Astt Professor Comp. Edom-2024 (Med. Edw Depte)

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प्रश्न-पुस्तिका संख्या व बारकोड / **Ouestion Booklet No. & Barcode**  **MPA-25** 

इस प्रश्न-पस्तिका को तब तक न खोलें जब तक कहा न जाए। Do not open this Question Booklet until you are asked to do so.

पुस्तिका में पृष्ठों की संख्या

Number of Pages in Booklet: 24

पुस्तिका में प्रश्नों की संख्या No. of Ouestions in Booklet : 150

Paper Code: 64

Sub: Physical Medicine and Rehabilitation

समय: 02:30 घण्टे + 10 मिनट अतिरिक्त \* Exam Date 3 7 2005 Time: 02:30 Hours + 10 Minutes Extra\*

Maximum Marks: 150

प्रश्न-पस्तिका के पेपर की सील/पॉलिथीन बैग को खोलने पर प्रश्न-पत्र हल करने से पूर्व परीक्षार्थी यह सुनिश्चित कर लें कि :

- प्रश्न-पुस्तिका संख्या तथा ओ.एम.आर. उत्तर-पत्रक पर अंकित बारकोड संख्या समान हैं ।
- 🔹 प्रश्न-पुस्तिका एवं ओ.एम.आर. उत्तर-पत्रक के सभी पृष्ठ व सभी प्रश्न सही मुद्रित हैं । समस्त प्रश्न, जैसा कि ऊपर वर्णित है, उपलब्ध हैं तथा कोई भी पृष्ठ कम नहीं है / मुद्रण तुटि नहीं है । किसी भी प्रकार की विसंगति या दोषपर्ण होने पर परीक्षार्थी वीक्षक से दसरा प्रश्न–पत्र प्राप्त कर लें । यह सनिष्ट्रियत करने की जिम्मेदारी अध्यर्थी की होगी । परीक्षा प्रारम्भ होने के 5 मिनट पश्चात् ऐसे किसी दावे/आपत्ति पर कोई विचार नहीं किया जायेगा ।

On opening the paper seal/polythene bag of the Question Booklet before attempting the question paper, the candidate should ensure that:

Question Booklet Number and Barcode Number of OMR Answer Sheet are same.

All pages & Questions of Question Booklet and OMR Answer Sheet are properly printed. All questions as mentioned above are available and no page is missing/misprinted.

If there is any discrepancy/defect, candidate must obtain another Question Booklet from Invigilator. Candidate himself shall be responsible for ensuring this. No claim/objection in this regard will be entertained after five minutes of start of examination.

### परीक्षार्थियों के लिए निर्देश

- 1. प्रत्येक प्रश्न के लिये एक विकल्प भरना अनिवार्य है ।
- 2. सभी प्रश्नों के अंक समान हैं।
- प्रत्येक प्रश्न का मात्र एक ही उत्तर दीजिए । एक से अधिक उत्तर देने की दशा में प्रश्न के उत्तर को गलत माना जाएगा ।
- OMR उत्तर-पत्रक इस प्रश्न-पस्तिका के अन्दर रखा है । जब आपको प्रश्न-पुस्तिका खोलने को कहा जाए, तो उत्तर-पत्रक निकाल कर ध्यान से केवल नीले बॉल पॉइंट पेन से विवरण भरें ।
- 5. कपया अपना रोल नम्बर ओ.एम.आर. उत्तर-पत्रक पर सावधानीपर्वक सही भरें । गलत रोल नम्बर भरने पर परीक्षार्थी स्वयं उत्तरदायी होगा ।
- 6. ओ.एम.आर. उत्तर-पत्रक में करेक्शन पेन/व्हाईटनर/सफेदा का उपयोग निषिद्ध है।
- 7. प्रत्येक गलत उत्तर के लिए प्रश्न अंक का 1/3 भाग काटा जायेगा । गलत उत्तर से तात्पर्य अशुद्ध उत्तर अथवा किसी भी प्रश्न के एक से अधिक उत्तर से है ।
- प्रत्येक प्रश्न के पाँच विकल्प दिये गये हैं, जिन्हें क्रमश: 1, 2, 3, 4, 5 अंकित किया गया है । अभ्यर्थी को सही उत्तर निर्दिष्ट करते हुए उनमें से केवल एक गोले (बबल) को उत्तर-पत्रक पर नीले बॉल पॉइंट पेन से गहरा करना है।
- 9. यदि आप प्रश्न का उत्तर नहीं देना चाहते हैं तो उत्तर-पत्रक में पाँचवें (5) विकल्प को गहरा करें । यदि पाँच में से कोई भी गोला गहरा नहीं किया जाता है, तो ऐसे प्रश्न के लिये प्रश्न अंक का 1/3 भाग काटा जायेगा ।
- 10.\* प्रश्न-पत्र हल करने के उपरांत अभ्यर्थी अनिवार्य रूप से ओ.एम.आर. उत्तर-पत्रक जाँच लें कि समस्त प्रश्नों के लिये एक विकल्प (गोला) भर दिया गया है। इसके लिये ही निर्धारित समय से 10 मिनट का अतिरिक्त समय दिया गया है।
- 11. यदि अभ्यर्थी 10% से अधिक प्रश्नों में पाँच विकल्पों में से कोई भी विकल्प अंकित नहीं करता है तो उसको अयोग्य माना जायेगा ।
- 12. मोबाइल फोन अथवा अन्य किसी इलेक्ट्रोनिक यंत्र का परीक्षा हॉल में प्रयोग पूर्णतया वर्जित है । यदि किसी अभ्यर्थी के पास ऐसी कोई वर्जित सामग्री मिलती है तो उसके विरुद्ध आयोग द्वारा नियमानुसार कार्यवाही की जायेगी।

चेतावनी : अगर कोई अभ्यर्थी नकल करते पकड़ा जाता है या उसके पास से कोई अनिधकृत सामग्री पाई जाती है, तो उस अभ्यर्थी के विरुद्ध पुलिस में प्राथमिकी दर्ज कराते हुए राजस्थान सार्वजनिक परीक्षा (भर्ती में अनुचित साधनों की रोकथाम अध्यपाय) अधिनियम, 2022 तथा अन्य प्रभावी कानून एवं आयोग के नियमों-प्रावधानों के तहत कार्यवाही की जाएगी। साथ ही आयोग ऐसे अभ्यर्थी को भविष्य में होने वाली आयोग की समस्त परीक्षाओं से विवर्जित कर सकता है ।

### INSTRUCTIONS FOR CANDIDATES

- 1. It is mandatory to fill one option for each question.
- 2 All questions carry equal marks.
- Only one answer is to be given for each question. If more than 3. one answers are marked, it would be treated as wrong answer.
- The OMR Answer Sheet is inside this Question Booklet. When you are directed to open the Question Booklet, take out the Answer Sheet and fill in the particulars carefully with Blue Ball Point Pen only.
- Please correctly fill your Roll Number in OMR Answer Sheet. Candidates will themselves be responsible for filling wrong
- Use of Correction Pen/Whitener in the OMR Answer Sheet is strictly forbidden.
- 1/3 part of the mark(s) of each question will be deducted for each wrong answer. A wrong answer means an incorrect answer or more than one answers for any question.
- Each question has five options marked as 1, 2, 3, 4, 5. You have to darken only one circle (bubble) indicating the correct answer on the Answer Sheet using BLUE BALL
- If you are not attempting a question then you have to darken the circle '5'. If none of the five circles is darkened, one third (1/3) part of the marks of question shall be deducted.
- 10.\* After solving question paper, candidate must ascertain that he/she has darkened one of the circles (bubbles) for each of the questions. Extra time of 10 minutes beyond scheduled time, is provided for this.
- A candidate who has not darkened any of the five circles in more than 10% questions shall be disqualified.
- Mobile Phone or any other electronic gadget in the examination hall is strictly prohibited. A candidate found with any of such objectionable material with him/her will be strictly dealt with as per rules.

Warning: If a candidate is found copying or if any unauthorized material is found in his/her possession, F.I.R. would be lodged against him/her in the Police Station and he/she would be liable to be prosecuted under Rajasthan Public Examination (Measures for Prevention of Unfair means in Recruitment) Act, 2022 & any other laws applicable and Commission's Rules-Regulations. Commission may also debar him/her permanently from all future examinations.

उत्तर-पत्रक में दो प्रतियाँ हैं - मूल प्रति और कार्बन प्रति। परीक्षा समाप्ति पर परीक्षा कक्ष छोड़ने से पूर्व परीक्षार्थी उत्तर-पत्रक की दोनों प्रतियाँ वीक्षक को साँपेंगे, परीक्षार्थी स्वयं कार्बन प्रति अलग नहीं करें । वीक्षक उत्तर-पत्रक की मूल प्रति को अपने पास जमा कर, कार्बन प्रति को मूल प्रति से कट लाइन से मोड़ कर सावधानीपूर्वक अलग कर परीक्षार्थी को सींपेंगे, जिसे परीक्षार्थी अपने साथ ले जायेंगे । परीक्षार्थी को उत्तर-पत्रक की कार्बन प्रति चयन प्रक्रिया पूर्ण होने तक सुरक्षित रखनी होगी एवं आयोग द्वारा माँगे जाने पर प्रस्तुत करनी होगी ।

- 1. A 30 year old right handed adult had road traffic accident and during surgical management his left elbow disarticulation was done before 1 year. Now his residual stump is healthy without any noted complications and ideal for prosthesis fitting. What is his percentage of permanent disability due to left elbow disarticulation?
  - (1) 60%
- (2) 65%
- (3) 70%
- (4) 75%
- (5) Question not attempted
- 2. Electrodiagnostic study of a patient with myopathy show all, except
  - (1) Motor Unit Action Potential (MUAP) duration is reduced.
  - (2) Motor Unit Action Potential (MUAP) amplitude is reduced.
  - (3) Motor Unit Action Potentials (MUAPs) are generally polyphasic.
  - (4) Motor Unit Action Potentials (MUAPs) are recruited late.
  - (5) Question not attempted
- 3. In normal human gait, the portion of the gait cycle during which two limbs are in contact with the ground (double limb support) accounts about what portion of total gait cycle?
  - (1) 10%
- (2) 15%
- (3) 20%

- (4) 25%
- (5) Question not attempted

4. In spinal cord injury patient, ASIA Impairment Scale "C" means

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- (1) Incomplete: Sensory but not motor function preserved below the neurological level and includes the sacral segments S4-5.
- (2) Motor function is preserved below the neurological level, and more than half of the key muscles below the neurological level have a muscle grade <3.
- (3) Complete: No motor or sensory function is preserved in the sacral segments S4-5.
- (4) Incomplete: Motor function is preserved below the neurological level, and at least half of key muscles below the neurological level have a muscle grade of 3 or more.
- (5) Question not attempted
- 5. All of the following are assessed in "SELF CARE" domain of Functional Independence Measure (FIM), except
  - (1) Transfers (2) Eating
  - (3) Grooming (4) Bathing
  - (5) Question not attempted
- 6. In nerve conduction studies, which of the following statement is correct for "F Response"?
  - (1) F response is used routinely to study the more distal nerve segments.
  - (2) Stimulus is given as submaximal stimulus.
  - (3) F response is useful in L5-S1 radiculopathy diagnosis.
  - (4) F responses always present in sleeping or sedated patients.
  - (5) Question not attempted

- 7. In a patient with motor neuron disease primary findings on needle EMG will be following, except:
  - (1) Positive sharp waves
  - (2) Fabrication
  - (3) F waves
  - (4) Fasciculation potentials
  - (5) Question not attempted
- 8. Following can cause increased bone loss, except one
  - (1) Cushing's syndrome
  - (2) Primary Hyperparathyroidism
  - (3) Hypothyroidism
  - (4) Addison's disease
  - (5) Question not attempted
- 9. What is the recommended daily calcium intake at the age between 19-50 years?
  - (1) 800 mg/d (2) 1000 mg/d
  - (3) 1200 mg/d (4) 1300 mg/d
  - (5) Question not attempted
- 10. Which of the following is not an effect of regular exercise on cardiovascular system?
  - (1) Oxygen consumption decreases at rest.
  - (2) Heart rate decreases at rest.
  - (3) Stroke volume increases at rest.
  - (4) Cardiac output remain unchanged at rest.
  - (5) Question not attempted

- 11. Which of the following condition is an "absolute contraindication" of exercise testing?
  - (1) Acute pulmonary embolus
  - (2) Left main coronary stenosis
  - (3) Electrolyte abnormalities
  - (4) Severe arterial hypertension (SBP>200 mmHg and/or DBP>110 mmHg) at rest
  - (5) Question not attempted
- 12. All of the following conditions are contraindicated for high-velocity manipulation techniques, except
  - (1) Osteomyelitis
  - (2) Acute musculoskeletal pain
  - (3) Unstable fractures
  - (4) Multiple myeloma
  - (5) Question not attempted
- **13.** Which of the following is not a contraindication of cryotherapy?
  - (1) Impaired skin sensation
  - (2) Bursitis
  - (3) Impaired local circulation
  - (4) Peripheral vascular disease
  - (5) Question not attempted
- 14. The most common frequency used in short wave diathermy (SWD) machines for medical treatment is
  - (1) 27.12 MHz
  - (2) 3.3 MHz
  - (3) 915.12 MHz
  - (4) 2456.50 MHz
  - (5) Question not attempted

- 15. True statement about "Pètrissage massage" technique is
  - (1) It involves both hands compressing the skin between the thumb and fingers.
  - (2) A circular, longitudinal, or transverse pressure applied by the fingers, thumb, or hypothenar region of the hand to small areas.
    - (3) It uses rhythmic alternating contact of varying pressure between the hands and the body's soft tissue.
    - (4) It involves gliding the palms, fingertips, and/or thumbs over the skin in a rhythmic circular pattern with varying degrees of pressure.
    - (5) Question not attempted
- **16.** During vigorous exercise following parameter increase, except one
  - (1) Testosterone
  - (2) Fibrinolysis
  - (3) Renal blood flow
  - (4) Number of platelets
  - (5) Question not attempted
- 17. Following technique is used for neuro-facilitation commonly
  - (1) Plyometric
  - (2) Progressive resistive
  - (3) Delorme
  - (4) ROOD

- 18. Which of the following activity of daily living (ADL) is included in "Extended Activity of Daily Living (EADL)"?
  - (1) Transfers
  - (2) Child care
  - (3) Financial Management
  - (4) Housekeeping
  - (5) Question not attempted
- 19. Which of the following statement is incorrect for the "basic paraplegic wheelchair dimensions"?
  - (1) Back height: Distance from buttocks to the inferior angle of the scapula.
  - (2) Armrest height: Distance from buttocks to forearm with elbow at 90 degrees.
  - (3) Seat depth: Distance from back of buttocks to mid-thigh area.
  - (4) Seat width: Distance between the widest parts of the buttocks.
  - (5) Question not attempted
- **20.** All of the following are advantages of "Foam Cushions", except
  - (1) Increase cushion life and easy to clean
  - (2) Inexpensive
  - (3) Light weight
  - (4) Easy to modify
  - (5) Question not attempted

- 21. Following is not included in National List of Essential Assistive Products (NLEP)-2023 released by ICMR:
  - (1) Pocket coach
    - (2) Walkers
    - (3) Braille
    - (4) Portable ramps
    - (5) Question not attempted
- **22.** Following complementary interventions can be integrated as movement therapies:
  - (1) Guided imagery
  - (2) Feldenkrais method
  - (3) Yoga
  - (4) QI Gond
  - (5) Question not attempted
- **23.** Correct statement/statements about Ratchet wrist-hand orthosis:
  - (a) The Ratchet WHO is a static orthosis.
  - (b) It stabilizes the wrist and does not allow to change the position of wrist for different activities.
  - (c) A thumb post is used to maintain abduction and to position the thumb in alignment with the finger pads.

Select the correct answer using the codes given below:

### Codes: In the distance

- (1) (a) only
- (2) (b) only
- (3) (c) only
- (4) All (a), (b) and (c)
- (5) Question not attempted

- 24. Which of the following statement/s is/are correct about the anatomical basis of foot and ankle biomechanics?
  - (a) The axis of the ankle joint passes just distal to the tip of each malleolus.
  - (b) Comparing the long axis of the foot with the ankle axis, the foot is slightly externally rotated.
  - (c) In relation to the axis of the knee, the ankle axis is externally rotated approximately 20 to 30 degrees.

Select the correct answer using the codes given below:

## Codes:

- (1) Only (a)
- (2) (a) and (c)
- (3) (b) and (c)
- (4) All (a), (b) and (c)
- (5) Question not attempted
- 25. A 30 year old male is walking with wearing right transibial prosthesis. During initial contact to loading response of gait cycle, he has prolonged heel contact and his knee remains fully extended. What is most probable cause of his prosthetic gait deviation?
  - (1) Foot is too far outset or inset
  - (2) Socket is loose
  - (3) Excessive toe lever
  - (4) Inadequate heel lever
  - (5) Question not attempted

- 26. Which is correct about SACH foot?
  - (1) It is less durable and heavy weight.
  - (2) Has moving parts but does not consists of a wooden or composite keel.
  - (3) Has no compressible foam heel and toes.
  - (4) It is appropriate for individuals with an amputation who have a lower activity level (K1 to K2).
  - (5) Question not attempted
- 27. Which of the following areas is "pressure intolerant area" in PTB socket for below knee amputation?
  - (1) Hamstring tendons
  - (2) Medial tibial flair
  - (3) Patellar ligament/tendon
  - (4) Femoral condyle
  - (5) Question not attempted
- 28. Which of the following is not an advantage of using polycentric prosthetic knee joint?
  - (1) Varying stability through stance
  - (2) Shortens shank during swing phase of gait cycle
  - (3) While sitting, give natural and better cosmetic appearance
  - (4) Single cadence
  - (5) Question not attempted

- 29. Which is incorrect about cable control mechanism of upper limb prosthesis?
  - Cable controls shoulder and humerus movements to activate the terminal device and elbow.
  - (2) Dual cable used to activate terminal device and elbow is known as Bowden cables.
  - (3) The common movements that are captured for control include scapular abduction, shoulder depression and abduction, and humeral flexion.
  - (4) Dual-control cable systems use the same cable to control elbow flexion and terminal device opening in the transhumeral prosthesis.
  - (5) Question not attempted
- 30. Miami Orthoses is the low-profile scoliosis orthoses, which provide dynamic action using following principles, except:
  - (1) End-point control
  - (2) Transverse loading
  - (3) Curve correction
  - (4) Axial loading
  - (5) Question not attempted
- 31. Following suspension system will be best suited for a trans-tibial ampute with an unstabe short stump
  - (1) Neoprene sleev
  - (2) Suction suspension
  - (3) PTB cuff strap
  - (4) Thigh corset

- 32. Following shoe modification can be done to reduce pressure under the metatarsal heads:
  - (1) Medial flare
  - (2) Lateral wedge
  - (3) Heel raise
  - (4) Rocker soles
  - (5) Question not attempted
- **33.** De Quervain's tenosynovitis can be managed with following orthosis:
  - (1) Hand finger orthosis
  - (2) Thumb spica
  - (3) Knuckle bender
  - (4) Static wrist hand orthosis
  - (5) Question not attempted
- 34. To control mild to moderate genu recurvatum due to capsular laxity, following orthosis is preferable.
  - (1) Kafo
  - (2) Unloader brace
  - (3) Townsend double hinged brace
  - (4) Swedish knee cage
  - (5) Question not attempted
- **35.** Cozen's test is used to diagnose which of the following cumulative trauma disorder?
  - (1) Lateral epicondylitis
  - (2) De Quervain's tenosynovitis
  - (3) Bicipital tendinopathy
  - (4) Thoracic outlet syndrome
  - (5) Question not attempted

- **36.** Pronator Syndrome is due to compression of median nerve at following sites, except:
  - (1) Entrapment of nerve under the ligament of Struthers in the medial distal arm
  - (2) Entrapment of nerve under the lacertus fibrosus
  - (3) Entrapment of nerve under a thickened or fibrous portion of the flexor digitorum superficialis
  - (4) Entrapment of nerve under the pronator quadratus
  - (5) Question not attempted
- **37.** Which of the following is not a proposed clinical diagnostic criteria for "Complex Regional Pain Syndrome"?
  - (1) Temperature asymmetry and/or skin colour changes and/or skin colour asymmetry.
  - (2) Edema and/or sweating changes and/or sweating asymmetry.
  - (3) Decreased range of motion and/or motor dysfunction and/or trophic changes.
  - (4) Continuing pain, which is always in proportionate to any inciting event.
  - (5) Question not attempted
- **38.** According to Wagner classification of diabetic foot ulcer "Grade 3 ulcers" is defined as
  - (1) Localized superficial ulcer of the skin
  - (2) Deep ulcer with abscess or osteomyelitis
  - (3) Deep ulcer extending to tendon, bone, ligament or joint
  - (4) Forefoot gangrene
  - (5) Question not attempted

- 39. Which of the following ligament is not a component of "lateral ankle complex or lateral ligament of ankle"?
  - (1) Anterior talofibular ligament
  - (2) Posterior inferior tibiofibularligaments
  - (3) Posterior talofibular ligament
  - (4) Calcaneofibular ligament
  - (5) Question not attempted
- **40.** "Lhermitte sign" can be positive in which of the following condition?
  - (1) Lateral epicondylitis
  - (2) Cervical spondylosis
  - (3) De-Quervain's tenosynovitis
  - (4) Anterior Cruciate Ligament (ACL) injury
  - (5) Question not attempted
- **41.** Which statement/s is / are correct for lumbar disc herniations?
  - (a) More than 95% of lumbar disc herniations occur at the L4 – L5 and L5 – S1 levels.
  - (b) Radicular symptoms in limb is due to mechanical compression and/or inflammatory response from herniated disc on nerve root.
  - (c) Central disc herniation is more common than posterolateral disc herniation.

Select the correct answer using the codes given below:

### Codes:

- (1) Only (a)
- (2) (a) and (b)
- (3) (b) and (c)
- (4) All (a), (b) and (c)
- (5) Question not attempted

- 42. A 60 year old male has complaint of low back pain. His L-S Spine radiographs (flexion/extension) lateral views showed spondylolisthesis of L5-S1 with 50% slip of L5 over S1. Identify his grade of spondylolisthesis based on Meyerding Grading System?
  - (1) Grade 2 (2) Grade 3
  - (3) Grade 4 (4) Grade 5
  - (5) Question not attempted
- **43.** Commonly responsible muscle for rotational torticollis
  - (1) Ipsilateral splenius capitis
  - (2) Ipsilateral levator scapulae
  - (3) Contralateral splenius capitis
  - (4) Contralateral levator scapulae
  - (5) Question not attempted
- 44. Kienbock disease is avascular necrosis of
  - (1) Lunate
- (2) Hamate
- (3) Pisiform
- (4) Scaphoid
- (5) Question not attempted
- 45. Baxter nerve is a branch of
  - (1) Lateral plantar nerve
  - (2) Medial plantar nerve
  - (3) Medial calcaneal nerve
  - (4) None of these
  - (5) Question not attempted
- 46. Plastic bag palsy is entrapment neuropathy of
  - (1) Digital nerve
  - (2) Median nerve
  - (3) Ulnar nerve
  - (4) Supra-scapular nerve
  - (5) Question not attempted

- 47. X-ray of a 60 year old male with tibio-femoral joint osteoarthritis showed "definite osteophytes with moderate joint space narrowing and some sclerosis". Identify the grade of osteoarthritis of this patient based on Kellgren-Lawrence radiographic grading scale.
  - (1) Grade-1 (2) Grade-2
  - Grade-3
- (4) Grade-4
- (5) Question not attempted
- 48. Which of the following drug is "Targeted Synthetic Disease Antirheumatic Drug" Modifying used to treat Rheumatoid Arthritis?
  - (1) Leflunomide (2) Tofacitinib
  - (3) Infliximab (4) Adalimumab
  - (5)Question not attempted
- A 28 year old male is diagnosed as Ankylosing Spondylitis. His X-ray sacroiliac joint AP view showed "minimal abnormality like small localized areas with erosions or sclerosis without alteration in joint width". What is the radiographic grading of sacroilitis in this patient?
  - (1) Grade 1
- (2) Grade 2
- (3) Grade 3 (4) Grade 4
- (5) Question not attempted
- **50.** A 18 year old girl has dorso-lumbar scoliosis. In her X-ray of D-L spine (PA view) only one pedicle is seen which is positioned at the center of the vertebral body. According to Moe-Nash classification of spinal rotation, what is the grade of vertebral rotation in this patient?
  - (1) Grade 1
- (2) Grade 2
- (3) Grade 3 (4) Grade 4
- (5) Question not attempted

- **51.** "Charleston bending brace" is used in which of the following clinical condition?
  - (1) Acute spinal cord injury with stable fracture
  - (2) Ulnar nerve palsy with claw hand
  - (3) Scoliosis
  - (4) Brachial plexus injury
  - Question not attempted (5)
- 52. Which of the following radiological finding is uncommon in rheumatoid arthritis?
  - (1) Juxta-articular osteopenia
  - (2) Fusiform soft tissue swelling
  - (3) Periosteal elevation
  - Marginal bony erosion and (4) bony cysts
  - (5)Question not attempted
- Proximal muscle weakness and an 53. erythematous heliotropic rash on the skin of the eyelids and the dorsum of hands is commonly seen in
  - (1) Polymyositis
  - (2) Dermatomyositis
  - (3) Inclusion body myositis
  - (4) Cancer associated myositis
  - Question not attempted
- Splints employed for burn injuries 54. is preferably made from
  - (1) Polypropylene
  - (2) HDPE
  - (3) Low temperature thermoplastic
  - (4) LDPE
  - Question not attempted (5)

- 55. In structural lamination of human spinal cord at C6 level, the neuron mediating pain transmission via the substantia gelatinosa are primarily located in which laminae?
  - (1) Laminae I (2) Laminae II
  - (3) Laminae IV (4) Laminae IX
  - (5) Question not attempted
- **56.** Following clinical feature is uncommon in "Brown Sequard Syndrome":
  - (1) Contralateral loss of proprioception
  - (2) Ipsilateral weakness
  - (3) Contralateral loss of pain sensation
  - (4) Contralateral loss of temperature sensation
  - (5) Question not attempted
- **57.** Correct statement about "Spinal Cord Injury Without Radiographic Abnormality (SCIWORA)".
  - (1) MRI usually does not demonstrate any abnormality.
  - (2) Commonly seen in older populations with cervical spondylitis.
  - (3) Most common cause is high speed motor vehicle accident.
  - (4) Lumbar spine is more frequent than cervical spine.
  - (5) Question not attempted
- 58. A 30 year old male has acute spinal cord injury and he is in spinal shock. Which of the following reflex is usually the first reflex to return after spinal shock?
  - (1) Delayed Plantar Reflex (DPR)
  - (2) Bulbocavernosus Reflex
    - (3) Cremasteric Reflex
    - (4) Ankle Jerk
    - (5) Question not attempted

- 59. Following is usually not recommended for the treatment of "Autonomic Dysreflexia" in cervical spinal cord injury patient:
  - Immediately change the position of patient from sitting to supine position.
  - (2) Loosen the tight clothes, remove abdominal binder and check for Foley catheter blockage.
  - (3) Monitor BP and heart rate in every 2 to 5 minutes.
  - (4) If symptoms persist and systolic BP is >150 mmHg, administer antihypertensive agent.
  - (5) Question not attempted
- 60. Incorrect about Walking Index for Spinal Cord Injury (WISCI) scale:
  - (1) It is used to more precisely measure the walking capacity after incomplete spinal cord injury.
  - (2) WISCI-II is a 21 point scale (0 to 20).
  - (3) It takes into consideration the use of walking aids, braces and physical assistance during 10 metre walking.
  - (4) A higher score represent high/more impairment.
  - (5) Question not attempted

- 61. A patient of spinal cord injury has neurogenic bowel. Fluid management and dietary modification are not effective to soften the stool to facilitate the regular bowel movements. Which of the following drug can be used in this patient which primarily act as a stool softener?
  - (1) Psyllium
  - (2) Senna
  - (3) Bisacodyl
  - (4) Docusate sodium
  - (5) Question not attempted
- **62.** Gold standard test for diagnosing heterotopic ossification in spinal cord injury patient is
  - (1) Serum alkaline phosphatase level
  - (2) Ultrasonography
  - (3) Three phase bone scan (Bone Scintigraphy)
  - (4) MRI
  - (5) Question not attempted
- 63. Reflex voiding is a bladder management method in patients with spinal cord injury. Incorrect statement about reflex voiding is
  - (1) Used in those patients where sacral micturition reflex is not intact.
    - (2) Reflex voiding method is commonly recommended for male rather than female.
    - (3) Reflex voiding occurs because a spontaneous uninhibited contraction occurs when bladder reaches a certain volume.
    - (4) A condom catheter attached with leg bag, is used to collect urine.
    - (5) Question not attempted

- **64.** Crede maneuver for bladder management in spinal cord injury patients is used in which of the following condition?
  - (1) Used in patients with suprasacral injury
  - (2) Used in detrusor sphincter dyssynergia
  - (3) Used in over-active sphincter
  - (4) Used in those with no bladder contraction
  - (5) Question not attempted
- 65. A pressure ulcer where full thickness skin and tissue loss is present and obscured by slough or eschar is classified in which stage as per NPUAP pressure ulcer classification?
  - (1) Stage II (2) Stage III
  - (3) Stage IV (4) Unstageable
  - (5) Question not attempted
- 66. Following subscale or domain is not included in "Braden Risk Assessment Scale" for pressure ulcer in spinal cord injury:
  - (1) Activity (2) Mobility
  - (3) Spasticity (4) Nutrition
  - (5) Question not attempted
- 67. Agency for Health Care Policy and Research (AHCPR) guideline recommended what amount of protein intake for a person with SCI and pressure ulcer for better wound healing?
  - (1) 1.25 to 1.5 g/kg of body weight per day
  - (2) 1.0 to 1.25 g/kg of body weight per day
  - (3) 0.5 to 1.0 g/kg of body weight per day
  - (4) 0.25 to 0.5 g/kg of body weight per day
  - (5) Question not attempted

- 68. Which of the following neurophysiological test is commonly used to evaluate the injury of corticospinal tract following spinal cord injury?
  - (1) Somato Sensory Evoked Potentials (SSEP)
  - (2) Motor Evoked Potentials (MEP)
  - (3) Laser Evoked Potentials (LEP)
  - (4) All of these
  - (5) Question not attempted
- 69. Artery of Adamkiewicz is situated at spinal cord level
  - (1) T-1 to T-6 (2) T-6 to T-12
  - (3) T-12 to L-2 (4) T-1 to S-5
  - (5) Question not attempted
- 70. A comminuted fracture of C1 is called as
  - (1) Jefferson Fracture
  - (2) Hangman's Fracture
  - (3) Chance Fracture
  - (4) Clay Shoveler's Fracture
  - (5) Question not attempted
- 71. The following descending tract control muscles that maintain upright posture and balance:
  - (1) Lateral Vestibulospinal
    - (2) Anterior Corticospinal
    - (3) Reticulo Spinal
    - (4) Spino Cerebellar
    - (5) Question not attempted
- 72. Following is an accessory muscle of inspiration and can be necessary to maintain ventilation in high level spinal injury:
  - (1) Diaphragm
    - (2) Pectoralis major
  - (3) External intercostals
    - (4) Trapezius
    - (5) Question not attempted

- 73. Common nutritional deficiency associated with metabolic myelopathy
  - (1) Folate deficiency
  - (2) Iron deficiency
  - (3) Vitamin C deficiency
  - (4) Vitamin D deficiency
  - (5) Question not attempted
- 74. It is recommended that anticoagulant thromboprophylaxis in spinal cord injury with limited mobility should continue for at least
  - (1) 2 Weeks
  - (2) 8 Weeks
  - (3) 12 Weeks
  - (4) 24 Weeks
  - (5) Question not attempted
- **75.** Which of the following statement is incorrect about "meniscal tear/injury"?
  - (1) Tear is most common by rotation as the flexed knee moves towards an extended position.
  - (2) The most common type of tear is the longitudinal tear.
  - (3) The most common location of tear is the anterior horn of the meniscus.
  - (4) The medial meniscus is more prone for injury because it is less mobile.
  - (5) Question not attempted

- 76. During rehabilitation of a patient after ACL reconstruction, the use of blood flow restriction during physical therapy has become popular. Which of the following is incorrect about "blood flow restriction during physical therapy"?
  - (1) The protocol combines low intensity exercise with vascular occlusion which promoting muscular hypertrophy.
    - (2) This therapy helps in additional recruitment of slow twitch fibers by providing excessive oxygen to the tissue.
    - (3) This therapy helps in moderate production of reactive oxygen species promoting tissue growth.
    - (4) This kind of therapy stimulated secretion of catecholamines and growth hormone.
    - (5) Question not attempted
- 77. Incorrect statement about "Osteochondritis Dissecans (OCD)".
  - (1) OCD is most common seen in older patients after 50 years of age.
  - (2) OCD occurs most often in the knee joint.
  - (3) OCD is the most common source of loose bodies in the knee joint.
  - (4) Common site of OCD in knee is on the lateral aspect of the medial femoral condyle near the attachment of the PCL.
  - (5) Question not attempted

- 78. Which of the following muscle is not included in "Rotator Cuff'?
  - (1) Subscapularis
  - (2) Supraspinatus
  - (3) Infraspinatus
  - (4) Teres major
  - (5) Question not attempted
- **79.** Which is not a common component of resistant clubfoot deformities?
  - (1) Adduction or supination, or both
  - (2) Short medial column or long lateral column of the foot
  - (3) External rotation and valgus deformity at calcaneus
  - (4) Equinus deformity at ankle
  - (5) Question not attempted
- 80. In a cerebral palsy with spastic diplegic child, the "Split posterior tibialis transfer surgery" is done for correction of following:
  - (1) Eversion and dorsiflexion deformity of foot
  - (2) Inversion and plantarflexion deformity of foot
  - (3) Crouch gait and internal rotated gait

- (4) Hip flexion deformity
- (5) Question not attempted

- 81. Which of the following is not a principle of tendon transfer for a paralysed muscle?
  - (1) The muscle to be transferred must be strong enough to supplement the power of a partially paralyzed muscle.
  - (2) The transferred tendon should be routed in as direct a line as possible between the muscle's origin and its new insertion.
  - (3) The tendon to be transferred should have a range of excursion similar to the one it is reinforcing or replacing.
  - (4) The transferred tendon must be securely attached under tension slightly lesser than normal.
  - (5) Question not attempted
- **82.** According to Bruner's rules, the absolute maximum tournique time is
  - (1) 2 Hours (2) 3 Hours
  - (3) 4 Hours (4) 1 Hour
  - (5) Question not attempted
- 83. In paralytic hip flexion, abduction and external rotation contracture complete release of muscles from iliac wing and transfer of crest of ilium is undertaken in following procedure:
  - (1) Ober's Procedure
  - (2) Yount's Procedure
  - (3) Campbell Procedure
  - (4) All of these
  - (5) Question not attempted
- 84. Gracialis muscle transfer and tunnel with direct closure of the wound can be performed for
  - (1) Ischial pressure ulcer
  - (2) Sacral pressure ulcer
  - (3) Trochanteric pressure ulcer
  - (4) Any of these

- 85. Incorrect about "Cervical Epidural Steroid Injection".
  - (1) It is primarily used to treat pain arising from cervical herniated discs or spinal stenosis.
  - (2) Preferred injection site is between C3-C4 interspace.
  - (3) Most frequent complication of a cervical epidural injection is subarachnoid penetration.
  - (4) For injection procedure, patient is placed in the prone, lateral decubitus, or sitting position with the neck flexed.
    - (5) Question not attempted
- **86.** "Intercostal Nerve Block" is commonly not indicated in which of the following condition?
  - (1) Herpes zoster
  - (2) Rib fracture
  - (3) Intercostal neuropathies
  - (4) Visceral abdominal pain
  - (5) Question not attempted
- 87. Which of the following is not a complication of "Lumbar Epidural Steroid Injection"?
  - (1) Post-dural puncture headache
  - (2) Epidural steroids may increase plasma cortisol levels
  - (3) Conus medullaris syndrome
  - (4) Adhesive arachnoiditis
  - (5) Question not attempted
- 88. Radial tunnel syndrome can mimic as
  - (1) Triceps tendinitis
  - (2) Tennis elbow
  - (3) Cubital bursitis
  - (4) Supinator syndrome
  - (5) Question not attempted

- 89. For striatal toe, botulinum toxin should be injected in following muscle:
  - (1) Extensor hallucis longus
  - (2) Flexor hallucis longus
  - (3) Abductor hallucis
  - (4) Adductor hallucis
  - (5) Question not attempted
- 90. A 60 year old male had CVA resulting in right hemiparesis with aphasia. During assessment for aphasia, the examiner noted that the patient has good fluency, poor comprehension, poor repetition and poor naming. Identify the type of aphasia of this patient.
  - (1) Broca aphasia
  - (2) Transcortical motor aphasia
  - (3) Conduction aphasia
  - (4) Wernicke aphasia
  - (5) Question not attempted
- 91. A 55 year old male had CVA with left hemiparesis before 1 month and now he is in recovery phase. He has spasticity in his left upper and lower limb and now he begins to activate muscles selectively outside the flexor and extensor synergies. Identify his Brunnstrom stages of motor recovery.
  - (1) Stage 2 (2) Stage 3
  - (3) Stage 4 (4) Stage 5
  - (5) Question not attempted
- **92.** Revised McDonald diagnostic criteria is a set of guidelines to facilitate the diagnosis of following neurological condition?
  - (1) Multiple sclerosis
  - (2) Stroke
  - (3) Parkinson's disease
  - (4) Huntington's disease
  - (5) Question not attempted

- 93. Which of the following is / are correct about "Becker Muscular Dystrophy" (BMD)?
  - (a) BMD is usually a X-linked dominant disorder.
  - (b) Onset of disease is between the age of 4 to 12 years in severe cases of BMD.
    - (c) Loss of ambulation is usually after 16 years of age.

Select the correct answer using the codes given below:

### Codes:

- (1) (a) only
- (2) (a) and (b)
- (3) (b) and (c)
- (4) All (a), (b) and (c)
- (5) Question not attempted
- 94. According to Seddon and Sunderland classification of nerve injury, a nerve injury involving axonal damage with wallerian degeneration and supporting structures remains intact, is defined as
  - (1) Neuropraxia and 1st degree
  - (2) Axonotmesis and 2nd degree
  - (3) Neurotmesis and 3rd degree
  - (4) Neurotmesis and 4th degree
  - (5) Question not attempted
- **95.** Crouch gait in a child with cerebral palsy is described as
  - (1) Variable pelvis position, excessive hip and knee flexion and ankle dorsiflexion
  - (2) Decreased knee flexion range of motion throughout the gait cycle
    - (3) Excessive hip and knee flexion and ankle equinus
    - (4) Excessive lower extremity adduction
    - (5) Question not attempted

- 96. Movement diorder which are sudden, shock-like movements that are usually random and range in severity from mild to severe enough to move the whole body, are defined as
  - (1) Tremor

- (3) Dystonia (4) Myoclonus
- (5) Question not attempted
- 97. Which of the following is not a cardinal motor sign of "Parkinson Disease"?
  - (1) Resting tremor
  - (2) Bradykinesia
  - (3) Spasticity
  - (4) Postural instability
  - Question not attempted
- 98. Which one of the following is a poor prognostic indicator in the patient of transverse myelitis?
  - Bowel and bladder dysfunction
  - (2) Younger age
  - (3) Retaining dorsal column function and deep tendon reflexes
  - Slower progression of sensory (4) or motor symptoms
  - Question not attempted
- 99. Which one of the following clinical feature is not consistent with Guillain-Barrè Syndrome?
  - (1) Progressive weakness in both arms and legs and areflexia
  - (2)Symmetry of symptoms
  - Mild sensory symptoms
  - Bowel or bladder involvement (4) at onset
  - Question not attempted

- 100. Which one of the following cranial nerve is not involved in swallowing process?
  - (1) Cranial nerves V
  - Cranial nerves VII
  - Cranial nerves X
  - (4) Cranial nerves VI
  - (5) Question not attempted
- 101. A vear old male with Myocardial Infarction (MI) admitted in hospital. Which of the following can be considered during acute phase (Phase 1) of cardiac rehabilitation of this patient?
  - Post-MI heart rate increase with activity, so it should be kept to within 20 beats/min of baseline
  - During activity systolic BP should be kept within 20 mm Hg of baseline.
  - The target intensity at the end of the phase I program exercise is usually to a level of four (4) METs
  - (4) All of these
  - Question not attempted
- 102. Which one of the following is uncommon finding in "restrictive pulmonary disease"?
  - FEV<sub>1</sub>/FVC Decrease
  - FEV<sub>1</sub> Decreased, normal, or increased
  - TLC Decreased (3)
  - RV Decreased (4)
  - Question not attempted

- 103. In a patient with Hansen's disease. which of the following nerve is usually the first and most severely involved in upper limbs?
  - (1) Ulnar nerve
  - (2) Median nerve
  - Radial nerve (3)
  - (4) Musculocutaneous nerve
  - Question not attempted
- 104. The current "gold standard" test for perinatal diagnosis of Myelomeningocele (MMC) is
  - (1) Fetal Magnetic Resonance Imaging (MRI)
  - (2) Ultrasound (US)
    - (3) Maternal serum Alpha-Fetoprotein (AFP)
    - Amniocentesis
    - Question not attempted
- 105. A young lady was evaluated after six months of intracranial haemorrhage. She does not need assistance in everyday life; employment is possible but may require special equipment. Her score on Glasgow Outcome Scale (GOS) is
  - (1) 5
- (2) 4
- (3)
- (5) Question not attempted

- 106. A young man post traumatic brain injury on clinical evaluation has, intelligible verbalization, recognizable verbal responses and cry following emotional exposure, is in a state of
  - Coma vigil
  - Apallic syndrome
  - (3) Vegetative state
  - (4) Minimally conscious state
  - (5) Question not attempted
- 107. Most efficient diagnostic strategy for spinal muscular atrophy is
  - Electro diagnostics
  - (2) MRI
  - (3) Genetic testing
  - (4) Muscle biopsy
  - Question not attempted
- 108. Hirayama disease or monomelic amyotrophy has following features, except one
  - (1) Unilateral limb involvement
  - Cold paresis
  - (3) Incontinence of bladder
  - Distal involvement (4)
  - Question not attempted
- 109. A young man on evaluation with Ranchos level of cognitive functioning, is oriented responds to the environment but abstract reasoning abilities are decreased relative to premorbid levels can use assistive devices to memory deficits. revised Ranchos level of cognitive functioning scale his score will be
  - (1) Level VII (2) Level VIII
- - (3) Level IX (4) Level X
- - (5) Question not attempted

- primarily assesses the labyrinthine function through the vestibule-spinal reflexes in a patient with Vestibular Impairments?
  - (1) Fukuda stepping test
  - (2) Epley maneuver
  - (3) Dix-Hallpike maneuver
  - (4) Romberg test
  - (5) Question not attempted
- 111. In a healthy infant/child "Tonic neck primitive reflex" usually disappears at the age of
  - (1) 5 months (2) 9 months
  - (3) 12 months (4) 24 months
  - (5) Question not attempted
- physical assistance for mobility in most of the settings, he may walk for short distances at home with physical assistance and for school he is transported in a manual wheelchair. What is his Gross Motor Function Classification Scale (GMFCS) level?
  - (1) GMFCS level II
  - (2) GMFCS level III
  - (3) GMFCS level IV
  - (4) GMFCS level V
  - (5) Question not attempted 😁
- 113. Which one of the following is not a specific learning disorder?
  - (1) Dyslexia
  - (2) Dysgraphia
  - (3) Dyscalculia
  - (4) Dysarthria

- 114. A child with autism has impaired expressive communication. Which of the following augmentative and alternative communication (AAC) system can't be used to enhance communication of this child?
  - (1) Low-tech picture and alphabet boards
  - (2) Low-tech voice output devices

    Talking symbol notepad
  - (3) High end synthesized speech devices Vantage communication device
  - (4) Braille Trails
  - (5) Question not attempted
- 115. In cerebral palsy poor prognostic signs for walking reported by Bleck include following, except one
  - (1) Persistent moro reflex
  - (2) Strong extensor thrust on vertical suspension
  - (3) Absence of normal parachute reaction after 11 months
  - (4) Sitting by 2 years
  - (5) Question not attempted
- 116. Following can be classified as closed spinal dysraphism
  - (1) Myelomeningocele
  - (2) Myelocele
  - (3) Hemimyelocele
  - (4) Meningocele
  - (5) Question not attempted

- 117. Following are possible symptoms of a shunt malfunction in hydrocephalus except one in adults:

  - Vomiting I like and 3-1
    - (3) Lethargy
    - (4) Sunsetting eyes
    - (5) Question not attempted
- 118. A 30 year old male has complete SCI (D8 neurological level). Which of the following is correct regarding his sexuality?
  - (1) Reflexogenic arousal should be preserved whereas psychogenic arousal will not.
  - (2) Psychogenic arousal should be preserved whereas reflexogenic arousal will not.
  - (3) Both reflexogenic and psychogenic arousal should be preserved.
  - (4) Both reflexogenic and psychogenic arousal should be absent.
  - (5) Question not attempted
- 119. Sympathetic storm is a medical emergency in PMR. Which one of the following symptom is uncommon in sympathetic storm in traumatic brain injury patient?
  - (1) Agitation
  - (2) Hypothermia
  - (3) Diaphoresis
  - (4) Hypertension
  - (5) Question not attempted

- difficulty and his tracheostomy with tube placement was done before 2 days. During inpatient rehabilitation, his tracheostomy tube was accidentally decannulated. What should not be done in this patient?
  - (1) Tube should be immediately reinserted blindly.
    - (2) Patient should be immediately ventilated using a bag valve-mask.
    - (3) Use pulse oximetry for continuous monitoring.
  - (4) Transfer patient immediately to an emergency department for orotracheal intubation.
    - (5) Question not attempted
- 121. Which of the following drug or drugs can be used for intracavernous injection to treat the erectile dysfunctions in male patient with spinal cord injury?
  - (1) Papaverine
  - (2) Phentolamine
  - (3) Alprostadil
  - (4) All of these
  - (5) Question not attempted
- 122. After cardiac transplantation during rest following parameters are greater than normal, except one
  - (1) Heart rate
  - (2) Stroke volume
  - (3) Systolic pressure
  - (4) Serum lactate
  - (5) Question not attempted

- 123. As per Rights for Person with Disability Act, 2016, how many percent of government jobs in the cadre strength in each group of posts are reserved for the person with benchmark disabilities?
  - (1) 2% (2)
    - 3%
  - (3) 4%
- (4)
- Question not attempted (5)
- 124. As per Rights for Person with Disability Act, 2016, which of the following statement is incorrect for the person with disabilities?
  - (1) Every Government establishment shall provide reasonable accommodation and appropriate barrier free and conducive environment to employees with disability.
  - (2) The persons with benchmark disabilities shall be given an upper age relaxation of three vears for admission institutions of higher education.
  - No promotion shall be denied to a person merely on the ground of disability.
  - No Government establishment shall dispense with or reduce in rank, an employee who acquires a disability during his or her service.
  - Question not attempted (5)
- 125. A 30 year old male presented in clinic for disability disability certification. On examination he has 3 inches of true shortening of his left lower limb only and rest of the examination finding are within normal limits. How much is his percentage of disability due to 3 inches shortening of left lower limb only?
  - (1) 16% (2) 20%
- - (3) 24%

- (4) 28%
- (5) Question not attempted

- 126. A 45 year old male has prolapse intervertebral disc disease at L4-5. He has taken all medical and surgical treatment for his PIVD L4-5 but still has persistent back pain and stiffness which aggravated by heavy lifting and necessitating modification of all activities requiring heavy weight lifting. What is his permanent physical impairment?

  - (1) 10% (2) 20%
  - 25% (3)
- 30%
- Question not attempted
- 127. Following scheme from Government of India has provisions to provide barrier free environments:
  - SIPDA, 2016 (1)
  - (2) DDRC
  - Disability Early (3) Cross Intervention
  - (4) National Fund for PWDs
  - (5) Question not attempted
- 128. In an epidemiology study, the ratio of the incidence of the disease (or death) among exposed and the incidence among non-exposed is known as
  - Relative Risk (RR) (1)
  - Attributable Risk (AR) (2)
  - Population-attributable Risk (3)
  - Odds Ratio (OR) (4)
  - (5) Question not attempted

- 129. Which of the following is / are "Analytical study/studies"?
  - (1) Ecological study
  - (2) Cross-sectional study
  - (3) Case-control study
  - (4) All of these
  - (5) Question not attempted
- 130. Which of the following is not considered as a basic principle of clinical ethics while treating patient in Rehabilitation Medicine?
  - (1) Non-beneficence
  - (2) Non-maleficence
  - (3) Autonomy
  - (4) Justice
  - (5) Question not attempted
- 131. Which one of the following is incorrect about "Independent Medical Evaluation (IME)" in the medico-legal system?
  - (1) IME is arranged when one party desires to obtain an expert medical opinion from the patient's treating physician.
  - (2) IME is helpful to resolve a conflict between the patient and a third party.
  - (3) In IME no doctor-patient relationship established under traditional law.
  - (4) IME report cannot be introduced into the legal record unless a deposition occurs.
  - (5) Question not attempted

- 132. Which one of the following is an ideal patient for Neuromuscular Electrical Stimulation (NMES) application?
  - (1) Patient with post-polio residual paralysis
  - (2) Patient with muscular dystrophies
    - (3) Patient with traumatic brain injury
    - (4) Patient with brachial plexus injury
    - (5) Question not attempted
- 133. While preparing platelet rich plasma, the common activating agent is
  - (1) Magnesium sulphate
  - (2) Heparin
  - (3) Calcium chloride
  - (4) All of these
  - (5) Question not attempted
- 134. While harvesting bone marrow aspirate for autologous bone marrow, the preferable site for aspiration is
  - (1) Distal femur
  - (2) Tibia
  - (3) Calcaneum
  - (4) Iliac crest
  - (5) Question not attempted
- 135. Following training based intervention has been found beneficial in neural repair process:
  - (1) Constraint induced movement therapy

- (2) Bo-bath therapy
- (3) Isotonic therapy
- (4) All of these
- (5) Question not attempted

- 136. Which of the following is primary action/function of "Supraspinatus muscle"?
  - (1) Initiation of abduction of arm at shoulder
  - (2) Initiation of adduction of arm at shoulder
    - (3) Internal rotation of arm at shoulder
    - (4) External rotation of arm at shoulder
    - (5) Question not attempted
- 137. Which of the following is primary action/function of "dorsal interossei muscles" of hand?
  - (1) Abduction of the index, middle and ring fingers
  - (2) Adduction of the index, middle and ring fingers
  - (3) Extension of metacarpophalangeal joints
  - (4) Flexion of the interphalangeal joints
  - (5) Question not attempted
- 138. Which of the following is not a primarily "Lateral Rotators of the Thigh"?
  - (1) Obturator internus
  - (2) Quadratus femoris
  - (3) Gluteus minimus
  - (4) Gluteus maximus

- 139. A patient with traumatic brain injury has altered consciousness on Glasgow coma scale assessment, he has eye opening with painful stimuli, best motor response is withdrawal and inappropriate words on verbal response. Calculate his total Glasgow coma scale score?
  - (1) 7
- (2) 8
- (3) 9
- (4) 10
- (5) Question not attempted
- 140. Mr. Sameer is a diagnosed case of PIVD L4-L5 with severe L5 nerve root compression. During clinical examination which is a most common site of sensory deficit or altered sensation in this patient?
  - (1) Medial side of heel
  - (2) Dorsum of the foot at the third metatarsal phalangeal joint
  - (3) Lateral side of heel
  - (4) Medial femoral condyle
  - (5) Question not attempted
- **141.** "Beta-adrenergic receptors" are predominately distributed in which portion of bladder?
  - (1) Body of bladder
  - (2) Base of the bladder
  - (3) Prostatic urethra
  - (4) Distributed equally all over in bladder
  - (5) Question not attempted

- 142. Which of the following is not a branch of posterior cord of brachial plexus?
  - (1) Upper subscapular nerve
  - (2) Lateral pectoral nerve
  - (3) Nerve to latissimus dorsi
  - (4) Lower subscapular nerve
  - (5) Question not attempted
- **143.** Which of the following is not included in the structure of the ICF?
  - (1) Body functions
  - (2) Body structures
  - (3) Activities and participation
  - (4) Socioeconomic factors
  - (5) Question not attempted
- 144. Nursemaid's elbow is
  - (1) Subluxation of head of radius
  - (2) Lateral epicondylitis
  - (3) Inflammation of subcutaneous olecranon bursa
  - (4) Median nerve entrapment
  - (5) Question not attempted
- 145. Muscle fiber type with high myoglobin content, low glycogen content, slow contraction and high fatigue resistance
  - (1) Type I
- (2) Type II
- (3) Type III
- (4) Type IV
- (5) Question not attempted ...
- 146. Following are symptoms of cerebellar lesion, except one
  - (1) Intention tremors
  - (2) Postural tremors
  - (3) Ataxia
  - (4) Essential tremors
  - (5) Question not attempted

- **147.** Following are muscles of the pelvis, except one
  - (1) Obturator internus
  - (2) Piriformis
  - (3) Levator ani
  - (4) Obturator externus
  - (5) Question not attempted
- **148.** Which of the following is "not a determinant of human gait"?
  - (1) Pelvic rotation
  - (2) Pelvic Trendelenburg motion, or pelvic list
  - (3) Lateral displacement of the pelvis
  - (4) Knee extension in stance phase
  - (5) Question not attempted
- 149. In Osteoporosis pharmacotherapy, which drug is used as an anabolic agent or osteoblast stimulator agents?
  - (1) Bisphosphonates
  - (2) Calcitonin
  - (3) Teriparatide
  - (4) Denosumab
  - (5) Question not attempted
- 150. A 60 year old female has Vit-D deficiency. Which one of the laboratory finding is uncommon in this female?
  - (1) Serum calcium level is low or normal.
  - (2) Serum phosphorus level is low or normal.
  - (3) Parathyroid Hormone (PTH) level is low.
  - (4) Decreased urinary calcium excretion.

# रफ कार्य के लिए स्थान / SPACE FOR ROUGH WORK