

## ANM

### PROVISIONAL ANSWER KEY [CBRT]

Name of The Post	Associate Professor, Orthopaedics, General State Service, (Special Recruitment)  , Class-1
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### Instructions / સૂચના

**Candidate must ensure compliance to the instructions mentioned below, else objections shall not be considered: -**

- (1) All the suggestion should be submitted in prescribed format of suggestion sheet Physically.
- (2) Question wise suggestion to be submitted in the prescribed format (Suggestion Sheet) published on the website.
- (3) All suggestions are to be submitted with reference to the Master Question Paper with provisional answer key (Master Question Paper), published herewith on the website. Objections should be sent referring to the Question, Question No. & options of the Master Question Paper.
- (4) Suggestions regarding question nos. and options other than provisional answer key (Master Question Paper) shall not be considered.
- (5) Objections and answers suggested by the candidate should be in compliance with the responses given by him in his answer sheet. Objections shall not be considered, in case, if responses given in the answer sheet /response sheet and submitted suggestions are differed.
- (6) Objection for each question shall be made on separate sheet. Objection for more than one question in single sheet shall not be considered & treated as cancelled.

**ઉમેદવારે નીચેની સૂચનાઓનું પાલન કરવાની તકેદારી રાખવી, અન્યથા વાંધા-સૂચન અંગે કરેલ રજૂઆતો ધ્યાને લેવાશે નહીં**

- (1) ઉમેદવારે વાંધા-સૂચનો નિયત કરવામાં આવેલ વાંધા-સૂચન પત્રકથી રજૂ કરવાના રહેશે.
- (2) ઉમેદવારે પ્રશ્નપ્રમાણે વાંધા-સૂચનો રજૂ કરવા વેબસાઈટ પર પ્રસિધ્ધ થયેલ નિયત વાંધા-સૂચન પત્રકના નમૂનાનો જ ઉપયોગ કરવો.
- (3) ઉમેદવારે પોતાને પરીક્ષામાં મળેલ પ્રશ્નપુસ્તિકામાં છપાયેલ પ્રશ્નક્રમાંક મુજબ વાંધા-સૂચનો રજૂ ન કરતા તમામ વાંધા-સૂચનો વેબસાઈટ પર પ્રસિધ્ધ થયેલ પ્રોવિઝનલ આન્સર કી (માસ્ટર પ્રશ્નપત્ર)ના પ્રશ્ન ક્રમાંક મુજબ અને તે સંદર્ભમાં રજૂ કરવા.
- (4) માસ્ટર પ્રશ્નપત્ર માં નિર્દિષ્ટ પ્રશ્ન અને વિકલ્પ સિવાયના વાંધા-સૂચન ધ્યાને લેવામાં આવશે નહીં.
- (5) ઉમેદવારે જે પ્રશ્નના વિકલ્પ પર વાંધો રજૂ કરેલ છે અને વિકલ્પ રૂપે જે જવાબ સૂચવેલ છે એ જવાબ ઉમેદવારે પોતાની ઉત્તરવહીમાં આપેલ હોવો જોઈએ. ઉમેદવારે સૂચવેલ જવાબ અને ઉત્તરવહીની જવાબ ભિન્ન હશે તો ઉમેદવારે રજૂ કરેલ વાંધા-સૂચન ધ્યાનમાં લેવાશે નહીં.
- (6) એક પ્રશ્ન માટે એક જ વાંધા-સૂચન પત્રક વાપરવું. એક જ વાંધા-સૂચન પત્રકમાં એકથી વધારે પ્રશ્નોની રજૂઆત કરેલ હશે તો તે અંગેના વાંધા-સૂચનો ધ્યાને લેવાશે નહીં.

001. Osteoinductive factors which can be used for gene therapy in spinal fusion are all except  
 (A) BMP 9 (B) LMP 1  
 (C) NELL 1 (D) BMP 1
002. Vectors used in gene therapy in Orthopaedics are all except  
 (A) Lentivirus (B) Picornavirus  
 (C) Retrovirus (D) Adenovirus
003. Physical methods of gene transfer in orthopaedics are all except  
 (A) Gene bomb (B) Electroporation  
 (C) Ultrasound (D) Hydrodynamic therapy
004. Virus used for suicide gene therapy is  
 (A) Herpes simplex virus 1 (B) Herpes simplex virus 2  
 (C) Human immunodeficiency virus 1 (D) Human Immunodeficiency virus 2
005. Gene therapy can be used in  
 (A) Delayed union (B) Osteoporosis  
 (C) Rheumatoid arthritis (D) All of the above
006. Which of the following is not true about metals/implants used in orthopaedics  
 (A) Titanium has a lower elastic modulus than bone  
 (B) Stainless steel 316 L has a higher elastic modulus than bone  
 (C) Cobalt has a Lower yield strength than bone  
 (D) Stainless steel 316 L has a higher yield strength than bone
007. Materials used to form Bioactive layer to improve biointegration of implants are all except  
 (A) Tantalum (B) Hydroxyapatite  
 (C) Silicone (D) Fibronectin
008. Advantages of ultrahigh molecular weight polyethylene (UHMWPE) are all except  
 (A) High density (B) High abrasion resistance  
 (C) High strength (D) Low friction
009. Following are true with regards to bone cementing in orthopaedics except  
 (A) Third generation cementing technique involves vacuum centrifugation for cement preparation to reduce porosity  
 (B) Second generation cementing technique involves use of prosthesis centraliser  
 (C) First generation cementing technique involves use of cement plug restrictors  
 (D) Use of pulsatile lavage irrigation for femoral canal preparation in third generation cementing
010. Who among the following is the first to succeed in anchoring femoral prosthesis with the use of bone cement  
 (A) Sir John Charniey (B) Themistocles Gluck  
 (C) Otto Rohm (D) Judet

011. Which among the following is true regarding neurological manifestations in Fluorosis
- (A) Dorsal cord is involved earlier than the cervical cord  
 (B) Cervical spine is the first to show skeletal changes  
 (C) Cauda equina is common  
 (D) Minor trauma may precipitate neurologic deficits
012. Which among the following is true about Gauchers disease
- (A) Autosomal dominant inheritance  
 (B) Lack of enzyme Glucosylceramide beta-glucosidase  
 (C) Diaphysial fractures are common  
 (D) Erlenmeyer Flask appearance in the Head of the Femur due to Osteonecrosis
013. Which of the following is not true about mucopolysaccharidosis
- (A) Carpal tunnel syndrome is commonly seen in Hurlers syndrome  
 (B) Carpal tunnel syndrome is commonly seen in Hunters Syndrome  
 (C) Hurlers syndrome is due to deficiency of enzyme beta-L-iduronidase  
 (D) Hunters syndrome is due to deficiency of Enzyme iduronate-2-sulfatase
014. All are true about Albers-Schonbergs disease except
- (A) Dense and brittle bones  
 (B) Mandible is commonest bone affected  
 (C) Optic nerve is most commonly affected  
 (D) Metaphysic are mostly involved
015. Condition in which dense bone formation in a bone resembles the flow of candle drippings
- (A) Osteopetrosis  
 (B) Melorheostosis  
 (C) Dysplasia Epiphysialis Multiplex  
 (D) Dysplasia Epiphysialis Punctata
016. Which of the following is true about Olliers disease
- (A) Condition is predominantly unilateral  
 (B) Diaphysis is long and narrow  
 (C) Condition is manifested at birth  
 (D) Fractures are very common
017. Wimberger line in scurvy is seen in
- (A) Epipysis  
 (B) Diaphysis  
 (C) Metaphysic  
 (D) Gums
018. All are true about Vitamin D Resistant Rickets except
- (A) Most frequent cause of dwarfism  
 (B) High serum phosphorous level  
 (C) Normal calcium level  
 (D) Elevated alkaline phosphatase level
019. True about Mollities Ossium is
- (A) Hardened bones  
 (B) Failure of bone matrix to mineralise  
 (C) Caused due to deficiency of Vitamin E  
 (D) High serum phosphorous level
020. Osteoporosis is seen in
- (A) Disuse  
 (B) Cushings disease  
 (C) Sudeck osteodystrophy  
 (D) All of the above

021. Differential diagnosis of osteomyelitis is  
 (A) Chondrosarcoma (B) Osteoid osteoma  
 (C) Ewings sarcoma (D) Osteoblastoma
022. Cluttons joints are seen in  
 (A) Syphilis (B) Scurvy  
 (C) Leprosy (D) Tuberculosis
023. Brucella infection commonly involves the  
 (A) Phalanges (B) Spine  
 (C) Mandible (D) Foot
024. Which is true about Salmonella Osteomyelitis  
 (A) Intestinal symptoms are common (B) Ends of long bones affected  
 (C) Cervical spine is commonly affected (D) Small bones of hands are never affected
025. Which is true about Gonococcal Arthritis  
 (A) Bony Ankylosis is common  
 (B) Monoarticular arthritis  
 (C) Most commonly involves Hips, elbows and Foot  
 (D) Susceptible to penicillin
026. Which is true about Pigmented Villonodular synovitis  
 (A) Malignant degeneration is common (B) Most common joint affected is hip  
 (C) Seen in very elderly age group (D) Bursae and tendon sheaths may be involved
027. The basic pathology in paraplegia of late onset in tuberculosis of the spine is all except  
 (A) Tubercular debris (B) Sequestra from vertebral body  
 (C) Inflammatory edema (D) Stenosis of the vertebral canal
028. Percutaneous vertebroplasty is not done in  
 (A) Tuberculosis (B) Osteoporosis  
 (C) Hemangioma (D) Metastasis
029. The synovium in TB knee is thickened and doughy to feel, is best palpated on the  
 (A) Lateral aspect of knee (B) Posterior aspect of knee  
 (C) Medial aspect of knee (D) Anterior aspect
030. All the following are the diagnostic tests for confirmation of AIDS except  
 (A) Western blot test (B) Indirect immunofluorescence test  
 (C) Radio immunoprecipitation assay (D) CD 4 Lymphocyte Count
031. Clergyman's knee is  
 (A) Suprapatellar Bursitis (B) Prepatellar Bursitis  
 (C) Semimembranosus Bursitis (D) Infrapatellar Bursitis
032. True about Synovial Fluid is all except  
 (A) Secreted by Type A cells (B) Follows Non-Newtonian Fluid Kinetics  
 (C) Contains Hyaluronic acid (D) Viscosity Co-efficient is variable

033. Fluid whose viscosity decreases with increased rates of shear are  
 (A) Newtonian fluid (B) Rheotropic fluid  
 (C) Thixotropic fluid (D) Cathepsic fluid
034. All are true about normal synovial fluid except  
 (A) Cell count less than 100/mm<sup>3</sup>  
 (B) Specific gravity 1.030 to 1.050  
 (C) Protein content 20-200 mg/ml  
 (D) Glucose more than 75% of serum concentration
035. Which is true about normal articular cartilage  
 (A) Made of type 1 collagen  
 (B) Water content is 65-80 %  
 (C) Main proteoglycan is chondroitin phosphate  
 (D) It is vascular and neural structure
036. True statement about articular cartilage is  
 (A) Water content increases in ageing  
 (B) Collagen is normal in ageing  
 (C) Proteoglycan synthesis decreases in osteoarthritis  
 (D) Enzymatic degradation increases in ageing
037. Which of the following is a articular manifestation of Wilsons's disease  
 (A) Myositis assificans progressive  (B) Premature Osteoarthritis  
 (C) Deltoid fibrosis (D) Snapping hip syndrome
038. Most common location for bipartite patella is  
 (A) Inferolateral aspect of patella (B) Superomedial aspect  
 (C) Inferomedial aspect (D) Superolateral aspect
039. True about pseudogout is all except  
 (A) Deposition of calcium pyrophosphate crystals  
 (B) Negatively bisfringent crystals  
 (C) Associated with hypophosphatasia  
 (D) Associated with hypomagnesia
040. Milwaukee shoulder syndrome is because of  
 (A) Rotator cuff tear (B) Hemarthrosis into the shoulder  
 (C) Biceps tendon avulsion (D) Deposition of CPPD crystals
041. Gurds criteria is used in  
 (A) Fat embolism syndrome (B) Compartment syndrome  
 (C) Crush syndrome (D) Volkman's ischaemic contracture
042. Dwyers ostetomy is done for  
 (A) CTEV (B) Rickets  
 (C) DDH (D) Congenital Coxa Vara

043. All of the following are types of suturing techniques for tendon repair except  
 (A) Tajima (B) Petersons  
 (C) Bunnel (D) Kessler
044. Plaster of paris is chemically  
 (A) Calcium carbonate (B) Magnesium sulphate  
 (C)  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  (D) Hemihydrate Calcium sulphate
045. Otto pelvis is seen in  
 (A) Rickets (B) Osteomalacia  
 (C) Osteoporosis (D) Flourosis
046. Speeds test is done for diagnosis of  
 (A) Iliotibial band sprain (B) Bicipital tendonitis  
 (C) Deltoid ligament tear (D) Gluteus medius tear
047. The following tests are done for diagnosis of supraspinatus tear except  
 (A) Yergasons test (B) Hawkins kennedy test  
 (C) Neer test (D) Empty can test
048. Most common nerve involvement in fracture surgical neck humerus  
 (A) Radial nerve (B) Axillary nerve  
 (C) Median nerve (D) Ulnar nerve
049. O donoghue triad involves all the following except  
 (A) ACL (B) Medial Meniscus  
 (C) Lateral Meniscus (D) MCL
050. Inversion Injury of the ankle joint causes all the following injuries except  
 (A) Fracture base of the fifth metatarsal (B) Fracture of the sustentaculum tali  
 (C) Fracture tip of the lateral malleolus (D) Sprained extensor digitorum brevis
051. Which of the following approaches is best suited for performing triple arthrodesis at the ankle  
 (A) Olliers approach (B) Gatelliers and chastangs approach  
 (C) Posterior approach to the ankle (D) Colonnas approach
052. Which of the following is the distracting force in jones fracture  
 (A) Peroneus brevis (B) Peronius tertius  
 (C) Peronius longus (D) Tibialis posterior
053. Most common ligament injured in ankle sprain  
 (A) Anterior talofibular (B) Posterior talofibular  
 (C) Deltoid ligament (D) Cacaneofibular
054. Fabella is a sesamoid bone seen in  
 (A) Soleus (B) Lateral head of gastocnemius  
 (C) Medial head of gastocnemius (D) Tibialis posterior

055. Thurston Holland sign is seen in  
 (A) Type 2 epiphyseal injury                      (B) Type 4 epiphyseal injury  
 (C) Type 6 epiphyseal injury                      (D) Type 1 epiphyseal injury
056. In extension type of supracondylar fracture, the usual displacement is  
 (A) Anteromedial                                      (B) Anterolateral  
 (C) Posteromedial                                      (D) Posterolateral
057. Most commonly injured nerve in flexion type supracondylar fracture humerus is  
 (A) Ulnar nerve                                      (B) Median nerve  
 (C) Anterior interosseus nerve                      (D) Radial nerve
058. Hangmans fracture is the fracture of  
 (A) 1<sup>st</sup> cervical vertebra                               (B) 2<sup>nd</sup> cervical vertebra  
 (C) 3<sup>rd</sup> cervical vertebra                              (D) 2<sup>nd</sup> thoracic vertebra
059. Rupture of ulnar collateral ligament of the first MCP joint is called  
 (A) Bowlers thumb                                       (B) Gamekeepers thumb  
 (C) Mallet finger                                      (D) Jersey finger
060. Which of the following diagnostic modalities can be used to distinguish between pre and post ganglionic brachial plexus injuries  
 (A) Angiography                                      (B) Sinography  
 (C) Intradermal histamine test                      (D) Radionuclide imaging
061. A 43 year old health care worker complains of nocturnal wrist pain and has significant pain when pressure is applied to her volar wrist for more than 10 seconds. Which of the following structures is not usually contained within the carpal tunnel?  
 (A) Tendons of FDP  
 (B) Tendons of FPL  
 (C) Palmar cutaneous branch of the median nerve  
 (D) Tendons of FDS
062. The cubital tunnel is formed by which structures  
 (A) Anterior, Lateral epicondyle; posterior, olecranon; floor, MCL; roof, arciate ligament  
 (B) Anterior, medial epicondyle; posterior, olecranon; floor, MCL; roof, arcuate ligament  
 (C) Anterior, lateral epicondyle; posterior, olecranon; floor, lateral collateral ligament; roof, arcuate ligament  
 (D) Anterior, medial epicondyle; posterior, olecranon; floor, MCL; roof, arcuate ligament
063. An amateur bodybuilder presents with physical examination findings concerning for an ulnar nerve compression neuropathy. Which of the following anatomic locations is more commonly associated with ulnar nerve compression in bodybuilders as compared with the regular population?  
 (A) Osborne fascia                                      (B) Arcuate ligament  
 (C) Medial epicondyle                                       (D) Medial head of the triceps

064. True about Dupuytren's contracture is
- (A) Benign fibroproliferative disease involving muscles of hand and fingers  
 (B) Most commonly involves ring and small fingers  
 (C) Associated with steroid use  
 (D) It is bilateral in 90 % cases
065. A 55 year old woman presents with sudden catching and locking of her ring finger when trying to extend it. She experiences severe pain and notes tenderness in her distal palm. What is the best way to confirm the diagnosis?
- (A) X-rays (B) MRI  
 (C) Lidocaine Injection (D) Ultrasound of the hand
066. Maudsley Test is used for diagnosis of
- (A) Tennis elbow (B) Golfers elbow  
 (C) Myositis ossificans progressive (D) Myositis ossificans congenital
067. Most common muscle attachment involved in lateral epicondylitis is
- (A) Anconeus  (B) ECRB  
 (C) ECRL (D) Brachioradialis
068. All of the following are used as first line interventions in treatment of tennis elbow except
- (A) NSAIDs (B) Counterforce brace  
 (C) Extracorporeal shock wave therapy  (D) Muscle attachment Debridement
069. Achilles tendon rupture occurs during which type of muscle contraction?
- (A) Eccentric muscle contraction (B) Isometric muscle contraction  
 (C) Concentric muscle contraction (D) Rhythmic muscle contraction
070. Arizona brace is used in treatment of?
- (A) Rocker bottom foot deformity  (B) Adult acquired flatfoot deformity  
 (C) Congenital talipes equino varus (D) Congenital vertical talus
071. Which of the following best describes the spring ligament
- (A) Talocalcaneal ligament  (B) Calcaneonavicular ligament  
 (C) Talonavicular ligament (D) Calcaneofibular ligament
072. A 55 year old woman presents with a severe flatfoot deformity with arthritis in the subtalar joint. On examination, she has increased hindfoot valgus and forefoot abduction, which is not correctable on physical exam. Which stage is this flatfoot deformity?
- (A) Stage 1 (B) Stage 2  
 (C) Stage 3 (D) Stage 4
073. A 33 year old rugby player is seen for follow up after a first time anterior dislocation 6 weeks ago while being tackled. The shoulder has remained reduced. On examination he has good range of painless active and passive motion. Which of the following is considered a dynamic stabiliser of the glenohumeral joint?
- (A) Glenoid fossa (B) Anteroinferior labral complex  
 (C) Coracohumeral ligament  (D) Subscapularis muscle



074. Which is the best suited radiographic view to diagnose a Hill-Sachs lesion  
 (A) West point (B) Stryker notch  
 (C) Scapular Y (D) Axillary
075. Which of the following has been shown to be the greatest predictor of future dislocation after a first time anterior shoulder dislocation?  
 (A) Prolonged reduction  
 (B) Heavy labor occupations  
 (C) Chronic pain with motion after reduction  
 (D) Age at the time of first dislocation
076. Which is false about a normal wrist radiograph  
 (A) Radial inclination is normally 23 degrees  
 (B) Radial length is normally 12 mm  
 (C) Ulnar variance is normally 7 mm  
 (D) Dorsal/palmar tilt is normally 11 mm
077. A 27 year old right hand dominant man sustains a right distal radius fracture after a trip and fall. He is treated with closed reduction. Which radiographic parameter has the greatest bearing on functional outcome?  
 (A) Radial height (B) Radial inclination  
 (C) Ulnar variance (D) Palmar tilt
078. All are the following are method used to reduce a posteriorly dislocated hip except  
 (A) Allis maneuver (B) Bigelow maneuver  
 (C) Thomas maneuver (D) East Baltimore maneuver
079. What is the treatment of a type B3 vancouver periprosthetic fracture of hip  
 (A) Non operative treatment  
 (B) Fixation of fracture with revision of the femoral stem  
 (C) Fixation of the fracture without revision of the stem  
 (D) Fixation of the fracture with supplemental bone grafting with revision of the femoral stem
080. Jumpers knee involves pathology of the?  
 (A) Patella (B) Knee articular cartilage  
 (C) Quadriceps tendon (D) Patellar tendon
081. A 55 year old male slips on a patch of ice and falls on a hyperflexed knee. He reports hearing a “pop” during the fall and was unable to bear weight on the knee immediately after the injury. He has a large knee effusion on examination and is unable to perform a straight leg raise. You appreciate his patella is shifted on radiographic examination and an insall-salvati ratio seems to be 0.7. what is the likely diagnosis?  
 (A) Patella dislocation (B) Quadriceps tendon rupture  
 (C) Patellar tendon rupture (D) Anterior Cruciate ligament tear

082. A 44 year old woman is involved in a high speed RTA and suffers a right sided tibial plateau fracture. She is neurovascularly intact, and her compartments are soft. She has no other significant injuries except for a minor concussion and several broken ribs. Which of the following, if present, is an indication for operative fixation?
- (A) Articular step off 5 mm                      (B) Lateral meniscus tear on follow up MRI
- (C) Condylar widening < 3mm                      (D) ACL tear on follow up MRI
083. A 70 year old woman is brought to the trauma center with a significantly deformed right lower extremity with a 4cm wound over the posteromedial portion of her leg. She is found to have a Gustilo and Anderson type 3A fracture. Which of the following interventions has been shown to decrease the risk of infection at the fracture site?
- (A) Irrigating with high pressure pulse lavage
- (B) Immediate prophylactic antibiotic administration
- (C) Application of a wound VAC of the soft tissue defect in the casualty
- (D) Operative debridement within 6 to 8 hours of the injury
084. Zanca views are taken for assessment of which fractures
- (A) Clavicle fracture                      (B) Scapula fractures
- (C) Cervical spine fractures                      (D) Proximal humerus fractures
085. Mortise views of ankle are taken in?
- (A) 15 degrees internal rotation on AP view    (B) 15 degrees External rotation on AP view
- (C) Full Dorsiflexion on AP view                      (D) Full Plantar Flexion on AP view
086. Maisonneuve fracture are seen in?
- (A) Pronation external rotation injury                      (B) Supination external rotation injury
- (C) Supination adduction injury                      (D) Pronation abduction injury
087. A 55 year old woman is noted to have a traumatic injury to her right thigh. Which of the following is most sensitive for the diagnosis of compartment syndrome?
- (A) Pulselessness                      (B) Pallor
- (C) Pain                      (D) Paresthesias
088. A 5 year old boy falls on an outstretched hand. He presents to the casualty with complaints that he can't move his elbow, xray reveals a Gartland's type 3 extension type supracondylar fracture. His fingers are warm and well perfused but no radial pulse is palpable. On careful examination, with which of the following motions is he most likely to have difficulty?
- (A) Wrist extension                      (B) "thumbs up"
- (C) "A-okay" sign                      (D) Thumb small finger opposition
089. Through which of the following physal zones does the disruption in SCFE typically occur?
- (A) Reserve zone                      (B) Proliferative zone
- (C) Hypertrophic zone                      (D) Zone of provisional calcification

090. An 8 year old obese girl comes with a right sided unstable SCFE lesion following a fall while playing with her friends. She had no previous pain in her extremity. On examination, she has an externally rotated right lower extremity that is severely painful with passive range of motion. Frog leg lateral xrays show a displaced right SCFE lesion with a normal appearing left femoral head. Which of the following factors is a indication to prophylactically fix this child's left hip?
- (A) Obesity  
 (B) Age  
 (C) Unstable nature of the right sided SCFE  
 (D) Acute, traumatic right sided SCFE without pre existing symptoms
091. Which of the following is associated with developmental dysplasia of the hip?
- (A) Male sex  
 (B) Vertex occiput posterior delivery  
 (C) Polydactyly  
 (D) First born
092. A 15 month old girl presents to your orthopaedics opd for evaluation of the right hip. Which of the following is most associated with a diagnosis of developmental dysplasia of hip?
- (A) Negative barlow maneuver  
 (B) Asymmetry of hip abduction  
 (C) Negative ortolani maneuver  
 (D) Increased hip abduction
093. A 40 year old intravenous drug user presents to the casualty with a 2 day history of right knee pain associated with swelling and erythema. The patient is febrile with a holosystolic murmur at the right lower sternal border. CBC reveals leucocytosis. Blood and synovial fluid analysis is pending. What is the most likely pathogen causing the symptoms?
- (A) Neisseria gonorrhoea  
 (B) Staphylococcus aureus  
 (C) Pseudomonas aeruginosa  
 (D) Borrelia burgdorferi
094. A 45 year old man has a fall from his bike and is complaining of shoulder pain. Radiographs are negative for fracture and dislocation. On examination, you find a positive lift off test. What is the most likely diagnosis?
- (A) Teres minor tear  
 (B) Supraspinatus tear  
 (C) Infraspinatus tear  
 (D) Subscapularis tear
095. Which among the following is true regarding the anterior cruciate ligament?
- (A) Made of two bundles, AM and PL bundles, named after their femoral attachments  
 (B) AM bundle is the larger of the two and is tighter in extension  
 (C) Receives blood supply from the lateral geniculate artery  
 (D) It can resist a load approximately 2200 newtons
096. Second fracture is associated with injury of?
- (A) PCL  
 (B) ACL  
 (C) MCL  
 (D) LCL
097. Non-operative rehabilitation for an ACL deficient knee should include which of the following?
- (A) Quadriceps strengthening  
 (B) Straight leg raises  
 (C) Leg presses  
 (D) Hamstring strengthening

098. Which among the following is true regarding knee injuries
- (A) Torn lateral meniscus is the most commonly associated meniscal injury in the setting of an acute ACL tear
- (B) Childress test is used for LCL injury
- (C) Apleys test is more sensitive than McMurrays test for meniscal injury
- (D) The inner third “red red” zone of meniscus is vascular
099. Which of the following physical examination maneuvers is the most sensitive in the diagnosis of a medial meniscal tear?
- (A) Apleys test (B) McMurray test
- (C) Medial joint line tenderness (D) Pain with valgus stress
100. 17 year old baseball pitcher presents with medial elbow pain during overhead throwing. He is diagnosed with a UCL tear after physical examination and MRI. During what phase of throwing is he most likely to complain of medial elbow pain?
- (A) Follow through (B) Deceleration
- (C) Acceleration (D) Wind-up
101. All of the following are complications of multiple myeloma except
- (A) Pathological fracture  (B) Polycythemia
- (C) Amyloidosis (D) Impaired Immune function
102. All of the following tumours have osteoblastic bone metastasis except
- (A) Renal cell carcinoma (B) Carcinoid
- (C) Prostate carcinoma (D) Seminoma
103. 8 year old child complains of swelling in the middle of the thigh, with Codman's triangle on xray, on biopsy shows round cells with glycogen positivity. Diagnosis is
- (A) Ewing's sarcoma (B) Osteosarcoma
- (C) Neuroblastoma (D) Rhabdomyosarcoma
104. Tamoxifen is supposed to reduce the size of which of the following tumour?
- (A) Osteosarcoma (B) Chondrosarcoma
- (C) Synovial cell sarcoma  (D) Desmoplastic fibroma
105. “Corduroy” appearance on xray is a characteristic feature of?
- (A) Histiocytosis  (B) Hemangioma
- (C) Synovial sarcoma (D) Osteomyelitis
106. Which of the following is a variant of giant cell tumor?
- (A) Ossifying fibroma  (B) Non ossifying fibroma
- (C) Osteogenic sarcoma (D) Chondroblastoma
107. Radioresistant tumour among the following is?
- (A) Osteosarcoma (B) Ewing's sarcoma
- (C) Neuroblastoma (D) Wilms tumor

108. Which bone tumour arises from the epiphysis?
- (A) Osteoclastoma (B) Ewings sarcoma  
 (C) Chondromyxoid fibroma (D) Osteosarcoma
109. Most common bone tumour of hand is?
- (A) Osteoid osteoma (B) Enchondroma  
 (C) Osteochondroma (D) Metastasis
110. According to ennekings margins, what type of excision is achieved when the dissection is carried out entirely through normal tissue at a distance from the lesion?
- (A) Marginal excision  (B) Wide excision  
 (C) Radical excision (D) Intralesional excision
111. A 44 year old cab driver is involved in a high speed head on collision. In the casualty, he is hemodynamically stable and has full neurologic function of his lower limbs, he is complaining of severe lower back pain. Radiographs and CT imaging are done of lower spine. Which of the following findings is indicative of an unstable lumbar burst fracture that may need surgical stabilisation?
- (A) 50% loss of vertebral height at the level of injury  
 (B) 20 degrees of kyphosis at the level of injury  
 (C) 30% canal compromise  
 (D) Injury to the anterior and middle spinal columns only
112. All are true about RISSER SIGN except ?
- (A) Its a marker of skeletal maturity  
 (B) Ossification of the iliac apophysis seen on coronal radiographs  
 (C) Graded from 0 to 5 based on quartiles of total length of the iliac crest with ossified from medial to lateral  
 (D) Can be used to determine progression of scoliotic curve
113. A 54 year old woman sustains a twisting injury to her foot. An AP radiograph of the foot reveals a 4 mm diastasis between the first and second metatarsals. Which structure connects the medial cuneiform to the base of the second metatarsal?
- (A) Chopart ligament (B) Deltoid ligament  
 (C) Lisfranc ligament (D) Spring ligament
114. All are true about calcaneum fractures except
- (A) Decreased Bohlers angle correlates with poorer functional outcomes  
 (B) Sanders classification is based on MRI images taken in sagittal and coronal planes  
 (C) Normal Gissane angle for uninjured calcaneal fracture is 95 to 105 degrees  
 (D) Posttraumatic subtalar arthritis is common after nonoperative treatment
115. What percentage of patients with fractures of the calcaneum have associated spine injuries
- (A) 10% (B) 30%  
 (C) 50% (D) 80%

116. Which of the following most accurately lists the most common location of osteosarcoma in increasing frequency?
- (A) Proximal tibia < axial skeleton < proximal humerus < proximal femur
  - (B) Axial skeleton < proximal humerus < proximal femur < proximal tibia
  - (C) Axial skeleton < proximal humerus < proximal tibia < proximal femur
  - (D) Proximal humerus < axial skeleton < proximal tibia < proximal femur
117. In addition to metastasis, which of the following is also a poor prognostic indicator in the setting of osteosarcoma?
- (A) High alkaline phosphatase
  - (B) Pain
  - (C) Low lactate dehydrogenase
  - (D) Both (A) and (B)
118. A 14 year male presents with a 8 month history of increasing right knee pain and swelling. He is otherwise healthy, but a known carrier of the RB1 gene. A mass is found on the posterior aspect of his knee, and a biopsy is taken. If found to be an osteosarcoma, what would histologic analysis of the specimen likely show?
- (A) Densely packed uniform small blue stained cells in sheets
  - (B) Numerous multinucleated giant cells
  - (C) Diffuse cellular atypia with nuclear polymorphism and “lacey” osteoid matrix production
  - (D) Cystic spaces filled with blood
119. A 55 year old construction worker presents to your opd with complains of right knee pain, several years in duration. Examination of the right knee is notable for a slight flexion contracture, painful ROM and palpable crepitus during ROM. The left knee by comparison has a greater limited ROM that is not Painful. Standing xrays show significant medial and lateral compartment joint space narrowing with sclerotic and osteophytic changes in bilateral knees. He has not yet been treated for his condition. What is the best next step in the management of this patient.
- (A) Right total knee arthroplasty
  - (B) Right knee medial unicompartmental arthroplasty
  - (C) Bilateral total knee arthroplasty
  - (D) NSAIDS and acetaminophen and recommend physical therapy.
120. A 52 year old woman with history of rheumatoid arthritis is referred to your clinic with right knee pain. For the past 3 years her rheumatoid arthritis has been well controlled with a disease modifying anti rheumatic drug regimen. However she continues to have persistent knee pain, on examination she has a comparatively varus right knee with a painful and limited ROM. She is ligamentously intact and is tender to palpation only on the anteromedial aspect of her knee. Radiographs show significant narrowing of the right knee medial compartment, with relative sparing of the patellofemoral and lateral compartments. There are sclerotic and cystic changes on the medial aspect of her knee only. Having failed non- operative interventions, which of the following is the most appropriate surgical intervention for this patient?
- (A) Right total knee arthroplasty
  - (B) Right knee lateral unicompartmental arthroplasty
  - (C) Right knee medial unicompartmental arthroplasty
  - (D) Right knee corrective osteotomy

121. A 63 year old obese patient is referred to your orthopaedic clinic for arthritis, diagnosed on X-rays ordered by a PHC medical officer. The patient complain she gets pain in her left hip joint while doing brisk walking with her dog. Her aunt had a similar problem and had undergone a miracle operation. A careful history, physical examination and appropriate imaging confirm the diagnosis of left hip osteo arthritis. Which of the following is not an appropriate first line treatment?
- (A) Weight loss  
 (B) Intraarticular steroid injection  
 (C) Physical therapy for quadriceps strengthening  
 (D) Total hip Arthroplasty
122. Which is false regarding shoulder arthroplastly?
- (A) Total shoulder arthroplasty requires an intact rorator cuff  
 (B) Reverse total shoulder arthroplasty can be done for patients lacking rotator cuff  
 (C) In early post op period external rotation is avoided to prevent damage to the supraspinatus tendon repair  
 (D) Shoulder hemiarthroplasty is indicated in AVN head in sickle cell disease
123. A 80 year old woman who lives independently falls at home and sustains an irreparable fracture of the proximal humerus. She reports a history of painful shoulder arthritis and a long standing inability to raise her arm over her head. She is otherwise healthy. Which of the following is the best therapy?
- (A) Perform rotator cuff repair before performing a total shoulder arthroplasty  
 (B) Surgical intervention is contraindicated by her age  
 (C) Total shoulder arthroplasty  
 (D) Reverse total shoulder arthroplasty
124. FRAX is a assessment tool developed by WHO in risk assessment to assess?
- (A) Rickets (B) Scurvy  
 (C) Osteoporosis (D) Osteomyelitis
125. A 70 year old woman was prescribed alendronate for treatment of her osteoporosis. She presents to the clinic with a chief complaint of severe nausea, acidity, and heartburn after taking her medications. She had a history of Gastrointestinal reflux Disease and “irritable stomach”. Her NTX:Cr (N-telopeptide: creatinine) ratio was 45 (therapeutic range is 20-30). What is the most appropriate treatment option for this patient?
- (A) Risedronate (B) Ibandronate  
 (C) Zoledronate (D) Teriparatide (PTH)
126. All of the following are features of ankylosing spondylitis except
- (A) Bamboo spine  (B) Pelkan spur  
 (C) Romans sign (D) Squaring of the vertebral bodies
127. Which of the following is the most common source of loose bodies in the knee joint
- (A) Synovial chondromatosis  (B) Osteochondritis dessicans  
 (C) Osteophytes (D) Fractured Articular surfaces

128. All are articular deformities seen in Rheumatoid arthritis except  
 (A) Swan neck deformity (B) Z deformity  
 (C) Wind swept deformity (D) Inversion of hindfoot
129. Tendon rupture is commonly seen in rheumatoid arthritis, which of the following tendon is most commonly involved?  
 (A) Extensor pollicis longus (B) Extensor pollicis brevis  
 (C) Abductor pollicis longus (D) Abductor pollicis brevis
130. DOT in circle sign is a MRI sign diagnostic of?  
 (A) Madura Foot (B) Gout  
 (C) Actinomycosis (D) Coccidiomycosis
131. Acute infection of the pulp space of the hand is known as  
 (A) Paronychia (B) Whitlight  
 (C) Felon (D) Collar button abscess
132. True about skeletal tuberculosis is  
 (A) Hip TB heals by Fibrous ankylosis (B) Knee TB heals by Bony ankylosis  
 (C) Spine TB heals by Fibrous ankylosis (D) Side path regimen is used
133. Percutaneous vertebroplasty is not done for  
 (A) TB spine (B) Osteoporosis  
 (C) Hemangioma (D) Metastasis
134. Which of the following is not associated with chronic osteomyelitis  
 (A) Sequestrum (B) Amyloidosis  
 (C) Myositis ossificans (D) Metastatic abscess
135. Operation which splits the radius and ulna to provide crocodile type jaws with sensation is?  
 (A) Krukenbergs operation (B) Cincinati operation  
 (C) Pirogoffs operation (D) Jaws operation
136. Match stick sequestrum is seen in?  
 (A) Syphilis (B) Potts puffy tomor  
 (C) Sickle cell anemia (D) TB of ribs
137. Which is not true about foot prosthesis  
 (A) SACH foot looks almost like a normal foot  
 (B) Ankle movements are not possible with Jaipur foot  
 (C) SACH foot can allow walking with bare foot  
 (D) Jaipur foot can allow walking on uneven grounds
138. Which among these is not a hind foot amputation  
 (A) Pirogoff amputation (B) Syme amputation  
 (C) Sarmiento amputation (D) Boyd amputation



139. A 22 year old boy met with a accident and injured his right leg. He has a open communitted midshaft tibia fracture with wounds with skin loss over the fracture, with communion without bone loss, with injury to the posterior tibial nerve. He also has a Blunt abdominal injury with liver laceration. His Blood pressure in casualty was 80/50 mm hg. What is his Ganga hospital open injury severity score?
- (A) 9 (B) 11  
(C) 13 (D) 15
140. Siffert katz sign is seen in?
- (A) Genu valgum (B) Genu varum  
(C) Tibia vara (D) Genu recurvatum
141. True about Osgood Schlatter disease are all except
- (A) Osteochondritis of the tibial tubercle (B) Partial avulsion of tibial tubercle  
(C) Condition is often unilateral (D) Trauma is a frequent factor
142. Most common location of osteochondritis dissecans is
- (A) Medial side of medial femoral condyle (B) Lateral side of medial femoral condyle  
(C) Medial side of lateral femoral condyle (D) Lateral side of lateral femoral condyle
143. Surcingle cast, von lackum cast, cotrel cast are all used in treatment of?
- (A) Scoliosis (B) Kyphosis  
(C) Lordosis (D) Non union neck femur
144. True about osteitis pubis are all except
- (A) Painful condition  
(B) Associated with bony sclerosis of the symphysis  
(C) Usually develops after surgical trauma  
(D) Spontaneous reossification occurs with subsidence of symptoms
145. Landsmeers ligament is found in
- (A) Fingers (B) Palm  
(C) Wrist joint (D) Elbow
146. Graysons ligament is found in
- (A) Fingers (B) Palm  
(C) Wrist joint (D) Elbow
147. Clelands ligament is found in
- (A) Fingers (B) Palm  
(C) Wrist joint (D) Elbow
148. Madelungs deformity involves asymmetric growth of the epiphyseal plate of the
- (A) Distal end of the radius (B) Proximal end of the radius  
(C) Distal end of the ulna (D) Proximal end of the ulna
149. In slipped capital femoral epiphysis (SCFE), the epiphysis displaces
- (A) Inferiorly and anteriorly (B) Superiorly and posteriorly  
(C) Inferiorly and posteriorly (D) Superiorly and anteriorly

150. All are causes of chondrolysis except  
 (A) SCFE (B) Idiopathic  
 (C) Forcible closed manipulation (D) Smoking
151. Caffey's hypothesis and Trueta's thesis are described for?  
 (A) Coxa vara (B) Coxa breva  
 (C) Coxa plana (D) Coxa valga
152. Pellegrini-Stieda disease involves the?  
 (A) Hip joint (B) Knee joint  
 (C) Ankle joint (D) Subtalar joint
153. Pivot shift test, Slocum test, Laseque test are described to demonstrate?  
 (A) Anterolateral rotatory instability (B) Posterolateral Rotatory instability  
 (C) Anteromedial rotatory instability (D) Anterior cruciate ligament injury/tear
154. External rotation recurvatum test is used to demonstrate?  
 (A) Anterolateral rotatory instability (B) Posterolateral Rotatory Instability  
 (C) Anteromedial rotatory instability (D) Anterior cruciate ligament injury/tear
155. What is the treatment of choice in a recurrent patellar dislocation associated with a shallow lateral femoral condyle?  
 (A) Hauser operation (B) Goldthwaite Roux operation  
 (C) Albee's operation (D) Elmslie Trillat procedure
156. A young boy of 10 years complains of anterior knee pain. Tenderness is felt over the poles of patella. He walks with limp and is unable to kneel and run. Orthopaedic consultant thinks it's an osteochondritis of the poles of the patella. What is the probable diagnosis.  
 (A) Osteochondritis dissecans (B) Chondromalacia patellae  
 (C) Larsen Johansson disease (D) Osgood Schlatters disease
157. Osteochondritis dissecans is caused due to all except  
 (A) Hereditary factors (B) Infection  
 (C) Trauma (D) Endocrine imbalance
158. McBride operation is done for?  
 (A) Bunion (B) Swan neck deformity  
 (C) Buttonhole deformity (D) Hallux rigidus
159. Which tarsal bone is known as the tarsal scaphoid bone?  
 (A) Talus (B) Navicular  
 (C) Cuboid (D) Middle cuneiform
160. Kohler's disease is osteochondrosis of?  
 (A) Scaphoid (B) Navicular  
 (C) Lunate (D) Capitate

161. Sesamoid bones in the big toe is found in the tendon of ?  
 (A) Flexor hallucis brevis (B) Flexor hallucis longus  
 (C) Adductor hallucis (D) Abductor hallucis
162. All are true about hammer toe except  
 (A) Flexed at the PIP joint  
 (B) Hyperextension of the MTP joint  
 (C) Other members of family are similarly affected  
 (D) Affects the second toe most often
163. Os vesalianum is an accessory bone seen in the  
 (A) Foot (B) Hand  
 (C) Hip (D) Pelvis
164. All are suppressive agents used in treatment of Paget's disease except  
 (A) Netilmycin (B) Calcitonin  
 (C) Fluoride (D) Disphosphonates
165. Differential diagnosis of Caffey's disease are all except  
 (A) Vit C deficiency (B) Vit A deficiency  
 (C) Ewing's tumor (D) Osteomyelitis
166. All are true about sarcoidosis except  
 (A) Also known as Uveoparotid fever  
 (B) Pathologically consists of Caseating granulomas  
 (C) Bones of hands and feet most commonly involved  
 (D) Generally asymptomatic
167. True about eosinophilic granuloma are all except  
 (A) Benign bone destructive lesion (B) Eosinophilic leucocyte infiltrate  
 (C) No extra skeletal involvement (D) Multiple lesions
168. Among the following which is most commonly involved bone in Gaucher's disease  
 (A) Tibia (B) Spine  
 (C) Humerus (D) Sacrum
169. Clay shovellers fracture is  
 (A) Burst fracture of C7 vertebra (B) Fracture of transverse process of C7  
 (C) Fracture of spinous process of C7 (D) Avulsion Fracture of the radial styloid
170. In myositis ossificans, the mature bone is seen  
 (A) At periphery (B) In centre  
 (C) Whole muscle mass (D) In the joint capsule
171. Who coined the term orthopaedics?  
 (A) Robert Jones (B) Nicholas Andry  
 (C) Antonius Mathijssen (D) Hugh Owen Thomas

172. Who is the father of orthopaedics?  
 (A) Robert jones (B) Nicholas andry  
 (C) Antonius mathijssen (D) Hugh owen Thomas
173. Who is the father of arthroscopy?  
 (A) Masaki watanabe (B) Kenji takagi  
 (C) Robert W Jackson (D) Yoshinori tashiro
174. What gives the golden colour to the Gold knee?  
 (A) Cobalt chromium molybdenum nitrate (B) Titanium Niobium Nitride  
 (C) 22 carat Gold (D) Titanium Oxinium Nitrate
175. Origin of bone is from?  
 (A) Ectoderm (B) Endoderm  
 (C) Mesoderm (D) All of the above
176. The sequestrum in xray appears  
 (A) Dense (B) Light  
 (C) Isodense as surrounding bone (D) Any of the above
177. The synonym for pagets disease is  
 (A) Osteitis fibrosa (B) Osteitis proliferans  
 (C) Osteitis deformans (D) None of the above
178. Osteod osteoma originates from  
 (A) Periosteum (B) Cortex  
 (C) Medullary cavity (D) All of the above
179. Stenosing tenovaginitis commonly affects  
 (A) Abductor pollicis (B) Flexor pollicis longus  
 (C) Opponens pollicis (D) All of the above
180. The initial abnormality in rheumatoid arthritis is  
 (A) Fibrillation of cartilage (B) Sclerosis of cartilage  
 (C) In the synovial membrane (D) In the capsule
181. Stills disease is  
 (A) Spastic diplegia  
 (B) Rheumatoid arthritis in childhood  
 (C) Rheumatoid arthritis in the elderly  
 (D) Post traumatic bone formation in the lateral ligament of the knee
182. Cheiralgia paresthetica is entrapment neuropathy of?  
 (A) Lateral cutaneous nerve of thigh (B) Anterior cutaneous nerve of thigh  
 (C) Medial cutaneous nerve of thigh (D) Superficial branch of radial nerve
183. Synonym for vanishing bone disease or phantom bone disease is?  
 (A) Gorhams disease (B) Kashin beck disease  
 (C) Chandlers disease (D) Tietze syndrome

184. Preisers disease is avascular necrosis of?  
 (A) Trapezoid (B) Trapezium  
 (C) Pisiform (D) Scaphoid
185. Stener lesion is a type of traumatic injury to which digit occurring due to interposition of a tendon with a ligament?  
 (A) Thumb (B) Index finger  
 (C) Little finger (D) Ring finger
186. Mortons toe is a  
 (A) Short toe (B) Long toe  
 (C) Painful toe (D) Large toe
187. Mirels score is useful in management of which orthopaedic condition  
 (A) Compound fractures (B) Bone tumors  
 (C) Osteomyelitis (D) Avascular necrosis
188. Mumford procedure is performed for?  
 (A) Wrist arthritis (B) DRUJ subluxation  
 (C) Elbow instability (D) AC joint osteoarthritis
189. Brostrom procedure is done for repair of ligaments of the?  
 (A) Ankle (B) Shoulder  
 (C) AC joint (D) Elbow
190. Brunelli procedure is used for instability of the  
 (A) Wrist (B) Ankle  
 (C) Shoulder (D) Knee
191. Classification used for femoral shaft fractures are?  
 (A) Herscovici classification (B) Ruedi allgovers classification  
 (C) Tile classification (D) Winquist and Hansen classification
192. Lunate fractures are classified by  
 (A) Teisen classification (B) Schenck classification  
 (C) Hawkins classification (D) Haruguchi classification
193. A fracture of the distal third of the humerus resulting in entrapment of the radial nerve is  
 (A) Hume fracture (B) Holstein Lewis fracture  
 (C) Boxers fracture (D) Chance fracture
194. A V shaped fracture of the distal tibia extending into the ankle joint and fracturing the tibial plafond into anterior and posterior fragments is  
 (A) Gosselin fracture (B) Maisonneuve fracture  
 (C) Potts fracture (D) Segond fracture
195. Terry Thomas sign is seen in  
 (A) Scapho lunate dislocation (B) Lefort fracture  
 (C) Talus avascular necrosis (D) Knee tuberculosis

196. Which of the following elbow apophysis is the last to appear on elbow radiographs?  
(A) Trochlea (B) Lateral epicondyle  
(C) Medial epicondyle (D) Radial head
197. A 56 year old female bodybuilder presents to your clinic after straining her neck during an overhead lifting contest. She complains of numbness in her middle finger and weakness in her elbow extension. Which of the following findings would most likely be present in this patient ?  
(A) Decreased triceps reflex (B) Elbow flexion weakness  
(C) Finger grip weakness (D) Decreased biceps reflex
198. A 13 year old boy is referred to your clinic with a right sided SCFE after workup over several weeks by his paediatrician for insidious right knee pain. On examination, he has a obligatory external rotation with hip flexion and is refusing to bear weight. His TSH is 8.5 mIU/ml. Which of the following is the most appropriate treatment for this patient?  
(A) Percutaneous pinning of the right hip  
(B) Percutaneous pinning of both the hips  
(C) Open reduction and capsulotomy of the right hip with plate and screw fixation  
(D) Administration of levothyroxine with follow up TSH levels in OPD setting and bed rest until resolution of pain
199. A 22 year old male basketball player presents with a swollen, painful left knee. He was on a fast break and as he began to jump for an alley-oop, he felt his knee gave out and he collapsed to the floor. What is the most likely diagnosis?  
(A) Patellofemoral dislocation (B) Anterior cruciate ligament injury  
(C) Posterior cruciate ligament injury (D) Hamstring strain
200. A 50 year old woman presents to your clinic with complains of morning pains in her PIP's, MCP's and wrists. After positive serologic testing, the diagnosis of Rheumatoid Arthritis is made. Which of the following treatment regimens is most appropriate?  
(A) Ibuprofen 800 mg orally every 8 hours until symptoms improve  
(B) Methotrexate 15 mg orally once weekly and prednisolone 40 mg orally daily, with a short taper of prednisolone  
(C) Etanercept 50 mg subcutaneously every week  
(D) Prednisolone 40 mg orally once daily until symptoms improve