 - T10-T12 level.
- 79) Which of the following is known as lever of power:
- 1st order.
 - 2nd order.
 - 3rd order.
 - All of the above.
- 80) Which of the following is a key benefit of including flexibility training in a fitness development program:
- enhancing balance during physical activity.
 - enhancing muscular strength and endurance.
 - reducing the risk of injury to joints and soft tissue.
 - reducing stress on the cardiovascular system during exercise.

- 81) What age does the Rooting reflex become integrated:
- 3 months.
 - 6 months.
 - 8 months.
 - 10 months.
- 82) The classic clinical test for hip arthritis is_____:
- Flexion of hip in neutral.
 - Adduction of hip in flexion.
 - Internal rotation of hip in flexion.
 - External rotation of hip in flexion.
- 83) A physical therapist is caring for a patient in the step down unit. The patient has signs of increased intracranial pressure. Which of the following is not a sign of increased intracranial pressure:
- Bradycardia.
 - Increased pupil size bilaterally.
 - Change in LOC.
 - Vomiting.
- 84) Which of the following tendons are involved in deQuervains disease:
- APL & EPL.
 - APL & EPB.
 - APB & EPB.
 - APB & FPB.
- 85) In sway back posture all the muscle are weak except_:
- Hip flexors.
 - Hip extensors.
 - Upper back extensors.
 - Neck flexors.
- 86) A patient with impaired kinesthesia who is performing active range of motion exercises of the upper extremities will most likely require which of the following supplemental interventions:
- Visual cues while performing the exercises.
 - Pain-relieving modalities prior to performing the exercises.
 - Trunk stabilization while performing the exercises.
 - Stretching prior to performing the exercises.
- 87) All of the following are considered as determinants of stretching exercise except:
- Mode of stretch.
 - Speed of stretch.
 - Duration of stretch.
 - Direction of stretch.
- 88) For stimulation of denervated muscle, most appropriate current is used:
- Modified Faradic current.
 - Galvanic current.
 - Surged Faradic current.
 - Interrupted Direct current.
- 89) In ICU a patient demonstrates, no eye opening, no verbal response and no motor response. Using GCS how would you score this patient:
- 0.
 - 1.
 - 3.
 - 6.
- 90) All of the following are complications associated with pregnancy except:
- Hypertension.
 - Diastasis recti abdominis.
 - Hyperemesis gravidarum.
 - Weight gain.

- 91) **What structural change to the heart is associated with aortic stenosis:**
- Hypertrophy of left ventricle.
 - Hypertrophy of right ventricle.
 - Hypertrophy of left aorta.
 - Hypertrophy of right aorta.
- 92) **A physical therapist transfers a patient in a wheelchair down a curb with a forward approach. Which of the following is an appropriate action for this task:**
- Tilt the wheelchair backwards.
 - Have the patient lean forward.
 - Have the wheelchair brakes locked.
 - Position yourself in front of the patient.
- 93) **Prolonged application of UVR may produce skin cancers because:**
- It damages melanocytes.
 - It damages keratinocytes.
 - It damages sebaceous glands.
 - It damages langerhans cells.
- 94) **Which one of the following is not considered one of the "factors for success" in early intervention programs in preventing developmental delay, mental retardation, and poor school achievement:**
- Timing and duration of the intervention.
 - Multiple assessment periods.
 - Use of direct versus indirect learning experiences.
 - Intensity of services provided and received.
- 95) **The integration level for symmetrical tonic neck reflex (STNR) is:**
- Cerebellum.
 - Brain Stem.
 - Midbrain.
 - Medulla.
- 96) **Recording of the F wave is particularly helpful early in the course of:**
- Cervical radiculopathy.
 - acute inflammatory demyelinating polyradiculoneuropathy.
 - diabetic peripheral polyneuropathy.
 - critical illness polyneuropathy.
- 97) **The maximum amount of air that can be contained in the lungs after a maximum inspiration is called:**
- Vital Capacity.
 - Residual Volume.
 - Inspiratory Capacity.
 - Total lung capacity.
- 98) **Which of the following is involved in Rheumatoid Arthritis:**
- Synovial Fluid.
 - Synovial Membrane.
 - Cartilage.
 - Subchondral bone.
- 99) **Maximum differential gliding of FDP with respect to FDS tendon occurs in the position of _____:**
- Full fist.
 - Straight fist.
 - Hook fist.
 - All of the above.
- 100) **Which of the following tendon most commonly involved in lateral epicondylitis:**
- Extensor digitorum.
 - Ulnar carpi radialis.
 - Extensor carpi radialis longus.
 - Extensor carpi radialis brevis.



