- 1. The Oxygen uptake that signifies 1 MET is:
 - A. 3.5 ml/kg/min

B. 4.0 ml/kg/min

C. 4.5 ml/kg/min

D.5.0 ml/kg/min

- 2. In a patient with post-operative hypoxia, the best body position is:
 - A. 30 degrees inclined upward

B.60 degrees inclined upward

C. 30 degrees head end lowered

D. Supine, neutral position

- 3. PaCO₂ has the following relationship:
 - A. Inversely proportional to blood Ph
- B. Directly proportional to blood pH
- C. Inversely proportional to ventilation
- D. Directly proportional to ventilation
- 4. Recommending exercises without getting approval of the physician is risky in which of the following situation?
 - A. A person with a sedentary lifestyle for the last few years
 - B. A person with hypertension under control, with a normal stress test
 - C. A 50-year old woman who underwent hysterectomy recently
 - D. A 50-year old overweight male smoker with family history of coronary disease
- 5. How many lobes do the lungs have?
 - A. Three for left and three lobes for the right lung
 - B. Two for left and three lobes for the right lung
 - C. Three for left and two lobes for right lung
 - D. Two for left and two for right; and an inconsistent third lobe for right or left
- 6. What does percussion mean in chest physiotherapy?
 - A. Cupping or clapping which releases secretions from lung by transmitting the energy across the chest wall
 - B. Use of external devices on the chest wall which will dislodge impacted sputum from segments
 - C. Clapping or stroking which will increase the expiratory pressure and enable the client to clear airways
 - D. None of the above
- 7. Postural drainage is indicated in which of the following conditions?
 - A. Acute lobar pneumonia and patient is not coughing
 - B. A patient with sudden onset bronchial asthma who does not bring out secretions
 - C. A patient who has secretions but who is unconscious
 - D. Adult having difficulty expectorating sputum volume greater than approximately 25 ml/day
- 8. In a patient with chronic cardiopulmonary illness, the PaO₂ should not fall below:
 - A. 40 mm of Hg

B. 50 mm of Hg

C. 70 mm of Hg

D. 85 mm of Hg

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- 9. Of the following which is the best clinical test of integrity of the diaphragm?
 - A. Measurement of inspiratory strength in supine
 - B. Maximum breathing capacity
 - C. Measurement of Vital Capacity in supine and sitting
 - D. Surface EMG testing for action potentials
- 10. Which of the following is Forced Expiratory technique>
 - A. Low mid lung volume huff diaphragmatic breathing cough
 - B. Mid lung volume huff diaphragmatic breathing cough
 - C. High lung volume huff diaphragmatic breathing cough
 - D. Relaxed breathing suprasternal stimulation cough
- 11. Ulnar injury in the arm leads to all features **EXCEPT**
 - A. Wasting of hypothenar muscles
- B. Clawing
- C. Loss of sensation of medial one-third of hand D. Adduction of thumb
- 12. On changing from the upright to the supine position:
 - A. Baroreceptor activity decreases
 - B. Blood volume in the pulmonary circulation falls
 - C. Stroke volume increases

D. Renin activity increases

- 13. In the normal cardiac cycle:
 - A. Left ventricular volume is maximum at the end of atrial systole
 - B. The mitral valve closes aby action of papillary muscles
 - C. Ejection fraction is about 85%
 - D. The left ventricular pressure is maximal just before the aortic valve opening
- 14. The correct method of measuring for axillary crutches is:
 - A. 10 cm below the axillary fold and 10 cm laterally in standing
 - B. 5cm below posterior axillary and 15 cm laterally with patient in supine lying
 - C. 4cm below anterior axilla and 10cm medially with patient supine lying
 - D. 5cm below post axilla and 12cm laterally with patient standing
- 15. Which motions are usually impaired in a patient with diabetes and adhesive capsulitis of shoulder?
 - A. Abduction and external rotation
 - B. Flexion and internal rotation
 - C. Flexion, abduction and circumduction
 - D. Extension, flexion, and initial abduction
- 16. Concerning Muscle energy technique which of the following is NOT TRUE?
 - A. It is a direct manipulative procedure using patient's voluntary contraction
 - B. It is used to lengthen shortened muscles and mobilize stiff joints
 - C. It is unrelated to application of any precise counterforce
 - D. It is useful in reducing oedema and pain

- 17. When the internal body temperature rises, how does the body gets rid of the excess heat?
 - A. The blood flow to skin and formation of sweat increases
 - B. The blood flow to skin reduces and blood is diverted to viscera
 - C. The blood flow to the kidneys increase and urine flow is increased
 - D. The sweat dries up and results in cooling of skin
- 18. The commonest problem seen in the feet of patients with Diabetes Mellitus is
 - A. Loss of proprioception
- B. Loss of vibration sense
- C. Loss of dorsalis pedis pulse
- D. Loss of intrinsic muscle power
- 19. A middle aged man does yoga daily in the cross-legged (*padmasana*) sitting posture. After a prolonged session of yoga exercises, he reports with difficulty in walking. What conditions would you look for?
 - A. Moderate weakness of dorsiflexion and plantar flexion of foot
 - B. Weakness of ankle, buckling of knee and poor sensation of the sole of foot
 - C. Weakness of ankle dorsiflexion and poor sensation of lateral side of leg
 - D. Weakness of eversion, inversion and dorsiflexion
- 20. In neuro-muscular re-education, which of the following is focused?
 - A. Give full range of motion or activity and send the patient back to perform the functional activity
 - B. Give full range of motion and wait for neurologic improvement to happen before putting the client on activities
 - C. Concentrate on deficiency in motion and passively try to restore deficiency
 - D. Concentrate on deficieny or pain, and help the patient to overcome the problem by self-generated and supervised exercises
- 21. One of the objectives of Proprioceptive Neuromuscular Facilitation is:
 - A. Stimulating the brain to learn new techniques of motion after injury
 - B. Using synergistic and anti synergistic patters to overcome paralysis
 - C. Discovering energy saving motions to compensate for weak or painful patterns
 - D. Employing diagonal contract-relax stretching patterns to improve movement
- 22. In exercise training for patients with post-ischemic cardiac disease, the Heart Rate Reserve (HRR) means:
 - A. Difference between 220 and age in years
 - B. Difference between HRmax and HRrest
 - C. 70 to 75% of HRmax
- D. HRrest plus 30% of HRrest
- 23. Which of the following statements is true regarding aerobic training?
 - A. Aerobic power increases with exercises of large muscle groups in continuous and rhythmic manner
 - B. Aerobic power increases with a mix of large and small muscle exercises with short breaks of rest
 - C. With heavy muscle contractions such as weight training, large increase ②O₂max can be achieved
 - D. In order to increase aerobic power, higher frequency and resistance exercises are needed

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- 24. The impact of physical activity in Parkinson's disease includes:
 - A. Exercises can improve all symptoms of Parkinson's
 - B. Exercises improve bradykinesia and tremor
 - C. Exercises improve mobility and mood
 - D. Exercises have very little impact
- 25. Which of the following statements is true regarding Low Level LASER Therapy (LLLT) in Physiotherapy?
 - A. LLLT is useful in managing chronic pain of osteoarthritis of knee
 - B. LLLT is very useful in the management of chronic ulcers
 - C. LLLT with its high penetrative ability is suitable for treatment of plexitis
 - D. LLLT has insufficient evidence in the treatment of chronic low back ache
- 26. In motor relearning approach, the role of the therapist is:
 - A. To teach patient on alternative methods to substitute for missing components of a function
 - B. To teach normal hierarchical patterns of motion while controlling abnormal postural reflexes and tone
 - C. To teach patient to perform missing components of an action through goal-setting, feedback and guidance
 - D. To teach patient to perform action using motion as well as splints, braces and aids
- 27. The role of electrical stimulation (ES) in the hemiplegic upper limb is:
 - A. ES typically prevents complex regional pain syndromes, if started early
 - B. ES improves arm function, reach, manipulation and stability
 - C. ES helps prevent or reduce shoulder subluxation
 - D. ES does not have any effect on functional ability
- 28. The Functional Electrical Stimulation (FES) for gait in hemiplegia:
 - A. FES improves the gait pattern considerably, though not the speed and effort
 - B. Electrical stimuli are given at multiple intervals in a given gait cycle to ensure smooth gait
 - C. One stimulus is given at the swing phase for propulsion and another at foot-flat to ensure stability
 - D. Stimulation to common peroneal nerve is given at the start of the swing phase
- 29. For Constraint Induced Movement Therapy (CIMT) to be effective:
 - A. There should be at least 15° of active palmar flexion at wrist
 - B. There should be active palmar flexion and grasp
 - C. There should be wrist dorsiflexion and forearm supination
 - D. There should be some active dorsiflexion at the wrist and/or MCPs
- 30. Which of the following is **NOT TRUE** of Manipulation?
 - A. It is a brief, sudden, careful thrust given at the end of normal passive ROM
 - B. It is a small amplitude, sudden, decisive motion delivered to the target joint
 - C. It is a sudden stretch in three axes given to tissues that cross more than one joint
 - D. It is sometimes associated with a cracking noise that is felt or heard

- 31. Which of the following is NOT TRUE of Mobilization
 - A. It attempts to restore full ROM by repetitive, rhythmic passive movements
 - B. It makes use of strain and counterstrain method to bring a joint into position of comfort
 - C. It involves traction, gliding and angular movements to bring back joint play
 - D. It can be stopped at any point if the patient so desires
- 32. Which of the following is most essential for living independently?
 - A. Managing finances
- B. Feeding

C. Toileting

- D. Grooming
- 33. Concerning low back ache, which of the following statements is true?
 - A. The posterior longitudinal ligament and sheath covering nerve roots are highly pain sensitive
 - B. The ligamentum flavum and inter-spinous ligaments are very sensitive to pain
 - C. The intervertebral disc is very sensitive to pain
 - D. The anterior longitudinal ligament is moderately sensitive to pain
- 34. What problem can arise in a chronic bed ridden patient?
 - A. Abduction tightness at hips and extension at knees can occur
 - B. Flexion tightness in hips and knees can occur
 - C. Ankles go into dorsiflexion and fingers lose flexion
 - D. Elbows lose flexion and the arm is kept supinated
- 35. Which of the following is the most practical cross infection prevention method while attending to patients?
 - A. Taking universal precaution
- B. Wearing a pair of gloves at all times
- C. Following hand washing protocol
- D. Using double gloves and masks when risks are high
- 36. Which of the following is the most appropriate response in the care of a bedridden patient?
 - A. Bed sores occur mostly over the ischeal tuberosity and the trochanters
 - B. Bed sores when they occur can be managed by low dose UVR or LLLT
 - C. Bed sores are prevented by change of position every two hours
 - D. Bed sores are seldom seen in bedridden patients who are conscious
- 37. In a patient with spastic upper limb, what type of night splint is best recommended?
 - A. Cock up splint extending from mid-forearm to MCP joints
 - B. Cock up splint extending from mid-forearm to finger tips
 - C. Cock up splint extending from mid-forearm to PIP joints
 - D. Cock up splint extending from mid-forearm to middle crease of palm
- 38. In order to prevent tendo Achilles tightness what type of splint is best recommended?
 - A. AFO with the foot in neutral or plantigrade position
 - B. AFO with the foot in 15 degree plantar flexion
 - C. AFO with the foot in 5 degree plantar flexion
 - D. AFO with the foot in 5 degree dorsiflexion

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- 39. Which of the following is most appropriate for Constraint Induced Movement Therapy (CIMT) to be effective:
 - A. Patient should undergo CIMT for at least 3 hours per week
 - B. Patient should undergo CIMT for at least 6 hours per week
 - C. Patient should undergo CIMT for at least 1 hour per day every week
 - D. Patient should undergo CIMT for at least 15 hours per week
- 40. Virtual reality training helps to improve function in the paretic arm by:
 - A. Improving cognition and stimulating plasticity
 - B. Improving eye-hand coordination
 - C. Improving flexibility and strength
 - D. Improving flexibility, endurance and through automaticity
- 41. Of the following, which is the important disadvantage of gait training in parallel bars?
 - A. The lower limb muscles are unloaded and upper limb muscles are substituted
 - B. Non-paretic limbs are used mostly and recovery of balance remains slow
 - C. Patients do not get trained in normal walking as parallel bars are indoor equipment
 - D. Gait velocity is less and gait outcome remains poor
- 42. Which of the following is **NOT TRUE** of adaptive sequelae of upper limb in UMN conditions?
 - A. Habitual positioning of the upper limb B. Adaptive shortening of soft tissues
 - C. Flaccid shoulder
- D. Stiffness and pain of shoulder, wrist and/or hand
- 43. A patient undergoing electrical stimulation for facial palsy reports the next day with injury to his face because of electric burns. What is the best response to the situation?
 - A. Do first aid, dress the injury and send him
 - B. Dress the injury, reassure him and postpone physiotherapy till healing
 - C. Reassure him, postpone physiotherapy and advise him to get medical aid
 - D. Postpone physiotherapy, report the event to the line manager
- 44. Rehabilitation is more difficult in patients with:
 - A. Sensory aphasia
- B. Motor aphasia

C. Dysphonia

- D. Dysarthria
- 45. Lateral epicondylitis responds best to:
 - A. Ultrasound therapy
 - B. Ultrasound therapy and stretching exercises
 - C. Ultrasound therapy and TENS
 - D. Ultrasound therapy and mobilization
- 46. The simple footwear for uncomplicated diabetic foot must be:
 - A. A shoe insert made of silicon
 - B. MCR chappal with heel straps
 - C. MCR chappal with soft arch and heel straps
 - D. Shoe with MCR insole, arch and metatarsal wedge

- 47. A physiotherapist has to attend to patients in the Intensive care unit (ICU) after her therapy sessions in the Neurology ward. When she is in the ICU, what actions are considered most appropriate?
 - A. Uses mask and gloves before touching patients, follows hand hygiene
 - B. In addition to (a) above, make sure to read the register and make documentation
 - C. Adequate communication with all staff in the ICU and patients if possible
 - D. Communication with nurse and physician, uses personal care outfits, does hand hygiene and documentation
- 48. A physiotherapist is called in to attend a patient with stroke and discovers that the patient is HIV positive. What would be the therapist's appropriate response?
 - A. Discusses HIV positivity with the patient and/or careers with kindness.
 - B. Goes through the case records and teaches the patient/caregivers the exercises that can be done by them
 - C. Does not discuss HIV status with patient or carers, simply does physiotherapy adopting appropriate precautions
 - D. Does not discuss HIV status with patient/carers, seeks post-exposure prophylaxis from hospital
- 49. Patients with fibromyalgia are best managed with:
 - A. Limited use of modalities, aerobic exercises
 - B. Limited use of modalities, strengthening exercises
 - C. Liberal use of modalities, limited range of resistance exercises
 - D. Liberal use of modalities, no exercises
- 50. Patients with nonspecific low back ache are commonly managed with:
 - A. Spinal extension and flexion exercises
 - B. Spinal extension, pelvic tilt and abdominal exercises
 - C. Spinal flexion and hamstring stretching exercises
 - D. Spinal flexion exercises and manipulation of lower spinal segment

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