PROVISIONAL ANSWER KEY

Question 1

131/2024/OL

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Department Health Services

Question1:-True statements about Atlas vertebra is/are

- i) Absence of body
- ii) Absence of Spinous process
- iii) Absence of foramen transversarium
- iv) Absence of odontoid process

A:-Only (i and iii)

B:-Only (i and ii)

C:-Only (i, ii and iii)

D:-Only (i, ii and iv)

Correct Answer:- Option-B

Question2:-Great saphenous vein drains into

A:-Femoral vein

B:-Popliteal vein

C:-Inferior venacava

D:-Superior venacava

Correct Answer: - Option-A

Question3:-Assertion: inferior colliculus is seen in midbrain. Reason: inferior colliculus is a relay point of auditory pathway

A:-Both Assertion and Reason are true, and Reason is the correct explanation of Assertion

B:-Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion

C:-Assertion is true and Reason is false

D:-Assertion is false and Reason is true

Correct Answer:- Option-B

Question4:-Match the following and choose the correct combination given below:

Column-II Column-II

(Extra ocular muscles)a) Superior rectusb) Superior obliquei) Abducens nerveii) Trochlear nerve

c) Lateral rectus iii) Oculomotor nerve

A:-a-i, b-ii, c-iii

B:-a-i, b-iii, c-ii

C:-a-iii, b-ii, c-i

D:-a-iii, b-i, c-ii

Correct Answer:- Option-C

Question5:-Assertion: Median cubital vein is used for intravenous injections. Reason: Median cubital vein is superficial and is fixed with deep vein through perforating veins.

A:-Both Assertion and Reason are true, and Reason is the correct explanation of Assertion

B:-Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion

C:-Assertion is true and Reason is false

D:-Assertion is false and Reason is true

Correct Answer:- Option-A

Question6:-False statement about bronchopulmonary segments is

A:-Each bronchopulmonary segment is aerated by principal bronchus

B:-There are 10 brochopulmonary segments is each lung

C:-Tributaries of pulmonary veins are intersegmental in distribution

D:-Branches of pulmonary artery are segmental in distribution

Correct Answer:- Option-A

Question7:-All are branches of Arch of Aorta except

A:-Brachiocephalic trunk

B:-Left subclavian artery

C:-Right subclavian artery

D:-Left common carotid artery

Correct Answer:- Option-C

Question8:-Normal position of uterus is

A:-Anteflexed and anteverted

B:-Retroflexed and retroverted

C:-Retroflexed and anteverted

D:-Anteflexed and retroverted

Correct Answer:- Option-A

Question9:-Bones forming ankle joint is/are

- i) lower end of tibia
- ii) lower end of fibula
- iii) talus
- iv) Calcaneum

A:-Only (i & ii)

B:-Only (i, ii & iii)

C:-Only (i, ii & iv)

D:-All of the above (i, ii, iii & iv)

Correct Answer:- Option-B

Question10:-Left testis drains into

A:-Inferior venacava

B:-Left renal vein

C:-Left femoral vein

D:-Left internal iliac vein

Correct Answer:- Option-B

Question11:-All the statements about lymphoid organs are true except

A:-Thymus is a primary lymphoid organ

B:-Lymphoid follicles in lymp node contains B-Lymphocytes

C:-Spleen has cortex and medulla

D:-Tonsils are lined by stratified squamous non-keratinized epithelium

Correct Answer:- Option-C

Question12:-All are derivatives of surface ectoderm except

A:-Epidermis of skin

B:-Dermis of skin

C:-Muscles of the iris

D:-Arrectores pili muscles of the skin

Correct Answer:- Option-B

Question13:-Arrangement of structures in the hilum of kidney in order from anterior to posterior

A:-Renal vein, Renal artery, Renal pelvis

B:-Renal artery, Renal pelvis, Renal vein

C:-Renal artery, Renal vein, Renal pelvis

D:-Renal pelvis, Renal vein, Renal artery

Correct Answer:- Option-A

Question14:-Structure attached to the greater curvature of stomach are

- i) Greater omentum
- ii) Lesser omentum
- iii) Gastro splenic ligament
- iv) Gastro phrenic ligament

A:-Only (i & ii)

B:-Only (i, ii & iii)

C:-Only (i, ii & iv)

D:-Only (i, iii & iv)

Correct Answer:- Option-D

Question15:-Match the following and choose the correct combination given below

Column-I

Column-II

(Name of epithelium)

(Location)

a) Simple squamous epithelium

i) Urinary bladder

b) Pseudo-stratified columnar epithelium

ii) Trachea

c) Transitional epithelium

iii) Stomach

d) Simple columnar epithelium

iv) Loop of Henle

A:-a-ii, b-iii, c-i, d-iv

B:-a-iii, b-ii, c-i, d-iv

C:-a-iii, b-i, c-iv, d-ii

D:-a-iv, b-ii, c-i, d-iii

Correct Answer:- Option-D

Question16:-The normal glomerular filtration rate is

A:-500 ml/minute

B:-125 ml/minute

C:-250 ml/minute

D:-1000 ml/minute

Correct Answer:- Option-B

Question17:-The functional unit of the kidney is the

A:-Nephron

B:-Glomerulus

C:-Loop of Henle

D:-Collecting duct

Correct Answer: - Option-A

Question 18:- The heart's electrical activity is initiated by

A:-AV node

B:-SA node

C:-Bundle of His

D:-Purkinje fibres

Correct Answer:- Option-B

Question 19:- The primary respiratory control centre is located in the

A:-Cerebrum

B:-Cerebellum

C:-Medulla oblongata

D:-Pons

Correct Answer: - Option-C

Question20:-A deficiency in which vitamin can lead to anaemia?
A:-Vitamin A
B:-Vitamin B12
C:-Vitamin C
D:-Vitamin D
Correct Answer:- Option-B
Question21:-The hormone responsible for the development of secondary sex characteristics in males is
A:-Testosterone
B:-Estrogen
C:-Progesterone
D:-FSH
Correct Answer:- Option-A
Question22:-The sensory receptors responsible for detecting light are located in the
A:-Retina
B:-Cornea
C:-Lens
D:-Sclera
Correct Answer:- Option-A
Question23:-The type of muscle tissue found in the walls of blood vessels is
A:-Skeletal muscle
B:-Smooth muscle
C:-Cardiac muscle
D:-All of the above
Correct Answer:- Option-B
Question24:-The process of breaking down complexmolecules into simpler ones is called
A:-Anabolism
B:-Catabolism
C:-Metabolism
D:-Homeostasis
Correct Answer:- Option-B
Question25:-The part of the brain responsible for balance and coordination is the
A:-Cerebrum
B:-Cerebellum
C:-Medulla oblongata

D:-Pons

Correct Answer:- Option-B

Question26:-Normal tidal volume is

A:-500 ml

B:-100 ml

C:-1000 ml

D:-2400 ml

Correct Answer:- Option-A

Question27:-The sense organ for hearing is

A:-olfactory neuron

B:-Golgi tendon organ

C:-Pacinian corpuscle

D:-organ of Corti

Correct Answer:- Option-D

Question28:-Myopia or short sightedness is corrected by

A:-cylindrical lens

B:-planoconvex lens

C:-convex lens

D:-concave lens

Correct Answer:- Option-D

Question29:-Which of the following hormone is secreted from adrenal cortex?

A:-insulin

B:-cortisol

C:-thyroxine

D:-growth hormone

Correct Answer:- Option-B

Question30:-Deficiency of clotting factor VIII in blood produces

A:-leukaemia

B:-christmas disease

C:-haemophilia

D:-thrombocytopenia

Correct Answer:- Option-C

Question31:-The "winging of scapula" seen in patients with long thoracic nerve of Bell paralysis. In this clinical sign the abnormal prominence of medial border of scapula is produced due to the unopposed action of which muscle?

A:-Supraspinatus

B:-Levator scapulae

C:-Rhomboides

D:-Infraspinatus

Correct Answer:- Option-C

Question32:-The key muscle to determine the level of lesion in "Saturday night palsy" is

A:-Triceps

B:-Brachioradialis

C:-Extesor carpi radialis longus

D:-Extensor carpi radialis brevis

Correct Answer:- Option-B

Question33:-Out of the following muscles, which is not a flexor of elbow joint?

A:-Biceps femoris

B:-Brachioradialis

C:-Brachialis

D:-Biceps brachii

Correct Answer:- Option-A

Question34:-The Medical research council grading of power of lowerlimb muscles of case of post polio residual paralysis as given in the table

	1)	
Muscle group	Muscle power right	Muscle power left
Hip flex	5/5	4/5
Hip extensors	3/5	3/5
Hip abductors	3/5	3/5
Knee extensors	5/5	5/5
Ankle DF	5/5	5/5
Ankle PF	5/5	5/5

What could be the most likely pathological gait of this individual?

A:-Equinus gait

B:-Trendlenberg gait

C:-Hand - Knee gait

D:-Lordotic waddaling gait

Correct Answer:- Option-D

Question35:-A 55 year old woman presented with knee pain was engaged in a job involving frequent stair climbing for the past several years. Her body weight is 65 Kg and height is 150 cm. How many times shall be the patellofemoral joint reactive force (PFIRF) in relation to her body weight?

A:-Three times

B:-Four times

C:-Six times

D:-Five times

Correct Answer:- Option-C

Question36:-What is the most common clinical association seen in a case of Ulnar nerve paralysis with a negative Froment's sign?

A:-Distal Median Nerve palsy

B:-Proximal Median palsy

C:-Posterior cord palsy

D:-Lateral cord palsy

Correct Answer:- Option-B

Question37:-The MRC grading of muscles of lower limb of a patient with lumbosacral plexopathy is as shown in the table.

Muscle group	right	left
Hip extensors	3/5	5/5
Hip abductors	2/5	4/5
Knee extensors	4/5	4/5
Knee flexors	4/5	4/5

On which side will you advise this patient to hold ambulatory aid?

A:-Both sides

B:-None is required

C:-Left

D:-Right

Correct Answer:- Option-C

Question38:-The nerve conduction study result of ulnar nerve from the dominant Right hand of a 55 year old graphic designer is as given in the table. He has presented with slight clumsiness of the hand

Parameter of CMAP	Right ADM	Right 1st DI	Left ADM	Left
1st DI	-	-		
DL in ms	2.35	3.36	2.62	2.82
Amplitude in mA	12.0	4.5	11.0	12.0
CV in m/s	58	42	60	58

CMAP - Compound muscle action potential, 1st DI - First dorsal interossei, ADM-Abductor digiti minimi

The electrophysiological pattern is suggestive of neuropathy of

A:-Superficial branch of Right Ulnar nerve

B:-Deep branch of Right Ulnar nerve

C:-Proximal Right Ulnar nerve

D:-Distal Right ulnar nerve

Correct Answer:- Option-B

Question39:-A 12 year old girl was brought with adolescent idiopathic scoliosis. The dorso-lumbar spine Xray of this patient showed Cobb's angle as 25 degrees with apex of curve at D6. Her single breath count is 35. The right spinal orthosis of choice is

A:-Boston brace

- B:-CASH brace
- C:-Milwaukee brace
- D:-Halo brace

Correct Answer:- Option-A

Question 40:-A 55 year old house wife presented with pain at the base of thumb aggravated by turning door handles and while filling tumbler. Which is the right orthosis of choice

- A:-Dynamic wrist hand orthosis
- B:-Static wrist hand orthosis
- C:-Short opponens splint
- D:-Thumb spica splint

Correct Answer:- Option-D

Question41:-Faradic current in Electrotherapy practice is mainly used for the following except

- A:-Reeducation of a muscle which was in disuse
- B:-Training new muscle action after tendon transfer
- C:-Stimulating a muscle which has been denervated
- D:-Improving venous return and lymphatic drainage by muscle action

Correct Answer:- Option-C

Question42:-Contraindication for interrupted direct current in muscle stimulation includes all except

- A:-Partial brachial plexus injury
- B:-Cardiac arrythmias
- C:-Pelvic stimulation in Pregnant mothers
- D:-Around carotid sinus

Correct Answer:- Option-A

Question43:-Altering the threshold of action potential by changing the charge across the nerve membrane using sub threshold stimulation is

- A:-Galvanism
- **B:-Iontophoresis**
- C:-Electrotonus
- D:-Faradism

Correct Answer:- Option-C

Question44:-Continous movement of the treatment head of a therapeutic ultrasound machine is done because

- A:-Beam is regular and consistent at the near zone
- B:-There is reduced reflection and refraction at tissue interface
- C:-Standing waves can cause stasis of blood cells

Correct Answer:- Option-C Question45:-Medium frequency currents are mainly used in A:-NMES **B:-TENS** C:-IFT D:-Electro accupuncture Correct Answer:- Option-C Question46:-Lewis Hunting reaction of oscillatory vasodilation with vasoconstriction is seen in A:-TENS B:-IFT C:-Pulsed UST D:-Cryotherapy Correct Answer:- Option-D Question47:-One of the following is not a danger for low level LASER A:-Pregnant uterus B:-Pupil of the eye C:-Pressure ulcers D:-Neoplastic ulcers Correct Answer:- Option-C Question48:-Regarding how LASER differ from ordinary light by having the following properties (i) monochromaticity (ii) collimation (iii) coherence (iv) refraction A:-(i) and (ii) are right B:-(iii) and (iv) are right C:-(ii) and (iii) are right D:-(i) and (iii) are right Correct Answer:- Option-B Question49:-One of the following is a nonthermal effect of Ultrasound therapy A:-Ligament extensibility B:-Preferential heating of collagen C:-Relieving of muscle spasm D:-Microstreaming in cells Correct Answer: - Option-D Question 50:- In transcutaneous electrical stimulation the electrodes are placed

A:-Horizontal to the nerve

D:-Bones generally absorb the waves evenly to distribute heat

B:-In line with the nerve C:-Distal to the site of pain D:-Tangential to the nerve Correct Answer:- Option-B Question51:-The following are Rotator cuff muscle except A:-Teres major B:-Supra spinatus C:-Infra spinatus D:-Teres minor Correct Answer:- Option-A Ouestion52:-What is VIC? A:-Volkmann's ischemic contracture B:-Volkmann's ischemic changes C:-Voluntary isotonic contraction D:-Ventricular ischemic changes Correct Answer: - Option-A Question53:-What is Heterotopic ossification? A:-Intra osseous pseudo tumour B:-Mature lamellar bone in the muscle tissue C:-Calcific Tendinitis D:-Bleeding into the bone Correct Answer:- Option-B Question54:-Following are the components of CTEV except A:-Forefoot Adduction B:-Cavus C:-Internal Tibial torsion D:-Calcaneal foot Correct Answer:- Option-D Question55:-Following are the causes of Cerebral Palsy except

A:-Maternal Toxoplasma infection

B:-Cord around the neck

C:-Maternal Rubella infection

D:-Gestational diabetes in mother

Correct Answer:- Option-D

Question56:-Poliomyelitis affects

A:-CSF

B:-Dorsal root Ganglion

C:-Anterior Horn Cell

D:-Peripheral neurons

Correct Answer:- Option-C

Question57:-Radiographic feature of Spondylolisthesis

A:-Fish mouth appearance

B:-Scottish Terrier sign

C:-Bamboo spine

D:-Flowing wax

Correct Answer:- Option-B

Question58:-Golfer's Elbow is

A:-Medial epicondylitis

B:-Lateral epicondylitis

C:-Olecranon bursitis

D:-Ulnar styloiditis

Correct Answer:- Option-A

Question59:-Scoliosis is

A:-Curvature of spine measures 10 degree or more in X-RAY with rotation of vertebrae

B:-Curvature of spine measures 5 degree or more in X-RAY

C:-Increased Anteroposterior curvature of Lumbar spine greater than 5 degree

D:-Increased Anteroposterior curvature of Cervical spine greater than 5 degree

Correct Answer:- Option-A

Question60:-De QuerVain's Tenosynovitis is

A:-tenosynovitis of FDP and FDS

B:-tenosynovitis of APB

C:-tenosynovitis of Extensor Digitorum

D:-tenosynovitis of APL and EPB

Correct Answer:- Option-D

Question61:-The following Hand Muscle and Nerve is tested by FROMENTS sign

A:-Abductor Pollicis brevis and Ulnar Nerve

B:-Adductor Pollicis and Ulnar Nerve

C:-Extensor digitorum and Radial Nerve

D:-Extensor Pollicis longus and Radian Nerve

Correct Answer:- Option-B

Question62:-A Stroke Victim has prominent weakness of Lowerlimb of one side with

minimal or no weakness of upper limb. The possible lesion is in A:-Posterior Cerebral Artery B:-Posterior Inferior Cerebellar Artery (PICA) C:-Anterior Cerebral Artery D:-None of the above Correct Answer: - Option-C Question63:-All these Muscles constitute 'Rotator Cuff' of Shoulder joint except A:-Teres Minor **B:-Teres Major** C:-Supraspinatus D:-Infraspinatus Correct Answer:- Option-B Question64:-Trendelen burg Gait is due to weakness of A:-Gluteus medius **B:-Gluteus minimus** C:-All of the above D:-None of the above Correct Answer:- Option-C Question65:-COMPLETE Spinal Cord Injury as per ASIA Impairment Scale is Grade. A:-A B:-D C:-E D:-None of the above Correct Answer: - Option-A Question66:-All indicate Bad Prognosis in Stroke (CVA) except A:-Bowel / Bladder dysfunction and Large lesion **B:-Primitive Reflexes** C:-Prolonged Spasticity D:-Prolonged Flaccidity Correct Answer:- Option-C Question67:-All below are features of AD (Autonomic Dysreflexia) except A:-Hyper tension and Bradycardia B:-Hypotension and Bradycardia C:-Severe Headache D:-Excessive Sweating

Correct Answer:- Option-B

Question68:-Medical Research Council Scale is the Grading system used all over to assess

A:-Muscle strength (Power)

B:-Muscle Tone

C:-Reflexes

D:-a and b

Correct Answer:- Option-A

Question69:-Which of the following arises from the Root of Brachial Plexus

A:-Dorsal Scapular Nerve

B:-Long thoracic Nerve

C:-Nerve to latissimus dorsi

D:-a and b

Correct Answer:- Option-D

Question 70:- The most common type of Cerebral Palsy is

A:-Atonic

B:-Ataxic

C:-Spastic

D:-Mixed

Correct Answer:- Option-C

Question71:-In eccentric muscle contraction, muscle fiber

A:-Remains static

B:-Becomes shorter

C:-Increase in length

D:-None

Correct Answer:- Option-C

Question72:-All are exteroceptive sensations, except

A:-Light touch

B:-Temperature

C:-Pain

D:-Position

Correct Answer:- Option-D

Question73:-Among the Neuromuscular facilitation techniques, which technique stresses the concept that sensory input determines the motor output

A:-Rood approach

B:-Knott and Kabbat approach

- C:-Bobath method
- D:-Brunnstrom technique

Correct Answer:- Option-A

Question74:-Brief, explosive maneuvers that consist of an eccentric muscle contraction followed immediately by a concentric contraction

- A:-Progressive resistance exercise
- **B:-Plyometrics**
- C:-Isokinetic exercise
- D:-Isometric exercise

Correct Answer:- Option-B

Question75:-Stretching which uses the repetitive rapid application of force in a bouncing or jerking maneuver is called

- A:-Neuromuscular Facilitation
- B:-Static stretch
- C:-Ballistic stretch
- D:-Passive stretch

Correct Answer:- Option-C

Question76:-In Medical Research Council (MRC) testing of muscle power, active movement with gravity eliminated means the muscle power is

- A:-2
- B:-3
- C:-4
- D:-5

Correct Answer:- Option-A

Question77:-Among the manipulation techniques, all are Direct techniques, except

- A:-Thrust
- B:-Articulation
- C:-Muscle energy
- D:-Strain-counter strain

Correct Answer:- Option-D

Question 78:- All are contraindications for Manipulation techniques, except

- A:-Pregnant patients with low back and pelvic discomfort
- **B:-Unstable fractures**
- C:-Osteomyelitis
- D:-Paget disease

Correct Answer:- Option-D

Question 79:- Which one is a type of Arm orthoses

A:-Kenny stick B:-Everett orthosis C:-Lofstrand orthosis D:-Platform orthosis Correct Answer:- Option-B Question80:-Most commonly used Hydrotherapy is A:-Whirlpool B:-Hubbard tank C:-Swimming pool D:-All of the above Correct Answer:- Option-A Question81:-Amputation through the shaft of femur is termed A:-Transfemoral B:-Transtibial C:-Transhumeral D:-Transradial Correct Answer:- Option-A Question82:-Part of prosthesis which connects amputated residual limb to prosthesis is termed as A:-Orthosis B:-Socket C:-Orthotic joint D:-Terminal device Correct Answer:- Option-B Question83:-Which of the following is a named type of Ankle disarticulation A:-Transfemoral B:-Transtibial C:-SYME D:-Transhumeral Correct Answer:- Option-C

Question84:-Example of an obstructive lung disease is A:-Pulmonary Hypertension

7. Full londry Hypercension

B:-Pulmonary Hypotension

C:-Pulmonary Embolism

D:-Asthma

Correct Answer:- Option-D

Question85:-Mention a neuromuscular disease that can cause restrictive pulmonary function A:-Duchenne's muscular dystrophy B:-Emphysema C:-Asthma D:-Bronchitis Correct Answer:- Option-A Question86:-Oxygen therapy is provided to patients with SaO2 (Arterial Oxygen Saturation) A:-More than 95% B:-Less than 88-90% C:-More than 96% D:-More than 98% Correct Answer:- Option-B Question87:-The natural pacemaker of the heart - SA node (sino - atrial node) is situated in A:-Right ventricle B:-Left ventricle C:-Right atrium D:-Left atrium Correct Answer:- Option-C Ouestion88:-Aerobic exercise causes A:-No change in VO2Max B:-Decrease in VO2Max C:-Severe depression of VO2Max D:-Increase in VO2Max Correct Answer:- Option-D Question89:-Muscles of pelvic floor include all except A:-Rectus abdominis **B:-Pubococcygeus** C:-Puborectalis D:-Levator ani Correct Answer: - Option-A

Question 90: The nerve root value of the pudendal nerve are the ventral branches of

A:-T1-T6

B:-S2-S4

C:-T7-T12

D:-C5-C7

Correct Answer:- Option-B

Question91:-Autonomy with reference to Medical ethics implies

A:-High quality health care

B:-Power to make rational decisions and moral choices

C:-Consent for proposed treatment

D:-Professional competence

Correct Answer:- Option-B

Question92:-Physiotherapy practitioner is required to

A:-Respect inherent dignity and rights of all individuals

B:-Adhere to the core values of the profession

C:-Promote organization behavior's and clinical practices that benefit patients and society

D:-All of the above

Correct Answer:- Option-D

Question93:-Which of the following is true

A:-Threat of Malpractice action is enough to ensure high ethical standards

B:-Advanced technology used in treatment is likely to reduce malpractice

C:-Duty of care, causation and damage are the only important considerations in determining negligence

D:-None of the above

Correct Answer: - Option-D

Question94:-Informed consent involves all except

A:-Assessment of patient's understanding and seeking their preference

B:-Discussing suggested interventions and alternatives

C:-Controlled influence is a pre-requisite

D:-Cultural perspectives is a limitation

Correct Answer:- Option-C

Question95:-National Health Policy was last updated in

A:-1983

B:-2002

C:-2017

D:-2023

Correct Answer:- Option-C

Question96:-Performance appraisal system

A:-Is a structured process evaluating employees performance and provide feedback

B:-Is a one way communication process

C:-Is always conducted annually

D:-Results does not affect productivity and output

Correct Answer:- Option-A

Question97:-Red colour coded bags are used to dispose

A:-Waste sharps

B:-Infectious plastic waste

C:-Glassware

D:-Microbiology waste

Correct Answer:- Option-B

Question98:-Standard precautions for preventing Hospital Acquired Infections (HAI) does not include

A:-Vaccination

B:-Hand Hygiene

C:-Personal Protective Equipment (PPE)

D:-None of the above is correct

Correct Answer:- Option-A

Ouestion99:-Medical audit

A:-Help identify errors and discrepancies

B:-Does not influence quality of care provided

C:-Internal auditing is not mandatory for medium to large sized Health Care facilities

D:-It reduces optimization of revenue cycle management

Correct Answer:- Option-A

Question 100:-Which is a form of cold sterilisation

A:-Infrared rays

B:-Steam sterlisation

C:-Gamma rays

D:-Ultraviolet rays

Correct Answer:- Option-C