## **PROVISIONAL ANSWER KEY**

Question124/2023/OLPaper Code:410/2022Code:E E G Technician Grade IIDate of Test26-07-2023DepartmentMedical Education

Question1:-Choose the correct option Common mode Rejection in Electrophysiology is

A:-Process of rejecting signals from both ground and recording electrodes

B:-Is based on the principle of differential amplification

C:-Amplification from recording electrode only

D:-Ensures different impedence at each electrode of interest

Correct Answer:- Option-B

Question2:-Filters are used in Electrophysiology for

A:-High and low pass filters are set at the same settings in both motor and sensory nerve conduction tests

B:-Electrical noise could be excluded by allowing signals pass through both high pass and High frequency filters

C:-Low frequency noise will not interfere with baseline

D:-High frequency filters allow lower frequency signals to pass through

Correct Answer:- Option-B

Question3:-Impedance can be reduced by

A:-Cleaning the skin with Betadine ointment

B:-The 3 electrodes - Active, reference and ground should be of different types

C:-All contacts should be intact

D:-By placing the 3 electrodes - ground stimulator of recording electrodes in the same order, serially

Correct Answer:- Option-C

Question4:-Electrically sensitive patients are

- (i) Patients who have hyper sensitivity to medicines/drugs
- (ii) Patients with breeched or oozing skin
- (iii) These patients require only routine grounding
- (iv) Patients with central intravenous line

A:-(i) and (iv)

B:-(i) and (iii)

C:-(ii) and (iv)

D:-(ii) and (iii)

Correct Answer:- Option-C

Question5:-Choose the correct option

A:-A square wave can be obtained by adding a services of sine waves

B:-Fourier analysis cannot be applied to bioelectric potentials

C:-In needle EMG (Electromyogram), the displayed were form may not always represent bioelectric potential

D:-Amplification and filtration cannot always eliminate electric noise

Correct Answer:- Option-A

Question6:-Functions of ground electrodes are

- (i) Functions of ground and reference electrodes are same
- (ii) Ground electrodes allow stray current to pass through
- (iii) Helps in minimising contamination of signal of interest
- (iv) Ground and Reference electrodes are always having the same potential

A:-(i) and (iv)

B:-(ii) and (iii)

C:-(i) and (iii)

D:-(ii) and (iv)

Correct Answer:- Option-B

Question7:-For a safe electrical receptacle, the requisites are

A:- It should have minimum of two inputs

B:-Extension cord can be used, if there is a need

C:-Inputs could be black neutral lead of 0 volt and white hot lead of 120V of 60Hz A.C.

D:-Grounding should be uncompromised

Correct Answer:- Option-D

Question8:-High frequency oscillations are

- (i) identified in routine interictal scalp EEG recordings
- (ii) Seen only in Epilepsy
- (iii) Classified into fast Ripples and very high frequency oscillations
- (iv) Having frequency range of 80 Hz to > 1000 Hz

A:-(i) and (iii)

- B:-(ii) and (iii)
- C:-(i) and (iv)

D:-(ii), (iii) and (iv)

Correct Answer:- Option-C

Question9:-Choose the correct answer

Time constant in Electrophysiology is

(i) Defined as 63% delay time and 63% rise time in a Calibration signal

(ii) For a high frequency filter, time constant is time taken for calibration to decay from full scale to 63%

- (iii) Time constant is the product of Resistance and capacitance
- (iv) Raising the low frequency filter will cause prolongation of time constant

A:-(i) and (ii)

B:-(i) and (iii)

C:-(i) and (iv)

D:-(ii), (iii) and (iv)

Correct Answer:- Option-B

Question10:-Computerised/Digital EEG : Pick the correct option

(i) Alias signal can interfere with signal of interest in digital EEG

(ii) Amplitude and Pen alignment should be constantly monitored and adjusted in digital EEG.

(iii) Manipulation of raw data is possible even after completion of test in Digital EEG

(iv) Unable to store large volumes of data in smaller spaces

A:-(i) and (ii)

B:-(i) and (iii)

C:-(i) and (iv)

D:-(ii) and (iv)

Correct Answer:- Option-B

Question11:-Regarding Evoked potentials, Choose the correct statements

(i) Visual Evoked potentials are responses from lateral Geniculate body

(ii) Level of consciousness of the subject/patients is non significant in brain stem auditory evoked potential recording

(iii) The most important response obtained is from the motor cortex in somato sensory Evoked potential

(iv) Averaging is needed in all Evoked potential recording

A:-(i) and (ii)

B:-(ii) and (iii)

C:-(iii) and (iv)

D:-(ii) and (iv)

Correct Answer:- Option-D

Question12:-Pace maker for alpha rhythm is

A:-Cortex

B:-Thalamus

C:-Basal Ganglia

D:-Mesencephalor

Correct Answer:- Option-B

Question13:-Sensory Innervation of sole of foot is by which nerve

A:-Saphenous Nerve

**B:-Sural Nerve** 

C:-Superficial Peroneal Nerve

D:-Tibial nerve

Correct Answer:- Option-D

Question14:-Lesions of Brachial plexus can cause

- (i) Breathing difficulty
- (ii) Horner's syndrome
- (iii) Scapular pain
- (iv) Numbness of upper limb

A:-(i) and (iv)

B:-(ii) and (iv)

C:-(ii) and (iii)

D:-(i) and (iii)

Correct Answer:- Option-B

Question15:-F Response and H Reflex : Following are true

- (i) Both motor responses
- (ii) Useful in diagnosing early Radiculopathy
- (iii) Chrono dispersion is significant H Reflex
- (iv) Persistance should be more than 50% in F response

A:-(i) and (iv)

- B:-(i) and (iii)
- C:-(ii) and (iv)

D:-(iii) and (iv)

Correct Answer:- Option-C

Question16:-In wrist joint

A:-Radius and Ulne articulates with all carpal bones

B:-Carpal bones are eight in number

C:-The most common test done in Electrophysiology lab is ulnar Neuropathy at ciuyou's canal

D:-Fracture of scaphoid can cause carpal tunnel syndrome

Correct Answer:- Option-B

Question17:-Calculate the Nerve conduction velocity, if the Proximal latency = 7m sec; distal leting = 3m sec and distance between preximal and distal stimulating site is 20 m

A:-50 m/sec

B:-50 cm/sec

C:-5 m/sec

D:-50 mm/sec

Correct Answer:- Option-A

Question18:-Fifty year old gentleman presented with Bell's palsy of 6 days this blink reflex study was normal the inference is

A:-The study was done very early. Repeat after one month

B:-Diagnosis could be stroke, not Bell's palsy

C:-Technician needs more training

D:-Could also be normal in some cases and prognosis for recovery is good

Correct Answer:- Option-D

Question19:-Pick the correct option

The Repetitive Nerve stimulation study (RNS) for Neuromuscular Junction disorder shows

(i) Decrement in Myaesthemia Gravis is due to reduced safety factor

(ii) Post Exercise increment is seen only in presynaptic disorder like Eaton Lambert syndrome (LEMS)

(iii) More than 10% Decrement occurs in Myaesthe grar's by slow RNS

(iv) Post activation Exhaustion is only seen in presynaps disorders like LEMS

A:-(i) and (ii)

B:-(ii) and (iii)

C:-(iii) and (iv)

D:-(i) and (iii)

Correct Answer:- Option-D

Question20:-Forty two year old gentlemen presented with proximal muscle weakness. Needle EMG (Electromyography) showed the following findings what is your opinion

Increased Insertional activity, occasional fibrillation in vastus medialis. Motor unit Action potentials were short duration, low amplitude with polyphasi Early recruitment was also found

A:-Motor Neuron disease

B:-Guillain Barre syndrome

C:-Poly neuropathy

D:-Myopathy

Correct Answer:- Option-D

Question21:-What is/are the principal goal/s of the electrofiagnostic studies?

A:-Localise the neuromuscular disorder

B:-assess the severity of neuromuscular disorder

C:-Identify the etiology in all cases

D:-Both 1 and 2

Correct Answer:- Option-D

Question22:-Which of the following statements is false with regard to electrodiagnostic studies?

A:-Electrodiagnostic studies are more sensitive than the clinical examination in determining the fibre types involved in neuropathy (motor, sensory or both)

B:-Electrodiagnostic studies can define whether the underlying pathophysiology is demyelination or axonal loss

C:-Clinical time course of symptoms and signs are not required for the interpretation of the nerve conduction studies and electromyography

D:-Technical problems can easily lead to abnormal findings

Correct Answer:- Option-C

Question23:-Failure to recognise technical factors that influence the electrodiagnostic studies can result in diagnosing an abnormalities when none is present which is termed as

A:-Type I error

B:-Type II error

C:-Type III error

D:-Type IV error

Correct Answer:- Option-A

Question24:-The positively charged particles within the nucleus is

A:-Neutrons

**B:-Protons** 

C:-Electrons

D:-Neutrino

Correct Answer:- Option-B

Question25:-Which of the following is a conductor?

A:-Plastic

**B:-Rubber** 

C:-Ceramic

D:-Copper

Correct Answer:- Option-D

Question26:-The unit of measurement for the current is

A:-Voltage

**B:-Ampere** 

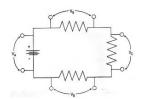
C:-Coulomb

D:-Ohms

Correct Answer:- Option-B

Question27:-The figure below shows a battery with a voltage ( $v_A$ ) connected in series to three resistors (B, C, D). The current running through the three resistors

results in a voltage drop across each resistor,  $v_B$ ,  $v_C$  and  $v_D$  respectively. Kirchhoff's voltage law is depicted by the equation



 $A:-V_A+V_B+V_C+V_D$  $B:-V_A=V_B\times V_C\times V_D$ 

C:- $\frac{V_A}{V_B} = \frac{V_C}{V_D}$ 

 $\mathsf{D:-}V_A = V_B + V_C + V_D$ 

Correct Answer:- Option-D

Question28:-What is the frequency of alternating current supply in India for domestic use

A:-40 Hz

B:-50 Hz

C:-60 Hz

D:-100 Hz

Correct Answer:- Option-B

Question29:-Which of the following statement is false regarding capacitance?

A:-Capacitance is a property of a circuit that allows it to store an electrical charge

B:-When a voltage is applied across the plates of a capacitor, electrons and forced onto one plate and pulled away from the other

C:-Capacitance is measured in Henries

D:-The amount of charge stored in a capacitor is proportional to the voltage across it

Correct Answer:- Option-C

Question30:-A patient with diabetic peripheral neuropathy is referred to the electrophysiology laboratory for nerve conduction study. He has swelling of one limb. What technical difficulty the neurotechnologist can encounter while doing the nerve conduction study?

A:-There is no technical problen for an experienced neurotechnologist

B:-The intervening tissue and edema will not create artificially low amplitude

C:-Compound muscle action potential will be difficult to record as compared to sensory nerve action potential

D:-Reduction in amplitudes will be more for the sensory nerve action potential as compared to compound muscle action potential

Correct Answer:- Option-D

Question31:-EEG records the brain activity generated by the

A:-Extracellular field potentials generated by the excitatory and inhibitory post synaptic potentials at the apical dendrites of pyramidal cells in the cerebral cortex

B:-Extracellular field potentials generated by the excitatory post synaptic potentials at the apical dendrites of pyramidal cells in the cerebral cortex

C:-Extracellular field potentials generated by the inhibitory post synaptic potentials at the apical dendrites of pyramidal cells in the cerebral cortex

D:-Extracellular field potentials generated by the excitatory and inhibitory post synaptic potentials at the astrocytes in the cerebral cortex

Correct Answer:- Option-A

Question32:-The reusable disc electrodes for routine scalp recordings is made of

A:-Aluminium

**B:-Silver** 

C:-Plastic

D:-Steel

Correct Answer:- Option-B

Question33:-For the proper artifact free recording of EEG, the impedance between the skin and electrodes should be below

A:-5KOhm

B:-15KOhm

C:-50KOhm

D:-100KOhm

Correct Answer:- Option-A

Question34:-The EEG amplifier is a differential amplifier which amplifies

A:-Both desires signal and the undesired potentials and noise

B:-The potential difference between input 1 and input 2 while removing the common signals

C:-The potential of input 1 while removing the undesired potentials and noise

D:-The potential of input 2 while removing the undesired potentials and noise

Correct Answer:- Option-B

Question35:-What is the most commonly used sampling rate in commercially available EEG equipments?

A:-100 Hz

B:-140 Hz

C:-200 Hz

D:-240 Hz

Correct Answer:- Option-D

Question36:-Why is the P100 latency used as the central measurement for full field visual evoked potential (VEP) interpretation?

A:-Attributable to the special physiological significance of P100

B:-It is the earliest components of VEP

C:-Since P100 is the largest component of VEP

D:-P100 is most stable and consistently identified waveform in all normal subjects

Correct Answer:- Option-D

Question37:-What is the usual sweep time set for obtaining brainstem auditory evoked potential in adults

A:-5 milliseconds

B:-10 milliseconds

C:-20 milliseconds

D:-30 milliseconds

Correct Answer:- Option-B

Question38:-Most commonly used nerve to record somatosensory evoked potential in lower limbs

A:-Common peroneal nerve

**B:-Superficial peroneal nerve** 

C:-Tibial nerve

D:-Sural nerve

Correct Answer:- Option-C

Question39:-Multiple sleep latency test (MSLT) is performed for the diagnosis of

A:-Sleep apnea

B:-Sleep disordered breathing in pediatric patients

C:-Parasomnia

D:-Narcolepsy

Correct Answer:- Option-D

Question40:-While recording EEG, movement of people near the patient generate the artifact labelled as

A:-Movement artifacts

B:-Electrostatic artifacts

C:-High frequency noise

D:-Electrode artifacts

Correct Answer:- Option-B

Question41:-MTLE-HS stands for

A:-Manifest Temporal Latent Epilepsy - Hippocampal Sclerosis

B:-Mesial Tangential Latent Epilepsy - Hippocampal Sclerosis

C:-Mega Temporal Latent Epilepsy - Hippocampal Sclerosis

D:-Mesial Temporal Lobe Epilepsy - Hippocampal Sclerosis

Correct Answer:- Option-D

Question42:-Ebersole type 2 spikes are seen with \_\_\_\_\_\_ epilepsy

A:-New Temporal Latent Epilepsy - Hippocampal Sclerosis

B:-Hypothalamic Hamartoma

C:-Neocortical Temporal Lobe Epilepsy

D:-Mesial Temporal Lobe Epilepsy - Hippocampal sclerosis

Correct Answer:- Option-C

Question43:-Which of the following EEG findings has a strong association with focal seizures?

A:-Temporal intermittent rhythmic delta activity (TIRDA)

B:-Occipital intermittent rhythmic delta activity (TIRDA)

C:-Frontal intermittent rhythmic delta activity (TIRDA)

D:-Parietal intermittent rhythmic delta activity (TIRDA)

Correct Answer:- Option-A

Question44:-Frequency of sleep spindles

A:-0.5 to 4 Hz

B:-11 to 16 Hz

C:-20 to 80 Hz

D:-4 to 7 Hz

Correct Answer:- Option-B

Question45:-EEG pattern in REM sleep is

A:-High amplitude, slow delta waves

B:-Low amplitude, fast theta waves

C:-High amplitude, beta waves

D:-Low amplitude, Slow delta waves

Correct Answer:- Option-B

Question46:-Diffuse, bilaterally synchronous 3Hz wave and spike discharges are typical EEG findings of

A:-Absence seizures

B:-Infantile spasm

C:-Myoclonic seizures

D:-Complex partial seizures

Correct Answer:- Option-A

Question47:-When people are attentive to an external stimulus or are thinking hard about something, the alpha rhythm is replaced by

A:-Delta

B:-Theta

C:-Alpha

D:-Beta

Correct Answer:- Option-D

Question48:-Stage 2 sleep is defined by the presence of

A:-Spikes and slow waves

B:-Sleep spindles and K complexes

C:-Rapid eye movements

D:-1- to 2 Hz delta frequencies

Correct Answer:- Option-B

Question49:-Triphasic waves are characteristically seen in

A:-Epileptic encephalopathy

B:-Brain death

C:-Metabolic encephalopathy

D:-Bilateral subdural hematoma

Correct Answer:- Option-C

Question 50:-Neonatal seizures include the following types EXCEPT

A:-Tonic

**B:-Clonic** 

C:-Tonic clonic

D:-Subtle seizures

Correct Answer:- Option-C

Question51:-Which of the statements about High frequency oscillations is INCORRECT?

A:-Higher frequency oscillations of HFOs are cerebral potentials between 80 and 500  $\mbox{Hz}$ 

B:-HFOs are best recorded using sphenoidal electrodes

C:-Fast HFOs between 250 and 500 Hz (also known as fast ripples) are specifically associated with epileptogenic cortex

D:-Complete surgical resection of these HFOs is more likely to result in a seizure free outcome after epilepsy surgery

Correct Answer:- Option-B

Question52:-True about SREDA is

A:-An epileptic ictal pattern

B:-alternate name for rhythmic temporal theta of drowsiness

C:-Seen in newborns

D:-Lasts for minutes

Correct Answer:- Option-D Question53:-Cortical spreading depression is associated with A:-Migraine **B:-Temporal lobe epilepsy** C:-Frontal lobe epilepsy D:-Hypothalamic hamartoma Correct Answer:- Option-A Question54:-High amplitude slowing can be elicited by \_\_\_\_\_\_ and \_\_\_\_\_ A:-Hyperventilation, closing of Eyes **B:-Drowsiness**, Photic Stimulation C:-Stage 2 Sleep, Photic Stimulation D:-Hyperventilation, Stage 3 Sleep Correct Answer:- Option-D Ouestion55:-True about Delta Brush A:-Is normal EEG finding in neonates aged 28-38 weeks B:-Can be seen in anti NMDA autoimmune encephalitis C:-Seen over temporal channels D:-All of the above Correct Answer:- Option-D Question 56:-Trace alternant, a characteristic pattern of EEG is A:-Seen in pregnant ladies in second trimester B:-Seen in neonates aged 35-38 weeks C:-Seen in mild cognitive impairment D:-Seen in brain death Correct Answer:- Option-B Question57:-Beta activity (13-30 Hz) A:-can be seen normally in anxious adults B:-Seen secondary to medications like benzodiazepines C:-Seen secondary to medications like barbiturates D:-All of the above Correct Answer:- Option-D Question58:-EEG measures the between two electrodes on the scalp A:-Resistance **B:-Current C:-Potential difference** 

D:-All of the above

Correct Answer:- Option-C

Question59:-Trace discontinue, a characteristic pattern of EEG is seen

A:-Seen in preterm neonates aged <32 weeks

B:-Seen in pregnant ladies in first trimester

C:-Seen in hypothalamic hamartoma

D:-Seen on REM sleep

Correct Answer:- Option-A

Question60:-Sleep spindles can be asynchronous

A:-Until 6 months of age

B:-Until 1 year of age

C:-Until 2 years of age

D:-Sleep spindles are never asynchronous

Correct Answer:- Option-C

Question61:-Optimum method of nerve stimulation for NCS is

A:-Start with higher current for supramaximal stimulation

B:-Start with low current, find site of maximal submaximal potential followed by supramaximal stimulation

C:-Start with low current and increase current till potential is in the normal range

D:-Start with high current and reduce until potential tends to fall from supramaximal

Correct Answer:- Option-B

Question62:-All of the following causes low CMAP amplitude EXCEPT

A:-Axonal neuropathy

B:-Demyelinating neuropathy with distal conduction block

C:-Myasthenia Gravis

D:-Distal Myopathy

Correct Answer:- Option-C

Question63:-Which of the following is a feature of antidromic method of sensory study when compared to orthodromic method

A:-Higher SNAP amplitude

B:-May result in volume conducted motor potential

C:-Less subject to artefacts

D:-All of the above

Correct Answer:- Option-D

Question64:-Inching technique is commonly used in

A:-Median nerve across wrist, recording at APB

B:-Ulnar nerve across elbow, recording at ADM

C:-Ulnar nerve across wrist, recording at FDI

D:-All of the above

Correct Answer:- Option-D

Question65:-The resting membrane potential in the axon is

A:--90 mV

B:--60 mV

C:--30 mV

D:--15 mV

Correct Answer:- Option-A

Question66:-A patient with sensory paresthesia in lower limbs has normal sensory potentials in NCS possibilities can be all EXCEPT

A:-Dorsal root ganglionopathy

B:-Sensory radiculopathy

C:-Spinal cord lesion

**D:-Brain lesion** 

Correct Answer:- Option-A

Question67:-Which of the following is CORRECT about demyelinating neuropathy

A:-Increased distal latency

B:-Decreased conduction velocity

C:-CMAP amplitude usually normal

D:-All of the above

Correct Answer:- Option-D

Question68:-After nerve transection, NCS performed in the hyperacute stage can show

A:-Normal parameters if stimulation and recording is done distal to lesion

B:-Pseudo conduction block if site of lesion is between proximal and distal stimulation points

C:-Axonal loss pattern

D:-Both 1 and 2

Correct Answer:- Option-D

Question69:-All of the following are true about F response EXCEPT

A:-Obtained by Supremaximal stimulation

B:-Reinforcement can be used if F response is not obtained

C:-Absent in sensory radiculopathy

D:-Minimal F wave latency is taken

Correct Answer:- Option-C

Question70:-Which of the following is NOT CORRECT about H reflex

A:-Obtained by supramaximal stimulation

B:-H reflex follows M response

C:-Routinely done in tibial nerve

D:-With higher stimulus strength, H reflex is replaced by F response

Correct Answer:- Option-A

Question71:-Which of the following is NOT a feature of Axon reflex

A:-Identical in latency and configuration

B:-Comes after F response

C:-May be seen in early GBS

D:-May Suggest that stimulus is not Supramaximal

Correct Answer:- Option-B

Question72:-In a median nerve stimulation study, distal latency is 5.2 ms, conduction velocity is 52m/s CMAP amplitude with wrist stimulation is 4.7 mV and with elbow stimulation is 3.8 mV which of the following will help to suggest a carpal tunnel syndrome in this patient?

A:-Palmar stimulation showing normal CMAP amplitude

**B:-Erbs point stimulation** 

C:-Abnormal ulnar conduction study

D:-None of the above

Correct Answer:- Option-A

Question73:-All are important while performing RNS study EXCEPT

A:-Warm the extremity

B:-Immobolize the muscle as best as possible

C:-Study weak muscles as mush as possible

D:-Study limited to distal nerves

Correct Answer:- Option-D

Question74:-If 3 Hz RNS shows decremental pattern, perform

A:-10 second exercise for post exercise facilitation

B:-1 minute exercise for post exercise exhaustion

C:-Rapid RNS followed by 1 minute exercise for postexercise facilitation

D:-Any of the above

Correct Answer:- Option-A

Question75:-Most commonly used EMG needle is

A:-Macro electrode

B:-Single fibre needle electrode

C:-Concentric needle electrode

D:-Monopolar needle electrode

Correct Answer:- Option-C

Question76:-Short duration, polyphasic MUP with early recruitment with normal interference pattern suggests

A:-Axonal neuropathy

**B:-Myopathy** 

C:-Neuromuscular junction disorder

D:-Anterior horn cell disease

Correct Answer:- Option-B

Question77:-In blink reflex

A:-Supraorbital nerve is stimulated

B:-Recording from both orbicularis oculi

C:-Both 1 and 2 are true

D:-None are true

Correct Answer:- Option-C

Question78:-While eliciting SSR

A:-Stimulus has to be intense

B:-Avoid habituation of stimulus

C:-Temperature of the skin should be above 30 degree celsius

D:-All of the above

Correct Answer:- Option-D

Question79:-You are asked to perform SSEP in a patient with suspected Creutzfelts Jacob Disease (CJD). After the procedure, you are expected to

A:-Discard the electrode

B:-Clean the electrode with 1:10 dilution of bleach

C:-Clean the electrode with 70% isopropyl alcohol

D:-Either B or C

Correct Answer:- Option-A

Question80:-While performing electrodiagnostic study in an ICU patient, following precautions needs to be taken:

A:-Should never be performed on a patient with temporary external pacemaker

B:-Select upper extremity contralateral to one with central line and should not proceed if there is fluid spill from central line entry point

C:-Proper grounding should be ensured

D:-All of the above

Correct Answer:- Option-D

Question81:-Which one of the following findings will not be seen in EEG of a normal term baby?

A:-Trace alternant in nonREM sleep

B:-POSTS (Positive Occipital Sharp Transients of Sleep)

C:-Some minor sharp transients

D:-Slow (delta) activity when awake

Correct Answer:- Option-B

Question82:-The classical 3/sec spike wave discharge is most typical and most pronounced in

A:-Lennox-Gastaut Syndrome

B:-Juvenile Myoclomic Epilepsy

C:-Jeavon's syndrome

D:-Petit mal absence

Correct Answer:- Option-D

Question83:-Which of the following is not a feature of Fourteen and Six Hertz positive bursts?

A:-Seen on posterior temporal and adjacent areas

B:-Seen during deep drowsiness and very light non-REM sleep

C:-Also known as Ctenoids

D:-Commonly seen in elderly individuals

Correct Answer:- Option-D

Question84:-Which of the following is the typical EEG finding in sporadic Creutzfeldt Jakob disease?

A:-Short interval, generalised, bilaterally synchronous periodic complexes

B:-Triphasic waves

C:-Burst supression pattern

D:-Long interval generalised periodic discharges

Correct Answer:- Option-A

Question85:-Which of the following drugs do not cause Generalised periodic discharges when taken in excessive amounts?

A:-Benzodiazepine

B:-Lithium

C:-Ifosfamide

D:-Baclofen

Correct Answer:- Option-A

Question86:-Which of the following is false about SIRPIDs (Stimulus Induced Rhythmic Periodic or Ictal Discharges)?

A:-Seen in healthy young adults

B:-Seen in critically ill individuals

C:-Elicited by suction, sound and touch

D:-Some patients may have focal motor seizures along with SIRPIDs

Correct Answer:- Option-A

Question87:-Which of the following is false about 'end of chain phenomenon'?

A:-Seen in bipolar montages

B:-Normal physiologic pattern

C:-Seen in occipital or frontpolar electrodes

D:-Phase reversal is absent

Correct Answer:- Option-B

Question88:-The most frequent EEG finding in patients with brain tumour is

A:-Focal slow activity

**B:-Focal seizure** 

C:-Focal attenuation of background activity

D:-Asymmetric beta activity

Correct Answer:- Option-A

Question89:-When adhering to the appropriate recording techniques, what threshold of micro Volts characterises electrocerebral inactivity, indicating a complete absence of EEG activity?

A:-1

B:-2

C:-3

D:-4

Correct Answer:- Option-B

Question90:-The characteristic EEG finding in Lennox Gestaut Syndrome include all except

A:-Slow back ground activity

B:-Frontally dominant slow (<2.5 Hz) spike and wave bursts

C:-Multifocal spikes

D:-Short interval periodic epileptiform discharges

Correct Answer:- Option-D

Question91:-Which of the following statements are correct about the effect of cooling on Nerve conduction study

- (i) Higher amplitude and longer duration compound motor action potentials
- (ii) Lower amplitude and shorter duration compound motor action potentials
- (iii) Higher amplitude and longer duration sensory nerve action potentials
- (iv) Lower amplitude and shorter duration sensory Nerve Action potentials

A:-(i) and (iii)

B:-(ii) and (iv)

C:-(ii) and (iii)

D:-(i) and (iv)

Correct Answer:- Option-A

Question92:-The key to differentiating chronic neuropathic from chronic myopathic motor unit action potential is

A:-Amplitude and duration

**B:-Stability** 

C:-Assessment of recruitment

D:-Polyphasia

Correct Answer:- Option-C

Question93:-In Neurogenic Thoracalic Outlet Syndrome, abnormal findings in Sensory Nerve Conduction may be seen in

- (i) Median Nerve
- (ii) Ulnar Nerve
- (iii) Median Antebrachial Cutaneous Nerve
- (iv) Lateral Antebrachial cutaneous Nerve

A:-(i) and (ii)

- B:-(i) and (iii)
- C:-(ii) and (iii)
- D:-(i) and (iv)

Correct Answer:- Option-C

Question94:-The most common cause of drop in amplitude between the wrist and below elbow sites during routine ulnar motor conduction studies is

A:-True conduction block

B:-Martin-Gruber anastomosis

C:-Riche-Cannieu anastomosis

**D:-Technical factors** 

Correct Answer:- Option-B

Question95:-Muscles supplied by anterior interosseous Nerve are

- (i) Flexer Digitorum Profundus
- (ii) Flexor Pollicis Longus
- (iii) Pronator Teres
- (iv) Pronator Quadratus

A:-(i), (ii) and (iii)

- B:-(i), (ii) and (iv)
- C:-(ii), (iii) and (iv)
- D:-(i), (iii) and (iv)

Correct Answer:- Option-B

Question96:-In needle electromyography of brachial plexus lesion, myokymic discharges are characteristics of

A:-Traumatic plexopathy

**B:-Neoplastic infiltration** 

C:-Thoracic oulet syndrome

D:-Radiation plexopathy

Correct Answer:- Option-D

Question97:-Variation in the time interval between the firing of adjacent single muscle fibers from the same motor units is termed

A:-Single fibre EMG

B:-Block

C:-Decrement

D:-Jitter

Correct Answer:- Option-D

Question98:-Nerves that originate from roots of brachial plexus are

- (i) Subscapular nerve
- (ii) Dorsal scapular Nerve
- (iii) Suprascapular Nerve
- (iv) Long Thoracic Nerve

A:-(i) and (ii)

- B:-(ii) and (iii)
- C:-(iii) and (iv)

D:-(ii) and (iv)

Correct Answer:- Option-D

Question99:-While analysing spontaneous activity during needle electromyography revving engine sound is characteristic of

A:-Myokymia

B:-Myotonia

C:-Neuromyotonia

D:-Paramyotonia

Correct Answer:- Option-B

Question100:-Nerves commonly affected in Diabetic amyotrophy are

- (i) Obturator nerve
- (ii) Femoral Nerve
- (iii) Posterior Tibial Nerve
- (iv) Sciatic Nerve

A:-(i) and (ii)

- B:-(i) and (iii)
- C:-(ii) and (iii)

D:-(i) and (iv) Correct Answer:- Option-A