

AYF

PROVISIONAL ANSWER KEY (CBRT)

Name of the post	Assistant Professor, Cardiology, General State Service, Class-1
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THE LINK FOR ONLINE OBJECTION SYSTEM WILL START FROM 04-09-2021; 04:00 PM ONWARDS

Instructions / સૂચન

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

- (1) All the suggestion should be submitted through **ONLINE OBJECTION SUBMISSION SYSTEM** only. Physical submission of suggestions will not be considered.
- (2) Question wise suggestion to be submitted in the prescribed format (proforma) published on the website / online objection submission system.
- (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 / online objection submission system. 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 should be made on separate sheet. Objection for more than one question in single sheet shall not be considered.

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

- (1) ઉમેદવારે વાંધા-સૂચનો ફક્ત ઓનલાઇન ઓબ્જેક્શન સબમીશન સીસ્ટમ દ્વારા જ સબમીટ કરવાના રહેશે. રૂબરૂ અથવા ટપાલ દ્વારા આયોગની કચેરીએ મોકલવા આવેલ વાંધા-સૂચનો ધ્યાને લેવામા આવશે નહીં જેની ખાસ નોંધ લેવી.
- (2) ઉમેદવારે વાંધા-સૂચનો રજૂ કરવા વેબસાઇટ / ઓનલાઇન ઓબ્જેક્શન સબમીશન સીસ્ટમ પર પ્રસિધ્ધ થયેલ નિયત નમૂનાનો જ ઉપયોગ કરવો.
- (3) ઉમેદવારે પોતાને પરીક્ષામાં મળેલ પ્રશ્નપુસ્તિકામાં છપાયેલ પ્રશ્નક્રમાંક મુજબ વાંધા-સૂચનો રજૂ કરતા તમામ વાંધા-સૂચનો વેબસાઇટ પર પ્રસિધ્ધ થયેલ પ્રોવિઝનલ આન્સર કી (માસ્ટર પ્રશ્નપત્ર)ના પ્રશ્ન ક્રમાંક મુજબ અને તે સંદર્ભમાં રજૂ કરવા.
- (4) માસ્ટર પ્રશ્નપત્રમાં નિર્દિષ્ટ પ્રશ્ન અને વિકલ્પ સિવાયના વાંધા-સૂચનો ધ્યાને લેવામાં આવશે નહીં.
- (5) ઉમેદવારે 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 ઉત્તરવહીનો જવાબ ભિન્ન હશે તો ઉમેદવારે રજૂ કરેલ વાંધા-સૂચનો ધ્યાનમા લેવાશે નહીં.
- (6) એક પ્રશ્ન માટે એક જ વાંધા-સૂચન પત્રક વાપરવું. એક જ વાંધા-સૂચનો પત્રકમાં એકથી વધારે પ્રશ્નોની રજૂઆત કરેલ હશે તો તે અંગેના વાંધા-સૂચનો ધ્યાને લેવાશે નહીં.

Website link for online objection submission system : www.safevaults.in/login

001. Chromosome linked with cardiac malformations of DiGeorge and Velocardiofacial syndrome is.
- (A) Chromosome 22 (B) Chromosome 21
(C) Chromosome 20 (D) Chromosome 17
002. Offsprings of diabetic mothers are at increased risk of the following congenital abnormality 10 times more than offsprings of normal mothers.
- (A) Trilogy of fallot
(B) Tetralogy of fallot with absent pulmonary valve
(C) Tetralogy of fallot
(D) Tetralogy of fallot with pulmonary atresia
003. Which valve abnormality is most common due to ingestion of lithium in pregnancy?
- (A) Mitral valve (B) Tricuspid valve
(C) Aortic valve (D) Pulmonary valve
004. Anterior leaflet of mitral valve is in fibrous continuity with
- (A) Left coronary cusp of aortic valve (B) Right coronary cusp of aortic valve
(C) Non coronary cusp of aortic valve (D) None of the above
005. Valve guarding the IVC is called as
- (A) Thebesian valve (B) Eustachian valve
(C) Vieussens valve (D) Chiari valve
006. Congenital heart disease accounts for _____ % of pediatric heart transplants.
- (A) 40% (B) 30%
(C) 20% (D) 10%
007. Cavo pulmonary shunt is also called as
- (A) Glenn shunt (B) Blalock Taussig shunt
(C) Central shunt (D) Waterson shunt
008. Graham steel murmur is related to
- (A) High pitched crescendo murmur of Pulmonic stenosis
(B) High pitched decrescendo murmur of Pulmonary regurgitation
(C) High pitched crescendo decrescendo murmur of Pulmonary regurgitation
(D) Low pitched decrescendo murmur of Pulmonary regurgitation
009. Bland White Garland syndrome is other name of
- (A) ARCAPA (B) ALCAPA
(C) Osler Weber Rendu disease (D) Single coronary artery
010. Williams syndrome is because of loss of function of gene.
- (A) Frataxin (B) Titin
(C) Collagen (D) Elastin
011. SPRUNG AV junction is characteristic of
- (A) ASD (B) VSD
(C) TGA (D) AV Septal defects

022. Which of the following trials is related to bone marrow stem cell therapy in Acute Myocardial Infarction?
 (A) RECOVERY (B) BOOST
 (C) ORBITAL (D) ACCLAIM
023. Which of the following neurohormonal changes not seen in Heart Failure?
 (A) Increased dopamine (B) Increased cardiotropin I
 (C) Increased Insulin/cortisol (D) Increased Insulin like growth factor I
024. Cleavage of propeptide to BNP and NT pro BNP is by serine protease called
 (A) Clevin (B) Corin
 (C) Forin (D) Porin
025. Which of the following is not a minor criterion in the Framingham Heart Study for Heart Failure?
 (A) Ankle edema (B) Hepatojugular reflux
 (C) Night cough (D) Tachycardia
026. Recommended daily intake of salt (NaCl) is
 (A) 3.7 gms (B) 5.8 gms
 (C) 5.5 gms (D) 6.0 gms
027. Which of the following does not produce superoxide in arteries?
 (A) NADPH Oxidase (B) NOS coupling
 (C) Xanthine Oxidase (D) Mitochondria
028. Hemodynamic Hallmark of Diastolic hypertension is
 (A) Increased large artery stiffness. (B) Increased peripheral SVR.
 (C) Both (A) and (B) (D) None of the above
029. Automated office Blood Pressure monitoring was utilized in.
 (A) ALLHAT trial (B) SPRINT trial
 (C) STREAM trial (D) ELEVATE trial
030. Hypertension is defined as Automated Office Blood Pressure (AOBP) as more than.
 (A) 130/80 mm Hg (B) 135/80 mm Hg
 (C) 135/85 mm Hg (D) 140/85 mm Hg
031. Which of the following regarding ABPM is false?
 (A) It is gold standard for BP monitoring
 (B) Out of office Hypertension night value is >120/70 mm Hg
 (C) Optimal value to attain 24Hr BP < 120/75 mm Hg
 (D) At least one measurement per hour to be taken with six reading in morning and six reading in night
032. Class II A of hypertensive heart disease is.
 (A) Grade I LV diastolic dysfunction (B) LVH with NYHA class II
 (C) LVH with normal functional capacity (D) HFPEF

033. Recommendation with regards to diet in guidelines all are false, except
 (A) Reduce sodium to less than 2.3 gms/day
 (B) Potassium intake of 3gms/day
 (C) One unit of alcohol drink/day in women
 (D) All of the above
034. Effectiveness of chlorthalidone than the hydrochlorothiazide was shown in the trial
 (A) ALLHAT trial (B) ACCOMPLISH trial
 (C) MRFIT trial (D) ASCOT trial
035. Which of the following is the adverse effect more commonly seen with thiazide diuretic in elderly?
 (A) Hyponatremia (B) Hypokalemia
 (C) Gout (D) Glucose intolerance
036. Which of the following in Cardiac MRI produces movies similar to echocardiography?
 (A) Gradient recalled ECHO (GRE) (B) Spin echo
 (C) Turbo spin echo (TSE) (D) Echo planar imaging (EPI)
037. Epicardial hyperenhancement in the inferolateral wall is consistent with
 (A) DCMP (B) Anderson Fabry disease
 (C) ARVD (D) HCM
038. T2 * value of less than msec is considered diagnostic for myocardial iron overload.
 (A) < 35 msec (B) < 40 msec
 (C) < 22 msec (D) < 20 msec
039. Tagging of myocardium indicative of constrictive pericarditis is
 (A) Gridlines at the interface between pericardium and epicardium shear during systole but not in diastole
 (B) Gridlines remain intact as motion is concordant.
 (C) Both (A) and (B)
 (D) None of the above
040. Autosomal Recessive form of Catecholaminergic Polymorphic Ventricular Tachycardia is due to mutation in gene encoding.
 (A) Ankyrin (B) Calsequestrin
 (C) Ryanodine receptor (D) SCN5A
041. The great majority of the symptomatic coronary thrombi are caused by.
 (A) Plaque rupture (B) Plaque erosion
 (C) Plaque hemorrhage (D) None of the above
042. The key cellular effectors in the pathogenesis of myocardial ischemic reperfusion damage
 (A) Monocytes (B) Neutrophils
 (C) Macrophages (D) T Cells
043. Which of the following trials of clopidogrel is done in STEMI patients managed with fibrinolysis?
 (A) CLARITY (B) CAPRIE
 (C) CURE (D) CHARISMA

044. Which of the following is a thromboxane inhibitor?
 (A) Elinogrel (B) Ticagrelor
 (C) Ridogrel (D) Cangrelor
045. Which of the following is a direct acting, reversible P2Y12 inhibitor with both an IV and oral formulation?
 (A) Ticagrelor (B) Elinogrel
 (C) Cangrelor (D) Ridogrel
046. Neutralizing dose of protamine for unfractionated heparin is.
 (A) 1mg of protamine for 100 U of UFH (B) 1mg of protamine for 1000 U of UFH
 (C) 1mg of protamine for 10 U of UFH (D) 1mg of protamine for 1 U of UFH
047. Fondaparinux was compared to enoxaparin in patients with UA/NSTEMI in _____ Trial
 (A) OASIS 5 trial (B) OASIS 6 trial
 (C) OASIS 7 trial (D) OASIS 4 trial
048. Which of the following is false regarding Argatroban, the direct thrombin inhibitor?
 (A) It binds to thrombin noncovalently thereby forming a reversible complex.
 (B) Metabolized by the cytochrome P450 3A4 pathway.
 (C) Renal adjustment is necessary.
 (D) Primary indication is use in Heparin induced thrombocytopenia.
049. Smallest tissue type plasminogen activator (tPA) derivative engineered to lack the fibronectin finger, epidermal growth factor and kringle-1 domains.
 (A) Lanoteplase (B) Tenecteplase
 (C) Reteplase (D) Streptlyase
050. Which of the following trials compared PCI with drug eluting stents and CABG?
 (A) ARTS II (B) GABI
 (C) EAST (D) AWESOME
051. Proportion of cardiac patients having significant depression.
 (A) 15% - 30% (B) 5% - 10%
 (C) 40% - 50% (D) 1% - 10%
052. *Wine and cheese reaction* is seen with following antidepressant medications.
 (A) Tricyclic antidepressants (B) Selective serotonin reuptake inhibitors
 (C) Monoamine oxidase inhibitors (D) Benzodiazepines
053. Which of the following antidepressants have less risk of cardiovascular side effects?
 (A) Selective serotonin reuptake inhibitors (B) Monoamine oxidase inhibitors
 (C) Tricyclic antidepressants (D) Benzodiazepines
054. Valvular cardiomyopathy is seen as a consequence of all except
 (A) Mitral regurgitation (B) Aortic regurgitation
 (C) Aortic stenosis (D) Mitral stenosis

055. Increased frequency of HLA association in patients with dilated cardiomyopathy is seen with all except.
- (A) HLA B 27 (B) HLA A2
(C) HLA DR4 (D) HLA DRW6
056. Billingham classification on a tissue taken by endomyocardial biopsy is used for pathophysiology of
- (A) Peripartum cardiomyopathy (B) Takotsubo cardiomyopathy
(C) Anthracycline cardiomyopathy (D) Post cardiac transplantation
057. Characteristic microscopic feature of myocardium in a pathological specimen of hypertrophic cardiomyopathy
- (A) Myocardial fiber disarray (B) Whorling of muscle fibers
(C) Clefts lined with endothelium. (D) All of the above
058. Which of the following is false regarding pulse of hypertrophic cardiomyopathy?
- (A) Brisk pulse
(B) Spike and dome pattern rapid rise of percussion wave with midsystolic drop.
(C) Shorter ejection time
(D) None of the above
059. BrockenbroughBraunwald phenomenon is all; except
- (A) Increase in contractility of the ventricle.
(B) Increase in degree of dynamic obstruction.
(C) Increase in gradient.
(D) Increase in aortic pulse pressure.
060. Optimal AV interval in hypertrophic cardiomyopathy for dual chamber pacing is.
- (A) 60 msec (B) 120msec
(C) 110msec (D) 240msec
061. Which of the following amyloidosis has relatively good prognosis?
- (A) Secondary AA (B) Primary AL
(C) Senile systemic amyloidosis (D) ATTR type
062. Which of the following type of hemochromatosis is autosomal dominant in inheritance?
- (A) Type I (B) Type II
(C) Type III (D) Type IV
063. Profession of medicine is based on _____ Relationship, which means 'putting the patient first'
- (A) Fiduciary (B) Beneficence
(C) Informed consent (D) None of the above
064. Alternative label for sensitivity an specificity are
- (A) True negativity rate; true positivity rate
(B) True positivity rate; true negativity rate
(C) True negative rate for both
(D) True positive rate for both

065. A probability of 25% (1 in 4) represents the odds ratio of
 (A) 1:3 (B) 1:4
 (C) 3:1 (D) 4:1
066. What is null hypothesis ?
 (A) There is no difference between the two groups being studied.
 (B) There is difference between the two groups being studied.
 (C) There can be difference which does not affect the study
 (D) None of the above
067. Typical AVNRT has conduction antegradely and retrogradely through.
 (A) Slow/fast (B) Fast/slow
 (C) Slow/slow (D) None of the above
068. Which of the following AVNRT can be induced by ventricular pacing?
 (A) Typical (B) Atypical
 (C) Both (A) and (B) (D) None of the above
069. Adenosine dose to block SVT post cardiac transplantation is.
 (A) 3 mg (B) 6 mg
 (C) 12 mg (D) 1 mg
070. Accessory pathway connecting the atrium to the distal or compact AV node is.
 (A) James' fiber (B) Brechamber fiber
 (C) Mahaim fiber (D) None of the above
071. Scalar ECG showing negative delta wave in lead I and AVF; the accessory pathway location
 (A) Left lateral. (B) Right posterior
 (C) Left posterolateral. (D) Middle cardiac vein
072. Triangle of dysplasia in ARVD is.
 (A) Posterior base; apex; tricuspid valve (B) Posterior base; septum; tricuspid valve
 (C) Posterior base; septum; infundibulum (D) Posterior base; apex; infundibulum
073. Which of the following is false with regards to RVOT VT?
 (A) First described by Gallaverdin
 (B) Young patients without structural heart disease
 (C) Women affected more than men.
 (D) Most common location is anteroseptum of RVOT below pulmonary valve.
074. Blood supply of bundle of His is by
 (A) AV nodal artery (B) Branches from LAD artery
 (C) Both (A) and (B) (D) None of the above
075. Familial primary cardiac conduction disease is due to mutations in
 (A) SCN5A gene (B) CACCL2 gene
 (C) KCNH1 gene (D) KCNQ2 gene

076. The cut off value for sinus pause beyond which it needs further evaluation.
 (A) 3 sec (B) 2 sec
 (C) 1 sec (D) None of the above
077. Chronotropic incompetence is inability of sinus node to achieve at least.
 (A) 70% of the age predicted heart rate. (B) 80% of the age predicted heart rate.
 (C) 65% of the age predicted heart rate. (D) 75% of the age predicted heart rate.
078. Which of the following pacing is contraindicated in patient with carotid sinus hypersensitivity?
 (A) DDI (B) DDD
 (C) AAI (D) None of the above
079. Progressive replacement of the proximal bundle branches by fibrosis as a result of the ageing process exaggerated by hypertension and arteriosclerosis is termed as
 (A) Lenegre disease (B) Lev disease
 (C) Both (A) and (B) (D) None of the above
080. Transseptal access for deploying the watchman device in left atrial appendage is.
 (A) Supero anterior (B) Infero posterior
 (C) At the foramen ovale (D) Anterior to foramen ovale
081. The number of days prior to CABG, the prasugrel has to be held is
 (A) 5 days (B) 7 days
 (C) 4 days (D) 6 days
082. UBENIMEX is investigation therapy in
 (A) Pulmonary embolism (B) Pulmonary hypertension
 (C) Heart failure (D) Chronic Limb ischemia
083. Drug which is shown to lower Lipoprotein(a)
 (A) Niacin (B) Statin
 (C) Ezetimibe (D) Fenofibrate
084. Most common ECG finding during angina is
 (A) T wave inversion (B) ST depression
 (C) ST elevation (D) Pseudonormalization
085. Anticoagulant drug evaluated in COMPASS trial
 (A) Warfarin (B) Apixaban
 (C) Rivaroxaban (D) Edoxaban
086. Which of the following is not a cardioselective betablocker?
 (A) Acebutolol (B) Atenolol
 (C) Carteolol (D) Nebivolol
087. Betablocker which has a stimulatory effect on endothelial nitric oxide synthetase?
 (A) Labetalol (B) Carvedilol
 (C) Bucindolol (D) Nebivolol
088. Which of the following drug causing gingival hyperplasia?
 (A) Metoprolol (B) Verapamil
 (C) Diltiazem (D) Nifedipine

089. Nitrate tolerance is not seen in which of the following vessels?
 (A) Capacitance vessels (B) Resistance vessels
 (C) Large epicardial coronaries (D) All of the above
090. Which of the following antianginal has an antischemic effect without a clinically meaningful change in Heart rate or blood pressure?
 (A) Ivabradine (B) Ranolazine
 (C) Isradipine (D) Nitrates
091. Which of the following statin should not be combined with Ranolazine?
 (A) Atorvastatin (B) Simvastatin
 (C) Pitavastatin (D) Rosuvastatin
092. Side branch compromise in bifurcation lesions without apparent branch vessel disease?
 (A) 20% (B) 30%
 (C) 10% (D) 40%
093. Late stent thrombosis is defined as stent thrombosis which occurs between
 (A) 30 days to 3 months (B) 30days to 6 months
 (C) 30days to one year (D) More than one year
094. Activation of factor VII involved in thrombin generation is seen in _____ pathway in coagulation system
 (A) Extrinsic pathway (B) Intrinsic pathway
 (C) Common pathway (D) None of the above
095. Which of the following is mixed hypercoagulable state?
 (A) Hyperhomocysteinemia (B) Previous venous thromboembolism
 (C) Pregnancy (D) Cancer
096. Which of the following statements regarding homocysteinemia is not true?
 (A) Severe homocysteinemia is common than mild, moderate homocysteinemia.
 (B) Genetic mutations of methyl tetrahydrofolate reductase (MTHFR) is responsible for the mild, moderate homocysteinemia
 (C) C677T polymorphism is associated with increased thermolability.
 (D) A1298C polymorphism is associated with reduced enzymatic activity.
097. Which of the following are potential mechanisms for aspirin resistance?
 (A) Poor adherence to drug
 (B) Thromboxane A2 generation via pathways distinct from COX-1
 (C) Increased activity of thromboxane A2 independent pathways of platelet activation
 (D) All of the above
098. Almost 50% of the Asians exhibit clopidogrel resistance because of the allele.
 (A) CYP2C19*2 allele loss of function (B) CYP2C19*2 allele gain of function
 (C) CYP2C19*3 allele gain of function (D) CYP2C19*4 allele loss of function

099. Coxibs to be avoided in patients with cardiovascular disease. This statement has been made after the APPROVE trial results- which has shown increased thrombotic cardiovascular events. APPROVE trial evaluated following drug.
- (A) Celecoxib (B) Etoricoxib
 (C) Rofecoxib (D) None of the above
100. Which of the following cardiac tumors is malignant tumor?
- (A) Myxoma (B) Lipoma
 (C) Lymphoma (D) Papillary fibroelastoma
101. Most common benign cardiac tumor is children.
- (A) Lipoma (B) Myxoma
 (C) Rhabdomyoma (D) Papillary fibroelastoma
102. Which of the following regarding fibromas occurring in heart is false?
- (A) Typically, they occur in adults.
 (B) Most often location is the ventricle and interventricular septum.
 (C) They may present with arrhythmias and sudden cardiac death.
 (D) They frequently calcify.
103. Most common cause of superiorvena cava syndrome nowadays is.
- (A) Vascular causes like aortic aneurysm (B) Lung cancer
 (C) Lymphoma (D) Metastatic cancer
104. False about physiological effects of exogenous estrogen
- (A) Reduces LDL cholesterol (B) Increases HDL cholesterol
 (C) Decrease HsCRP level (D) Improve glucose tolerance
105. Habitual heavy alcohol consumption for men is defined as
- (A) ≥ 4 drinks a week (B) ≥ 8 drinks a week
 (C) ≥ 15 drinks a week (D) ≥ 12 drinks a week
106. All are true about lipoprotein-associated phospholipase A2 except
- (A) Circulates bound to Lipoproteins
 (B) Predicts residual risk after aggressive LDL cholesterol reduction with statin therapy
 (C) Levels strongly correlate with LDL
 (D) Positively correlate with vascular risk
107. All indicate thrombosis due to erosion except
- (A) Thick and intact fibrous cap (B) Red fibrin rich thrombus
 (C) Collagen is a trigger (D) Non – occlusive thrombosis
108. Drug that can be used to treat hypertension in patients with Hypertrophic cardiomyopathy is
- (A) Amlodipine (B) Telmisartan
 (C) Metoprolol (D) High dose thiazides
109. All are the best add on drugs to treat true resistant hypertension except
- (A) Spironolactone (B) Nebivolol
 (C) Clonidine (D) Eplerenone

110. All are inclusion criteria of SPRINT trial except
 (A) Age \geq 50yrs (B) Diabetes
 (C) Systolic BP 130 – 180 mmHg (D) Clinical coronary disease
111. Which of the following trial/study is related to statin use in advanced heart failure
 (A) CORONA (B) HOPE-3
 (C) GLAGOV STUDY (D) JUPITER
112. Which of the following decreases HBA1C
 (A) Colesevelam (B) Rosuvastatin
 (C) Niacin (D) Fenofibrate
113. Most common complication from mitral balloon valvotomy is
 (A) Embolic events (B) Severe MR
 (C) Pericardial tamponade (D) LV perforation
114. False about Sydenham Chorea
 (A) More common in Females
 (B) There is a long latency period between streptococcal pharyngitis and the development of chorea
 (C) Jack-in-the-box-tongue is seen
 (D) Persist during sleep also
115. As per 2015 AHA revised JONES criteria for diagnosis of Rheumatic fever, major criteria in low-risk population include all except
 (A) Polyarthralgia (B) Polyarthritits
 (C) Chorea (D) Subcutaneous nodules
116. The cardinal findings of fetal heart failure include all except
 (A) Scalp edema (B) Ascites
 (C) Pericardial effusion (D) Increased fetal movements
117. Williams syndrome: All are seen except
 (A) Intellectual deficit (B) Infantile hypocalcemia
 (C) supravalvular AS (D) Multiple peripheral Pulmonary stenoses
118. In pulmonary stenosis with intact ventricular system, the mean doppler gradientvalue used as cut point for intervention is
 (A) 50 mmHg (B) 40 mm Hg
 (C) 45 mmHg (D) 60 mmHg
119. All are seen with pulmonary arterial-venous fistula except
 (A) Weber-Osler-Rendu syndrome (B) Left Isomerism
 (C) Absence of lower lobe of left lung (D) Bronchiectasis
120. Which of the following protease inhibitor do not appear to induce Lipodystrophy
 (A) Atazanavir (B) Nelfinavir
 (C) Lopinavir (D) Ritonavir

121. All are characteristics of Cardiac tamponade except
 (A) Elevated and equal intracavitary filling pressures
 (B) Low transmural filling pressures
 (C) Small cardiac volumes
 (D) Prominent Y descent
122. Normal pericardial thickness on CT SCAN is
 (A) < 2 mm (B) < 3 mm
 (C) < 4 mm (D) < 5 mm
123. False about Late MI pericarditis
 (A) Occurs from 1 week to a few months after MI
 (B) Symptoms include fever & pleuritic pain
 (C) Typical ECG changes of acute pericarditis are uncommon
 (D) Tamponade is unusual
124. All are risk factors for Obstructive sleep apnea except
 (A) Obesity (B) Male sex
 (C) Female sex (D) Old age
125. Aptamers are
 (A) Chemical antibodies (B) Small RNA
 (C) Single-stranded DNA nucleic acids (D) All of the above
126. Which of the following chest pain characteristic has the highest positive predictive value
 (A) Typical chest pain (B) Radiation to both arms
 (C) Radiation to neck or jaw (D) Associated Dyspnoea
127. Which of the following is not a characteristic of typical angina
 (A) Substernal discomfort (B) Initiated by stress
 (C) Associated with Palpitations (D) Relieved by rest or sub-lingual NTG
128. Palpable JVP is seen in
 (A) Severe tricuspid stenosis (B) Severe tricuspid regurgitation
 (C) SVC obstruction (D) Severe pulmonary stenosis
129. V wave on JVP represents
 (A) Atrial systole (B) Following just after S1
 (C) Occurs at start of ventricular systole (D) Atrial filling
130. Most common presenting symptom of Retroperitoneal hematoma
 (A) Hypotension (B) Diaphoresis
 (C) Tachycardia (D) Bradycardia
131. Contour of the pulse depends on all except
 (A) Stroke volume (B) Systemic resistance
 (C) Vascular capacity and compliance (D) Ejection time

132. Bounding pulse is seen in all except
 (A) Thyrotoxicosis (B) Severe bradycardia
 (C) AV fistula (D) Aortic stenosis
133. The amplitude of U wave usually is
 (A) Less than 0.1 mV (B) Less than 0.2 mV
 (C) Less than 0.3 mV (D) Less than 0.4 mV
134. Pulsus Paradoxus may be palpable when BP difference exceeds
 (A) 10 mm of Hg (B) 5 mm of Hg
 (C) 15 mm of Hg (D) 12 mm of Hg
135. Which of the following is a low-pitched sound
 (A) Ejection sound (B) Opening snap
 (C) Tumour plop (D) Pericardial knock
136. Which of the following is not a cause for mid systolic murmur
 (A) Aortic stenosis (B) Pulmonic stenosis
 (C) Large ASD with Lt to Rt shunt (D) Aortic regurgitation
137. Murmur of Acute rheumatic mitral valvulitis is
 (A) Graham steel murmur (B) Carey coomb murmur
 (C) Austin flint murmur (D) Rytand murmur
138. ECG electrodes placed higher on anterior torso than normal, help in diagnosis of
 (A) ARVC (B) Long QT syndrome
 (C) Short QT syndrome (D) Brugada syndrome
139. Final area to be activated in both ventricles
 (A) Anteroseptal wall (B) Apex
 (C) Posterolateral wall (D) Papillary muscle
140. J wave is associated with prominent notch in
 (A) Phase 2 of action potential on epicardium
 (B) Phase 1 of action potential on epicardium
 (C) Phase 2 of action potential on endocardium
 (D) Phase 1 of action potential on endocardium
141. All are causes of abnormal small heart seen on chest X-Ray except
 (A) Addison disease (B) Malnourishment
 (C) Emphysema (D) Thyrotoxicosis
142. Asymmetric pulmonary oedema in mitral regurgitation is more common in
 (A) Right Lower lobe (B) Light Upper lobe
 (C) Right Upper lobe (D) Right Middle lobe
143. In TOE, cardiac apex is formed by
 (A) Right Atrium (B) Left ventricle
 (C) Right Ventricle (D) Main pulmonary artery

144. Metabolism perfusion mismatch in PET indicates
 (A) Normal myocardium (B) Scarred myocardium
 (C) Hibernating myocardium (D) Ischemic myocardium
145. Myocardial viability detection by technetium can be improved by administration of
 (A) Beta blockers (B) Calcium channel blockers
 (C) Nitrates (D) Dobutamine
146. Which of the following are hazardous to CMR scanning
 (A) Coronary stents (B) Sternal wires
 (C) Pacing wires (D) Mechanical heart valves
147. Which of the following drugs are not effective in lowering heart rate for high quality cardiac CT scan
 (A) Metoprolol (B) Calcium channel blockers
 (C) Atenolol (D) Ivabradine
148. Sensitivity of endomyocardial biopsy in evaluating cause of heart failure is least in
 (A) Myocarditis (B) Sarcoidosis
 (C) Amyloidosis (D) Hemochromatosis
149. Which of the following conditions do not have poor quality of life in heart failure
 (A) Younger onset heart failure (B) Male sex
 (C) Higher body mass index (D) Presence of sleep apnoea
150. Which of the following receptors/channels is not upregulated in failing myocyte
 (A) Beta 1 Adrenergic (B) Beta 2 Adrenergic
 (C) Alpha 1 Adrenergic (D) Na/Ca Exchanger
151. Which of the following contractile proteins in failing myocyte reverts to foetal isoforms
 (A) Troponin I (B) Myosin Heavy Chain
 (C) Tropomyosin (D) Troponin T
152. All of the following are risk factors for the development of central sleep apnoea in Heart failure except
 (A) Presence of AF (B) Age > 60 years
 (C) Female sex (D) Hypocapnia
153. Which of the following is not a contraindication for heart transplantation
 (A) Age > 65 years (B) Diabetes
 (C) Active malignancy (D) Obesity (BMI > 35 kg/m²)
154. Which of the following side effect is more common with Tacrolimus than Cyclosporine when used after heart transplantation
 (A) Hirsutism (B) Gingival hyperplasia
 (C) Diabetes (D) Hyperlipidaemia
155. Which of the following mechanical circulatory device has pulsatile flow
 (A) Heartmate III (B) Heartmate II
 (C) HVAD (D) Syncardia TAH-t

156. The syncardia TAH – T is approved by FDA for
 (A) Bridge to transplantation (BTT) (B) Destination therapy (DT)
 (C) Both (A) and (B) (D) None of the above
157. Walking wounded defines which INTERMACS patient profile
 (A) Profile 1 (B) Profile 3
 (C) Profile 6 (D) Profile 7
158. Left anterior fascicular block (LAFB) on ECG is suggested by
 (A) qR pattern in aVL (B) qR pattern in III
 (C) rS pattern in aVL (D) QRS duration > 140 msec
159. Carotid sinus massaging transiently terminates, but the arrhythmia restarts immediately after massage in which of the following?
 (A) AVRT (B) AVNRT
 (C) PJRT (D) Adenosine sensitive AT
160. POTS is defined by increase in heart rate > 30/min in upright posture within
 (A) < 3min (B) > 3min
 (C) > 10min (D) < 10min
161. Sudden cardiac death provided by auditory triggers as telephone ring suggests which subtype of long QT syndrome
 (A) LQTS – 1 (B) LQTS – 2
 (C) LQTS – 3 (D) LQTS – 7
162. Triad of Andersen – Tawil syndrome includes periodic paralysis, dysmorphic features and
 (A) Atrial fibrillation (B) Atrial flutter
 (C) Ventricular arrhythmias (D) AVNRT
163. IVUS frequency is
 (A) 5-10 MHz (B) 10-15 MHz
 (C) 45-70MHz (D) 20-45 MHz
164. A 27-year primigravida with 28 weeks of gestation presents with symptoms of heart failure. Which disease is likely to be encountered in her?
 (A) MVP with MR (B) ASD
 (C) RHD with MS (D) Aortic regurgitation
165. Which of the following murmur does not show inspiratory accentuation?
 (A) TR murmur (B) TS murmur
 (C) AS murmur (D) PR murmur
166. In patients with severe acute AR secondary to infective endocarditis, if patient is haemodynamically stable surgery should be deferred for how many days of antibiotics
 (A) 7 days (B) 14 days
 (C) 10 days (D) 2 days
167. Percentage of general population in which Bicuspid aortic valve is seen is
 (A) 2% (B) 5%
 (C) 0.5% (D) 3%

168. One year risk of rupture for AAA of 8.0 cm size
 (A) 40% (B) 30%
 (C) 50% (D) 60%
169. Differential diagnosis of ST elevation include all except
 (A) Hyperkalemia (B) Hypercalcemia
 (C) Hypokalemia (D) Myocarditis
170. A patient complains of intermittent claudication on walking about less than 200 meters, he belongs to which stage of Fontaine classification
 (A) Stage I (B) Stage IIa
 (C) Stage III (D) Stage IIb
171. In PREDIMED trial, Mediterranean dietary intervention reduced risk of hard cardiovascular disease endpoints by
 (A) 30% (B) 20%
 (C) 40% (D) 50%
172. Which of the following nutrients is seen in Fish?
 (A) Unsaturated fats (B) Selenium
 (C) Vitamin D (D) All of the above
173. Sodium content in processed meat is approximately higher _____ compared to unprocessed meat?
 (A) 200% (B) 300%
 (C) 400% (D) 100%
174. Which of the following is not an artificial sweetner?
 (A) Saccharin (B) Sucralose
 (C) Aspartame (D) Stevia
175. Which of the following tea modestly reduces both blood pressure and LDL-C on consumption?
 (A) Green tea (B) Black tea
 (D) Both (A) and (B)
176. Alpha - Linoleic acid is predominantly seen in all of the following, except?
 (A) Flax seed (B) Canola
 (C) Walnuts (D) Vegetable oils
177. Trans fatty acids (TFA) raise all of the following except?
 (A) LDL-C (B) Triglycerides
 (C) Apo A1 (D) Lipoprotein(a)
178. High Sodium intake / day which has more positive association with CVD, especially stroke is intake of more than?
 (A) 4000 mg/day (B) 3000 mg/day
 (D) 1000 mg/day
179. Other name of Body Mass Index (BMI) is
 (A) Quetelet Index (B) Ancel Key Index
 (C) Bazett's Index (D) Friedman Index

191. Class II Killips Kimball classification includes all except
 (A) Crackles (B) S3
 (C) S4 (D) Elevated JVP
192. Pericarditis epistenocardica is a type of pericarditis seen in Acute Coronary Syndrome. Which of the following is false?
 (A) It is a chronic pericarditis (B) It is fibrinous in nature
 (C) Seen after transmural MI (D) The patient usually have symptoms
193. Which of the following is not a feature of plaque rupture?
 (A) It is lipid rich (B) Smooth muscle apoptosis
 (C) Nonfibrillar collagen breakdown (D) Macrophage predominance
194. Percentage of patients with a clinical diagnosis of NSTEMI-ACS having triple vessel disease on angiogram is
 (A) 25% (B) 35%
 (C) 10% (D) 20%
195. Which of the following is not a part of TIMI Stable Ischemic CHD risk score?
 (A) Peripheral arterial disease (B) Prior CABG
 (C) Elevated cardiac biomarkers (D) eGFR < 60
196. TRA2P TIMI 50 trial is related to the drug?
 (A) Ticagrelor (B) Tirofiban
 (C) Vorapaxar (D) Cangrelor
197. Which of the following is false regarding Cardiac Syndrome X?
 (A) 15% NSTEMI-ACS
 (B) No obstructive epicardial CAD
 (C) ECG evidence of ischemia is seen usually
 (D) Same as metabolic syndrome
198. Which of the following is recommended for refractory angina?
 (A) Enhanced external counterpulsation (B) Spinal cord stimulation
 (C) Transmyocardial revascularization (D) All of the above
199. Which of the following is not an off PUMP CABG
 (A) OPCABG (B) MIDCAB
 (C) TECAB (D) None of the above
200. Occlusion of venous grafts before hospital discharge is 10% and by one year 15-30%. Thereafter the annual occlusion rate upto 5 years is?
 (A) 3% (B) 2%
 (C) 4% (D) 5%