## **FINAL ANSWER KEY**

**Question Paper Code:** 55/2018/OL Category Code: 576/2017 Exam: Rehabilitation Technician Gr II Medium of Question: English Date of Test 03-11-2018 **Health Services** Department Alphacode Α Question1:-The Chief Minister who inaugurated the Hindon Elevated Road, the longest elevated road of India was A:-Pinarayi Vijayan B:-Mamtha Banerji C:-Yogi Adityanath D:-Aravind Kejrival Correct Answer:- Option-C Question2:-Write the abbreviated form of SAI. A:-Sports Affairs of India **B:-Sports Authority of India** C:-Sports Advisory of India D:-Sports Affinity of India Correct Answer:- Option-B Question3:-Which of the following mountain ranges form a dividing line between the Ganges Plain and the Deccan Plateau ? A:-Aravalli B:-Satpura **C:-Western Ghats** D:-Vindhyas Correct Answer:- Option-B Question4:-The Paithan (Jayakwadi) Hydro-electric project, completed with the help of Japan, is on the river A:-Godavari B:-Ganga C:-Cauvery D:-Narmada Correct Answer:- Option-A Question5:-How many agreements are signed between India and Uganda ? A:-7 B:-6 C:-5 D:-4 Correct Answer:- Option-D Ouestion6:-Who is known as the father of Kerala Renaissance ? A:-Chattampi Swamikal B:-Sree Narayana Guru C:-Sivananda Yogi D:-Kumaran Asan Correct Answer:- Option-B Question7:-Who introduced PIDIYARI SYSTEM in Kerala ? A:-Kuriakose Elias Chavara **B:-Sister Alphonsa** C:-Mother Therasa D:-St. Thomas Correct Answer:- Option-A Question8:-Which Indian personality has won the 2018 International Contributions Award given by the Association for Educational Communications and Technology (AECT), USA ? A:-K Anvar Sadath **B:-Kapil Bansal** C:-Harish Bhatt D:-P S Mohan Correct Answer:- Option-A

Question9:-Which of the following is the official mascot for the 2020 Tokyo Paralympic Games ?

A:-Keito **B:-Someit** C:-Zabivaka D:-Miraitowa Correct Answer:- Option-B Question10:-Which social reformer of Kerala is credited with linking caste and religious reformation with that of nationalist movement? A:-Ayyankali **B:-Pandit Karuppan** C:-Vagbhatananda D:-Vakkom Maulavi Correct Answer:- Option-C Question11:-Which movie has been chosen for the best film award "Palme d'Or" at the 2018 Cannes Film Festival ? A:-Anone B:-Warotenka C:-Half Blue **D:-Shoplifters** Correct Answer:- Option-D Question12:-Which is the largest river basin in India ? A:-Godavari B:-Krishna C:-Ganga D:-Indus Correct Answer:- Option-C Question13:-Which is the highest mountain peak in India? A:-Nanda Devi B:-Kamet C:-Trisul D:-Kangchenjunga Correct Answer:- Option-D Question14:-First Malayalam dictionary was compiled by A:-Mahakavi Vallathol Narayana Menon B:-Sreekandeswaram Padmanabha Pillai C:-Herman Gundert D:-Mahakavi Ullor Correct Answer:- Option-C Question15:-Who undertook a studentship in poetry under Manamboor Govindan Asan ? A:-Sree Narayana Guru B:-Chattampi Swamikal C:-Thycaud Ayya D:-Kumaranasan Correct Answer:- Option-D Question16:-The First Chief Justice of Kerala High Court A:-M S Menon **B:-P** Govindan Nair C:-K T Koshy D:-K Sankaran Correct Answer:- Option-C Question17:-The Jallian Wala Bhagh Massacre took place in the year A:-1919 B:-1819 C:-1918 D:-1719 Correct Answer:- Option-A Question18:-Who among the following was the first non-congress Chief Minister of India ? A:-Shanker Dayal Sharma B:-E M S Namboothiripad C:-N G Ranga

**D:-Indulal Yagnik** Correct Answer:- Option-B Question19:-The Maharaja of Travancore who invited Thycaud Ayya to his palace and became his disciple A:-Swati Tirunal **B:-Chithira Thirunal** C:-Marthanda Varma D:-Dharma Raja Correct Answer:- Option-A Question20:-Which of the following Monsoons account for most of the rainfall in India ? A:-North East Monsoon **B:-South East Monsoon** C:-East Asia Monsoon D:-South West Monsoon Correct Answer:- Option-D Question21:-Muilenburg prosthetics consists of A:-Socket, pylon and foot B:-Socket and foot C:-Simple insole to which toe fillers on spacers formed from foam are bonded D:-Simple insole and molded plastic for toe fillers Correct Answer:- Option-C Question22:-Collins partial-foot prosthesis is designed to resist A:-Dorsiflexion **B:**-Plantar flexion C:-Eversion D:-Inversion Correct Answer:- Option-A Question23:-The PTB supracondylar, suprapatellar (PTB-SCSP) socket does not provide A:-Increased mediolateral stability B:-Increased anteroposterior stability C:-Increased functional kneeling D:-Increased area of pressure distribution Correct Answer:- Option-C Question24:-Which one is the advantage of sleeve suspension ? A:-Provides added knee stability B:-Suspension is greatly decreased if the sleeve is punctured C:-Perspiration may build up under the sleeve and create skin irritation or hygiene problems D:-Helps minimize socket pistoning Correct Answer:- Option-D Question25:-Jaipur foot is based on which of the following design ? A:-Single axis B:-SACH C:-Flexible keel dynamic response D:-Multi axis Correct Answer:- Option-B Question26:-The possible cause of knee remain extension in loading response is A:-Foot too anterior B:-Foot too posterior C:-Heel too soft D:-Heel too high Correct Answer:- Option-A Question27:-IRC socket design provides A:-Better function **B:-Better Alignment C:-Better Proprioception D:-Better Suspension** Correct Answer:- Option-A Question28:-The pelvic band and hip joint suspension is used for A:-Short stump B:-Long stump

C:-Medium stump D:-Very short stump Correct Answer:- Option-D Question29:-Which of the following may be described as one of the cause of abducted gait ? A:-Weak hip abductors **B:-Abducted socket** C:-Prosthesis too long D:-Insufficient support by the lateral socket wall Correct Answer:- Option-C Question30:-Which of the following factor is not evaluated during socket trial ? A:-Suspension **B:-Alignment** C:-Distribution of weight bearing pressure and biomechanical forces D:-Freedom of ROM of proximal joint Correct Answer:- Option-B Question31:-In very light weight transfemoral prosthesis CG shifted to A:-Upward and towards sound side B:-Upward and towards prosthetic side C:-Downward and towards sound side D:-Downward and towards prosthetic side Correct Answer:- Option-A Question32:-Socket flexion angle in alignment is provided for A:-Better control of flexors B:-Better control of extensors C:-Better weight bearing D:-Better suspension Correct Answer:- Option-B Question33:-The role of calf suspension in stance phase is to A:-Control Flexion **B:-Control Extension C:-Control Hyperextention D:-Control Rotation** Correct Answer:- Option-C Question34:-The ICOR of four bar knee in flexion locates A:-Superior and Posterior **B:-Superior and Anterior C:-Inferior and Posterior D:-Inferior and Anterior** Correct Answer:- Option-D Question35:-The involuntary stability of knee joint is achieved by A:-Shifting mechanical axis of knee anterior to TKA B:-Shifting mechanical axis of knee posterior to TKA C:-shifting mechanical axis of knee medial to MKA D:-Shifting mechanical axis of knee lateral to MKA Correct Answer:- Option-B Question36:-The forearm is set in initial flexion in which type of socket ? A:-Northwestern socket B:-AHI socket C:-Muenster socket D:-Floating brim socket Correct Answer:- Option-C Question37:-In northwestern supracondylar socket is characterized by A:-Narrow M-L B:-Narrow A-P C:-Narrow in A-P and wider M-L direction D:-Wider A-P and Wider M-L Correct Answer:- Option-A Question38:-Indication of suprastyloid suspension socket is A:-Long transradial stump

B:-Wrist disarticulation with prominent styloid C:-Midcarpal amputation D:-Metacarpophalangeal disarticulation Correct Answer:- Option-B Question39:-Main feature of Three-quarter type below elbow socket A:-Indicated for short transradial amputation B:-Set in initial flexion C:-Narrow M-L D:-Has a Olecrenon cut off Correct Answer:- Option-D Question40:-Screw in socket is indicated in A:-Wrist disarticulation B:-Long transradial amputation C:-Elbow disarticulation D:-Shoulder disarticulation Correct Answer:- Option-C Question41:-Main principles of CRS socket A:-Longitudinal depressions added in the socket walls B:-Open release areas are created between the depressions that receive the displaced tissue C:-Requires selective pressure D:-All of the above Correct Answer:- Option-D Question42:-Which type of following socket is not a shoulder disarticulation socket ? A:-AHI socket **B:-Infraclavicular socket** C:-X-frame socket D:-Perimeter frame type socket Correct Answer:- Option-A Question43:-Acronym of ACCI is A:-Anatomically Contoured and Comfort Interface B:-Anatomically Contoured and Controlled Interface C:-Angulation Contoured and Controlled Interface D:-None of the above Correct Answer:- Option-B Question44:-Spilt socket is indicated for A:-Amputations immediately distal to the elbow joint B:-Inadequate strength of elbow flexors C:-Inability to tolerate the high unit pressure on the volar surface of the forearm D:-All of the above Correct Answer:- Option-A Question45:-TRAC interface incorporates design elements from A:-Split socket and three quarter type socket B:-Split socket and supracondylar socket C:-Muenster socket and northwestern socket D:-Muenster and suprastyloid socket Correct Answer:- Option-C Question46:-Carlyle index is A:-Ratio of total height to stump length B:-Ratio of total height to normal side length of corresponding stump length C:-Ratio of stump length to total height D:-Ratio of stump length to normal side length of corresponding stump length Correct Answer:- Option-C Question47:-Flexible hinges is indicated for A:-Amputation through the proximal third of the forearm B:-Amputation through the distal third of the forearm C:-Amputation through the middle third of the forearm D:-Amputation through mid of the forearm Correct Answer:- Option-C Question48:-Operating lever thumb is present in ulnar side is present in which terminal device ?

A:-Dorrance hook B:-Sierra hook C:-APRL hook D:-Ottobock hook Correct Answer:- Option-C Question49:-Step up hinges amplify the excursion of anatomic elbow joint by a ratio of A:-3 : 2 B:-3:1 C:-1:1 D:-2 : 1 Correct Answer:- Option-D Question50:-Campbell index is A:-Ratio of humeral length to stump antero-posterior diameter B:-Ratio of radius length to stump antero-posterior diameter C:-Ratio of femur length to stump end circumference D:-Ratio of tibial length to stump end circumference Correct Answer:- Option-A Question51:-Function of "Inverted Y strap" is to A:-Resist displacement of the socket on the residual limb when the prosthesis is subjected to heavy loading B:-Permit the use of scapular abduction and shoulder flexion on the amputated side for operation of the terminal device C:-Prevent to lateral rotation of prosthetic socket during prosthetic function D:-None of the above Correct Answer:- Option-B Question52:-Rotational wrist unit is prescribed mostly in A:-Bilateral upper-limb amputee who must perform all daily functions with prostheses B:-Bilateral upper limb amputees who needed to change different types of terminal devices C:-Amputees who engage in work or avocational activities that exert high rotational loads on the terminal device D:-Unilateral amputees who need to change terminal device for vocational activities Correct Answer:- Option-C Question53:-How many wrist flexions are available in Sierra Wrist Flexion Unit ? A:-Two B:-Three C:-Four D:-Five Correct Answer:- Option-B Question54:-Outside locking hinges are indicated in A:-Short transradial levels of amputation B:-Amputations immediately distal to the elbow joint C:-Elbow disarticulation and transcondylar levels of amputation D:-Amputees with very high transradial levels of amputation Correct Answer:- Option-C Question55:-Which Body motion is required to control a terminal device of upper limb prosthesis ? A:-Biscapular adduction **B:**-Glenohumeral extension C:-Glenohumeral elevation D:-Glenohumeral flexion Correct Answer:- Option-D Question56:-In standard harness system for transhumeral prosthesis what motion is required for elbow locking and unlocking? A:-Slight extension and abduction of the glenohumeral joint combined with equally slight shoulder depression on the amputated side B:-Slight flexion and adduction of the glenohumeral joint combined with equally slight shoulder depression on the amputated side C:-Slight extension and abduction of the glenohumeral joint combined with equally slight shoulder elevation on the non-amputated side D:-slight flexion and abduction of the glenohumeral joint combined with equally slight shoulder depression on the non-amputated side Correct Answer:- Option-A

Question57:-What is primary control motion for cycling the elbow unit in shoulder disarticulation prosthesis by chest strap harness system ?

A:-Glenohumeral flexion **B:-Biscapular abduction** C:-Scapular adduction on the amputated side D:-Scapular abduction on the amputated side Correct Answer:- Option-C Question58:-Bowden control cable system is used with A:-Transradial prosthesis **B:-Elbow disarticulation prosthesis** C:-Transhumeral prosthesis D:-Shoulder disarticulation prosthesis Correct Answer:- Option-A Question 59:-What is the function of muscle signal in myoelectric control prosthesis ? A:-Provide power to the motor B:-Controlling the prosthesis C:-Controlling the voltage and current of motor D:-All of the above Correct Answer:- Option-B Question60:-Which is not a component of Targeted Muscle Re-innervation ? A:-A spare muscle (the target muscle) of an amputated patient is denervated and then reinnervated with residual nerves of the amputated limb B:-The resultant EMG signals of the targeted muscle represent the motor commands to the missing limb C:-EMG signal used to drive the motor D:-EMG signal used to control a motorized prosthetic device Correct Answer:- Option-D Question61:-Knee drop lock joint is most suitable to control A:-Medial lateral instability **B:-Anterior posterior instability** C:-Weakness of Harmstrings D:-Weakness of Quadriceps Correct Answer:- Option-D Question62:-Charcot rehabilitation orthotic walker fabrication required in A:-CP B:-Polio C:-Diabetics D:-Rheumatoid Correct Answer:- Option-C Question63:-Placement of orthotic ankle joint in saggital plane is at A:-Distal tip of the medial malloeus B:-Distal tip of the lateral malleous C:-Mid of the medial malleuos D:-1/3 distal to the medial malloeus Correct Answer:- Option-A Question64:-Which option is not suitable for management of flaccid equinus ? A:-Spring Wire AFO for Dorsiflexion Assist B:-Klenzak AFO for Dorsiflexion Assist C:-Functional Electrical Stimulation for Dorsiflexion Assist D:-Free motion ankle joint for Dorsiflexion Assist Correct Answer:- Option-D Question65:-The patient with plantarflexors weakness can be prescribed with following type of orthosis A:-Foot drop stop B:-Reverse foot drop stop C:-Inside T bar D:-Outside T bar Correct Answer:- Option-B Question66:-The patient with pes plano valgus deformity may be provided with A:-Inside T strap with outside T strap B:-Inside bar with outside T strap

C:-Inside T strap with outside bar D:-Inside bar with outside bar Correct Answer:- Option-C Question67:-Which orthosis is least effective shoe for metatarsus adductus ? A:-Corrective shoes **B:-Tarsal pronator shoes** C:-Bebax shoe D:-Straight last shoe Correct Answer:- Option-D Question68:-For calcaneal spur, what kind of shoe should be provided ? A:-High quarter shoe B:-Metatarsal pad or bars C:-Heel cushion with microcellular rubber sole D:-High heels Correct Answer:- Option-C Question69:-What type of shoe modification is required in pes varus ? A:-Thomas heel B:-Lateral wedge C:-Heel cushion D:-MT bar Correct Answer:- Option-B Question70:-The bending of spreader bar in DB splint is to control A:-Equinus **B:-Rotation** C:-Varus D:-Cavus Correct Answer:- Option-C Question71:-Which of the following shoe modification is not effective in Flat feet ? A:-Lateral heel wedge B:-Medial heel wedge C:-Arch support D:-Thomas heel Correct Answer:- Option-A Question72:-Purpose of double rocker sole is A:-To eliminate weight-bearing forces on the forefoot B:-To reduce pressure under the metatarsal heads C:-To unload the midfoot area D:-To relieve forefoot pressure by shifting the weight-bearing forces to the hindfoot and midfoot Correct Answer:- Option-D Question73:-Which of the following modification don't influence in tone reducing AFO ? A:-Posterior heel pad **B:-Metatarsal pad** C:-Toe hyperextension pad D:-Toe separator pad Correct Answer:- Option-A Question74:-To correct genu recurvatum what kind of strap is given at the knee ? A:-Loose anterior strap **B:-Tight posterior strap** C:-Tight anterior strap D:-Loose posterior strap Correct Answer:- Option-B Question75:-Anterior cruciate ligament can be best treated by A:-Lenox Hill Derotation knee brace B:-Rehabilitation knee orthoses C:-Swedish knee cage D:-Knee sleeves Correct Answer:- Option-A Question76:-Which is not indication of KAFO in paraplegia ? A:-Quadriceps strength less than "Fair+" on manual muscle testing

B:-Impaired or absent knee proprioception C:-Severe hyperextension thrust during stance D:-Moderate to severe plantarflexion spasticity Correct Answer:- Option-D Question77:-Which is of the following type of Orthosis is suitable in unilateral LCPD ? A:-Toronto Orthosis **B:-Newington Orthosis** C:-Scottish Rite Orthosis **D:-Hip Abduction Orthosis** Correct Answer:- Option-D Question78:-The measurement for the Silesian bandage in weight relieving orthotics is taken from A:-The greater trochanter, over the opposite iliac crest, to the midline anteriorly B:-The scrapes Triangle, over the opposite iliac crest, to the midline anteriorly C:-The greater trochanter, over the same side iliac crest, to the midline posteriorly D:-The scrapes Triangle, over the same side iliac crest, to the midline posteriorly Correct Answer:- Option-A Question79:-Craig splint is used in A:-CTEV B:-CDH C:-DDH D:-Perthe's Disease Correct Answer:- Option-D Question80:-Phocomelia is A:-Defects in long bones B:-Complete absence of long bones C:-Partial absence of long bones D:-Complete absence extremity Correct Answer:- Option-A Question81:-UMN disorders found in A:-PPRP **B:-Muscular Dystrophy** C:-Paraplegia at the level of 12 D:-CP Correct Answer:- Option-D Question82:-Chairback lumbo sacral orthosis my be provided to control A:-Coronal plane motion **B:-Saggital plane motion** C:-Transverse plane motion D:-All the above Correct Answer:- Option-B Question83:-Which spinal segment has the greatest range of motion ? A:-Cervical **B:-Thoracic** C:-Lumbar D:-Sacral Correct Answer:- Option-A Question84:-What type of cervical brace used to control 40 to 50% of flexion-extension ? A:-Soft collar **B:-Hallo Cervical Orthosis** C:-SOMI D:-Philadelphia collar Correct Answer:- Option-D Ouestion85:-Which motion does Williams Lumbsacral orthosis control ? A:-Flexion **B:-Extension** C:-Rotation D:-Restricts all motion Correct Answer:- Option-B Question86:-Which of the following Thoracic lumbo-sacral orthoses control flexion ?

A:-Taylor **B:-Knight Taylor** C:-Jewett D:-Cow horn Correct Answer:- Option-C Question87:-Which lumbar segment is the most mobile ? A:-L4-L5 B:-L2-L3 C:-L3-L4 D:-L1-L2 Correct Answer:- Option-A Question88:-Which of the following cervical orthosis does not limit rotation ? A:-Halo vest B:-Minerva brace C:-Aspen collar D:-Sterno-Occipital-Mandibular Immobilizer (SOMI) Correct Answer:- Option-C Question89:-A patient has a stable C4 fracture. Which cervical orthosis would be appropriate ? A:-Soft collar B:-Philadelphia collar C:-Halovest D:-Minerva Correct Answer:- Option-B Question90:-Which of these back braces is primarily used for stable vertebral anterior compression fractures ? A:-Williams brace B:-Chairback brace C:-Taylor brace D:-Knight brace Correct Answer:- Option-C Question91:-The most common deformity seen in patient with a osteoporotic spine is A:-Scoliosis **B:-Kyphosis** C:-Lordosis D:-Scoliokyphosis Correct Answer:- Option-B Question92:-Complications associated with use of Halo Apparatus A:-Abscess of brain B:-Vascular compression of duodenum C:-Dysphagia D:-All of the above Correct Answer:- Option-D Question93:-Which is not Prognostic tool for curve progression ? A:-Peak growth age **B:-Degree of maturity** C:-Peak height velocity D:-Chronological age Correct Answer:- Option-B Question94:-Reliable indicators for differentiating resolving from progressive scoliosis : A:-Rib Vertebral Angle Difference (RVAD) B:-Cobb angle C:-Risser sign D:-Menarchal status Correct Answer:- Option-A Question95:-The proximal rows of carpal bones are A:-Trapezium, trapezoid, capitate and hamate B:-Scaphoid, lunate, triquetrum and pisiform C:-Scaphoid, lunate, trapezium, trapezoid D:-Scaphoid, lunate, capitate and hamate Correct Answer:- Option-B

Question96:-The primary indication for Thumb CMC palmar abduction mobilization splint is to A:-Prevent flexion contracture **B:-Assist Extension** C:-Prevent web space contracture **D:-Maintain Abduction** Correct Answer:- Option-C Question97:-The splint used in Deupuytren Contracture A:-Short opponens splint B:-Long opponens splint C:-MCP, PIP Flexion D:-MCP, PIP Extension Correct Answer:- Option-D Question98:-Trigger finger occurs in A:-Trauma **B:-Rheumatoid Arthritis** C:-Paralysis D:-Osteoarthritis Correct Answer:- Option-B Question99:-Orthotic treatment of Tennis Elbow is A:-Elbow cage B:-Elbow strap to relax muscles over medial epicondyle C:-Elbow strap to relax muscles over lateral epicondyles D:-Elbow strap to relax muscles over olecranon process Correct Answer:- Option-C Question100:-Which of the following motion get restricted in injury of supraspinatus ? A:-Abduction **B:-Flexion** C:-Extension D:-Adduction Correct Answer:- Option-A