

PROVISIONAL ANSWER KEY

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Question1:-What determines prehensile force of the voluntary opening terminal device?

- A:-Myoelectric surface electrodes
- B:-Microswitch buttons
- C:-Number and type of rubber bands, springs
- D:-All the above

Correct Answer:- Option-C

Question2:-Hindfoot control orthosis is recommended for _____

- A:-Subtalar instability
- B:-Knee flexion
- C:-Knee extension
- D:-Persistent toe walking

Correct Answer:- Option-A

Question3:- _____ is used for TB cervical spine?

- A:-Cervical Collar
- B:-Philadelphia collar
- C:-Four-post collar
- D:-Halo vest

Correct Answer:- Option-D

Question4:-How many harness will a clavicular orthosis have?

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

Correct Answer:- Option-C

Question5:- _____ is an indication for ASH brace?

- A:-Chronic low back pain
- B:-Sciatica
- C:-Adolescent kyphosis
- D:-Mild thoraco-lumbar injuries

Correct Answer:- Option-C

Question6:-'Three claw chunk' is which type of prehension?

- A:-Spherical prehension
- B:-Palmar prehension
- C:-Lateral Prehension
- D:-Tip to tip prehension

Correct Answer:- Option-B

Question7:- _____ is a device which is applied to lower limb to give support or control a joint while walking.

- A:-Splint
- B:-Caliper
- C:-Elbow Hinge
- D:-None of the above

Correct Answer:- Option-B

Question8:-Boston brace for scoliosis is preferred for an age group of _____

- A:-3 to 10 years
- B:-11 to 22 years
- C:-23 to 50 years
- D:-51 to 75 years

Correct Answer:- Option-A

Question9:-Which is preferred for knee flexion deformity more than 35 degrees?

- A:-Post guard
- B:-Push Knee splint
- C:-Knee cage splint
- D:-None of the above

Correct Answer:- Option-C

Question10:-Which of these is an articulated ankle foot assembly?

- A:-Jaipur foot
- B:-SACH
- C:-SAFE
- D:-Single axis

Correct Answer:- Option-D

Question11:-Used for self-suspending transradial sockets such as the muenster socket

- A:-Figure 4 harness
- B:-Figure 6 harness
- C:-Figure 8 harness
- D:-Figure 9 harness

Correct Answer:- Option-D

Question12:-_____ splint is used for Brachial plexus injury

- A:-Volkman
- B:-Turnbuckle
- C:-Cock-up
- D:-Aeroplane

Correct Answer:- Option-D

Question13:-The flex-foot cheetah is made up of

- A:-Polyethylene
- B:-Foam
- C:-Carbon fibre reinforced polymer
- D:-Plastic fibre

Correct Answer:- Option-C

Question14:-_____ is a type of transradial harness suspension system.

- A:-Figure-8
- B:-Figure-9
- C:-Chest strap with shoulder saddle
- D:-All of the above

Correct Answer:- Option-D

Question15:-What kind of prosthetic foot is used for K2 users

- A:-Multi-axis foot
- B:-Seattle foot
- C:-SACH foot
- D:-Flex foot

Correct Answer:- Option-A

Question16:-Which dynamic response prosthetic foot consists of 1 pylon and foot

- A:-Multi-axis foot

B:-Seattle foot

C:-SACH foot

D:-Flex foot

Correct Answer:- Option-D

Question17:-What does TES stand for?

A:-Tough Elongated Suspension

B:-Total Elastic Suspension

C:-Thick Elongated Suspension

D:-Tough Extension Suspension

Correct Answer:- Option-B

Question18:-Which of the following is not the type of suction liner?

A:-Pin system

B:-ACE wrap

C:-lanyard

D:-seal-in liner

Correct Answer:- Option-B

Question19:-What is the preferred length of the residual limb for trans-tibial prosthetics?

A:-3-4 inches

B:-3-4 cms

C:-6-7 inches

D:-6-7 cms

Correct Answer:- Option-C

Question20:-Excessive knee friction and inadequate suspension may lead to which type of gait deviation?

A:-Limited heel rise

B:-Lateral whip

C:-Vaulting

D:-Lateral trunk bending

Correct Answer:- Option-C

Question21:-Among these what is not source of the following gait deviation: Circumduction

A:-Extension assist is too strong

B:-Weak hip abductors

C:-Medial brim of the socket impinges soft tissue during swing phase

D:-Prosthesis has been excessively lengthened Medial whip

Correct Answer:- Option-B

Question22:-_____ lines the socket interface of knee prosthesis

A:-suction

B:-Pin locks

C:-Belts

D:-Gel liners

Correct Answer:- Option-D

Question23:-Which one of the following angle is true about the angle between the neck and shaft of the femur in adult?

A:-140-150 degree

B:-130-140 degree

C:-120-130 degree

D:-110-120 degree

Correct Answer:- Option-C

Question24:-What is Syme's amputation

A:-Amputation of knee

B:-Amputation of middle finger

C:-Amputation of ankle joint

D:-Amputation of metatarsals

Correct Answer:- Option-C

Question25:-Which of these is not related to the abducted gait deviation

A:-Prosthesis too long

B:-Short stump length

C:-Socket too small

D:-Suspension belt may be insufficient

Correct Answer:- Option-B

Question26:-What kind of prosthesis does a patient with a small toe amputation need?

A:-low profile foot

B:-SAFE foot

C:-SACH foot

D:-No prosthesis required

Correct Answer:- Option-D

Question27:-Which knee unit is the most stable?

A:-Manual locking knee

B:-Pneumatic knee

C:-Hydraulic knee

D:-All the above

Correct Answer:- Option-A

Question28:-What K ambulator is manual locking knee used in?

A:-K1

B:-K2

C:-K3

D:-K4

Correct Answer:- Option-A

Question29:-As the length of the residual limb increases, _____ improves

A:-Function alone

B:-Prosthetic control alone

C:-Both function and Prosthetic control

D:-Aesthetic factor

Correct Answer:- Option-C

Question30:-To ensure a sufficient lever arm for effective prosthetic control, at least how many inches of the tibia are required?

A:-2-3

B:-3-4

C:-4-5

D:-5-6

Correct Answer:- Option-D

Question31:-Which of these exercises should be done 1 week after a transtibial amputation?

A:-Quad sets

B:-Glut sets

C:-Short arc hip extension

D:-abduction

Correct Answer:- Option-A

Question32:-How many years should a definitive prosthesis last?

A:-1-3 years

B:-2-4 years

C:-3-5 years

D:-4-6 years

Correct Answer:- Option-C

Question33:-On observation, _____ is indicated by the areas on the residual limb that are blanched and quickly turn deep red.

- A:-infection
 - B:-Excessive pressure
 - C:-A rash
 - D:-Edema
- Correct Answer:- Option-B

Question34:-Bony growth out from the main surface of the bone is called _____

- A:-Secondary chondrosarcoma
 - B:-Exostosis
 - C:-Solitary osteochondroma
 - D:-None of the above
- Correct Answer:- Option-B

Question35:-_____ is most recommended for transtibial amputee gait training?

- A:-quad Cane
 - B:-Standard walker
 - C:-Lofstrand crutches
 - D:-All of the devices are equally effective
- Correct Answer:- Option-C

Question36:-When the ischium does its weight bearing in standing gait, the anterior socket wall produces a _____ force which keeps the ischium on the ischial seat.

- A:-Anterior
 - B:-Posterior
 - C:-Medial
 - D:-Lateral
- Correct Answer:- Option-B

Question37:-The length of a hip prosthesis should be _____

- A:-The same as the sound limb
 - B:-Shorter than the sound limb
 - C:-Longer than the sound limb
 - D:-Longer by 2 inches
- Correct Answer:- Option-B

Question38:-What does SACH stand for?

- A:-Solid ankle Cushion Heel
 - B:-Sole Angulated Cuspidor Heel
 - C:-Sole Angulated Customer Heel
 - D:-Solid ankle Customer Heel
- Correct Answer:- Option-A

Question39:-_____ is applicable for a patient with compensated rearfoot varus.

- A:-Soft, medial post
 - B:-Soft, lateral post
 - C:-Rigid, lateral post
 - D:-Rigid, medial post
- Correct Answer:- Option-D

Question40:-ASH brace is a spinal orthosis that prevent

- A:-Flexion of the spine
 - B:-Extension of the spine
 - C:-Side flexion of the spine
 - D:-Rotation of the spine
- Correct Answer:- Option-A

Question41:-_____ plastic is commonly used in prefabricated Ankle Foot Orthosis

- A:-Polypropylene

- B:-Polyethylene
- C:-Transpolyisoprene
- D:-Polycapriolactone

Correct Answer:- Option-A

Question42:-For a candidate who needs both motion control and shock absorption _____ orthosis would be suggested

- A:-Rigid
- B:-Semi-Rigid
- C:-Soft
- D:-None of the above

Correct Answer:- Option-B

Question43:-Which of these is a true statement

- A:-Strain is force over tissue surface area
- B:-Stress is the tissue's change in shape for applied pressure
- C:-The steeper the stress/strain curve, the more ductile the material
- D:-The steeper the stress/strain curve, the more ductile the material

Correct Answer:- Option-D

Question44:-Which of these is an option to reduce pronation during gait

- A:-Flare the lateral heel
- B:-Bevel the lateral heel
- C:-Bevel the posterior heel
- D:-Flare the posterior heel

Correct Answer:- Option-B

Question45:-_____ is not a clinical applications of creep

- A:-Spasticity
- B:-Joint Contracture
- C:-Elongatin
- D:-Hypotonia

Correct Answer:- Option-D

Question46:-Which of Newton's laws do we use most when manufacturing orthotic devices?

- A:-I
- B:-II
- C:-I and II
- D:-III

Correct Answer:- Option-D

Question47:-When weight is a major concern, in designing Prosthetics and Orthotics _____ is used.

- A:-Steel
- B:-aluminium
- C:-Titanium
- D:-Plastic

Correct Answer:- Option-B

Question48:-When residual forearm is so short, which of these is used to augment function?

- A:-Supracondylar suspension
- B:-Step up Hinges
- C:-Both (1) and (2)
- D:-Prehensors

Correct Answer:- Option-C

Question49:-Which of these are used on uneven terrain?

- A:-Constant friction knee
- B:-Polycentric knee
- C:-Stance phase control

D:-Fluid control knee

Correct Answer:- Option-A

Question50:-For fixed deformities, _____ foot orthoses are used to improve foot function.

A:-Rigid

B:-Soft

C:-Semi-rigid

D:-All the above

Correct Answer:- Option-B

Question51:-Which of these is not applicable for AFO?

A:-Absorption of ground reaction forces

B:-Protection of fusion sites

C:-Protection of md foot

D:-Providing mediolateral stability

Correct Answer:- Option-D

Question52:-Which of these is not applicable for orthosis?

A:-Prevent deformity

B:-Controls instability

C:-Corrects a fixed joint contracture

D:-Relieves pain

Correct Answer:- Option-C

Question53:-The mandibulo-occipital assembly is a part of _____ orthosis

A:-Foot

B:-Spinal

C:-Knee

D:-Cervical

Correct Answer:- Option-B

Question54:-Central amputation involves _____

A:-Digits II and III

B:-Digits III and IV

C:-Digits IV and V

D:-Thumb and index finger

Correct Answer:- Option-B

Question55:- _____ provides stable support of prosthesis

A:-Socket

B:-Body of prosthesis

C:-Harness

D:-Control system

Correct Answer:- Option-C

Question56:-Endoskeletal systems are made of _____

A:-Titanium pylons

B:-Carbon fiber

C:-Steel

D:-All the above

Correct Answer:- Option-D

Question57:-What does the abbreviation HKAFO stand for in orthotics?

A:-high-kinesthetics-against-feet orthoses

B:-hip-knee-ankle-foot occlusions

C:-hip-knee-ankle-foot orthoses

D:-hipster-knee-ankle-foot orthodontics

Correct Answer:- Option-C

Question58:-Which of these are not an example of orthosis

- A:-Finger splint
- B:-hio-knee-ankle-foot orthoses
- C:-Knee brace
- D:-Spinal brace

Correct Answer:- Option-B

Question59:-Which of these is not a property of immediate post-op prosthesis?

- A:-Non-adjustable
- B:-Non-removable
- C:-Permanent
- D:-Helps remove edemas

Correct Answer:- Option-C

Question60:-Hemipelvectomy refers to _____

- A:-Midtarsal amputation
- B:-Ankle disarticulation
- C:-Removal of part of pelvis
- D:-Removal of all of pelvis

Correct Answer:- Option-C

Question61:-Mr. X has medio-lateral instability at the ankle joint.Which type of orthotic ankle joint can be prescribed?

- A:-plantar flexion stop
- B:-Dorsiflexion assist
- C:-Free motion
- D:-Fixed

Correct Answer:- Option-B

Question62:-_____ indicates that the patient has ability/potential for ambulation with ability to traverse curbs, stairs, uneven surfaces

- A:-K0
- B:-K1
- C:-K2
- D:-K3

Correct Answer:- Option-C

Question63:-Posterior lead spring is applicable for

- A:-Controlling all ankle motions
- B:-Allowing set amount of Plantar/ Dorsiflexion
- C:-Controlling Inversion/Eversion
- D:-Dorsiflexion assistance

Correct Answer:- Option-D

Question64:-Functional outcome at the transtibial level can be _____ if there is good soft-tissue coverage of the residual limb and good fitting of the socket

- A:-High
- B:-Very high
- C:-Low
- D:-Very low

Correct Answer:- Option-B

Question65:-The socket design for knee disarticulation does not include _____

- A:-Partial end-bearing
- B:-Partial bearing on distal two-thirds of the thigh
- C:-Rigid outer frame
- D:-Ischial bearing

Correct Answer:- Option-D

Question66:-_____ is used to provide adjustable swing control with variable cadence and are generally used for level 2 or level 3 ambulators

- A:-Manual locking knees

B:-Stance control knees

C:-Pneumatic knees

D:-Hydraulic knees

Correct Answer:- Option-C

Question67:-_____ incorporate pneumatic or hydraulic control mechanism for stance stability and variable cadence, again for longer residual limbs

A:-Pneumatic knees

B:-Hydraulic knees

C:-Hybrid polycentric knees

D:-Microprocessor-controlled hydraulic knees

Correct Answer:- Option-C

Question68:-The functional outcome at transfemoral amputation generally depends on _____

A:-Proximal muscle strength

B:-The residual limb length

C:-Overall status of the patient

D:-all the above

Correct Answer:- Option-D

Question69:-_____ Patellar Tendon-Bearing Orthosis can be used for dysvascular patients with chronic ulcerations on the feet

A:-Bi-valve plastic clamshell

B:-Calf corset design

C:-Dual channel

D:-None of the above

Correct Answer:- Option-B

Question70:-_____ has an incremental locking mechanisms every 7-10° to gradually stretch the knee following contracture or spasticity

A:-Drop lock

B:-Bail lock

C:-Ratchet lock

D:-Stance lock

Correct Answer:- Option-C

Question71:-_____ allows up to 25° of flexion, even in its locked position, to mimic normal gait patterns.

A:-Drop lock

B:-Trick knee lock

C:-Ratchet lock

D:-Offset knee lock

Correct Answer:- Option-B

Question72:-Handi-Hook device is the prosthetic option for

A:-Wrist disarticulation amputation

B:-Partial hand amputation

C:-Mitt amputation

D:-Transradial amputation

Correct Answer:- Option-B

Question73:-While using an elbow Disarticulation Amputation, Once the elbow is properly positioned, the elbow must be locked a _____ maneuver of the shoulder

A:-Down, back and out

B:-Up, front and in

C:-Up, back and out

D:-Down, front and out

Correct Answer:- Option-A

Question74:-Long transhumeral amputation preserves _____ of humeral length in Transhumeral Amputation

A:-40%

B:-30-60%

C:-50-90%

D:-100%

Correct Answer:- Option-C

Question75:-Which specialty Terminal Device can be designed for golf and skiing for an amputee?

- A:-Robotic terminal devices
- B:-Waterproof terminal devices
- C:-Activity - specific terminal devices
- D:-All the above

Correct Answer:- Option-C

Question76:-No prosthetic device may be necessary for most of the functional tasks if there is at least _____

- A:-Any three fingers remaining
- B:-The thumb and two fingers remaining
- C:-The thumb and one finger remaining
- D:-Any two fingers remaining

Correct Answer:- Option-C

Question77:-Which of the following is an indication of Supra Malleolar Orthosis (SMO)?

- A:-Moderate to severe subtalar instability
- B:-Flexible arch instability
- C:-Flexible equinus deformity
- D:-Mild to moderate subtalar instability

Correct Answer:- Option-A

Question78:-KAFO designs can be used for _____

- A:-Guillain-Barre
- B:-Polio
- C:-Lumbar spinal injury
- D:-All the above

Correct Answer:- Option-D

Question79:-Which of these does not pertain to general features of AFO?

- A:-trimlines
- B:-degrees of dorsiflexion
- C:-Ratchet lock
- D:-Foot plate design

Correct Answer:- Option-C

Question80:-When is the fitting of permanent prosthesis is scheduled?

- A:-Days 21-28
- B:-Months 2 and 3
- C:-Months 3-6
- D:-Months 6-9

Correct Answer:- Option-C

Question81:-What is Li-Fi?

- A:-Light Fidelity
- B:-Laser Fidelity
- C:-Lens Fidelity
- D:-Lens Firefly

Correct Answer:- Option-A

Question82:-Spoofing is

- A:-an attack in which a program masquerades as another by falsifying data
- B:-is the attempt to obtain sensitive information such as username and password
- C:-a malicious computer program that masquerades as benign applications or files
- D:-a program that replicates itself and damages the computer

Correct Answer:- Option-A

Question83:-LTE stands for

- A:-Long term evolution
- B:-4G communication standard
- C:-High speed wireless communication
- D:-All the above

Correct Answer:- Option-D

Question84:-RAM is an acronym for

- A:-Read Access Memory
- B:-Random Access Memory
- C:-Random Area Memory
- D:-Read Area Memory

Correct Answer:- Option-B

Question85:-_____ is known as the brain of a computer

- A:-Control unit
- B:-Arithmetic and Logic unit
- C:-Central Processing unit
- D:-Memory Unit

Correct Answer:- Option-C

Question86:-IP stands for

- A:-Information Processing
- B:-Information Protocol
- C:-Internet Processing
- D:-Internet Protocol

Correct Answer:- Option-D

Question87:-Which of the following is not a browser?

- A:-Mozilla Firefox
- B:-Microsoft Edge
- C:-Yahoo
- D:-Google Chrome

Correct Answer:- Option-C

Question88:-DVD stands for

- A:-Digital volatile disk
- B:-Digital versatile data
- C:-Digital versatile disk
- D:-Digital volatile data

Correct Answer:- Option-C

Question89:-A byte contains _____ bits

- A:-7
- B:-8
- C:-4
- D:-10

Correct Answer:- Option-B

Question90:-Which of the following is a pointing device?

- A:-Mouse
- B:-Track ball
- C:-Joystick
- D:-All the above

Correct Answer:- Option-D

Question91:-At what approximate time between 4 a.m and 5a.m. will the hands of a clock be at right angle

- A:-4:40 a.m

B:-4:38 a.m

C:-4:36 a.m

D:-4:25 a.m

Correct Answer:- Option-B

Question92:-What is the average of first 20 multiples of 8

A:-84

B:-80

C:-64

D:-86

Correct Answer:- Option-A

Question93:- $3^{1.55} \times 3^{1.45} \times 2^{1.25} \times 2^{0.75} = \dots$

A:-72

B:-104

C:-102

D:-108

Correct Answer:- Option-D

Question94:-A person moves North, then he turns to his right and then again right and finally go to left. In which direction is he moving now?

A:-North

B:-East

C:-West

D:-South

Correct Answer:- Option-B

Question95:-Write the 25th term of the G.P 1, -1, 1, -1,.....

A:-0

B:-1

C:-1

D:-2

Correct Answer:- Option-B

Question96:-Today is Monday, after 61 days the day will be

A:-Friday

B:-Sunday

C:-Saturday

D:-Monday

Correct Answer:- Option-C

Question97:-If 6 girls can embroider a dress in 9 days, then the number of days taken by 2 girls is _____

A:-27 days

B:-25 days

C:-37 days

D:-35 days

Correct Answer:- Option-A

Question98:- $\left(1 - \frac{1}{2}\right)\left(1 - \frac{1}{3}\right)\left(1 - \frac{1}{4}\right)\dots\left(1 - \frac{1}{60}\right) = \frac{x}{60}$
find the value of x

A:-0

B:-600

C:-300

D:-1

Correct Answer:- Option-D

Question99:-A class has 20 boys and 30 girls. The average age of boys is 11 years and girls is 12 years. What is the average age of whole class

A:-10.6

B:-11.6

C:-11.8

D:-10.8

Correct Answer:- Option-B

Question100:- $(\sqrt{5}-2)^2 = ? - \sqrt{80}$ Find?

A:-9

B:-8

C:-7

D:-0

Correct Answer:- Option-A