

पुस्तिका में पृष्ठों की संख्या : 24  
Number of Pages in Booklet : 24

पुस्तिका में प्रश्नों की संख्या : 180  
No. of Questions in Booklet : 180

प्रश्न-पत्र पुस्तिका संख्या /

Question Paper Booklet No. **5202945**

**SSAPCr-02**

**Paper Code : 20**

**SUBJECT : Cardiology**

परीक्षा तिनांक :- 13/08/2020

परीक्षा सत्र :- 9:00 To 12:00

समय : 3.00 घण्टे

Time : 3.00 Hours

अधिकतम अंक : 180

Maximum Marks : 180

प्रश्न-पत्र पुस्तिका एवं उत्तर पत्रक के पेपर सील/पोलिथीन बैग को खोलने के बाद परीक्षार्थी प्रश्न-पत्र पुस्तिका संख्या को उत्तर पत्रक पर सावधानीपूर्वक अंकित करें। इसमें किसी भी प्रकार की त्रुटि होने पर जिम्मेदारी अभ्यर्थी की होगी।

The candidate fill the Question Paper Booklet No. on Answer Sheet carefully after opening the Paper Seal / Polythene bag. Candidate himself shall be responsible for any error.

**परीक्षार्थियों के लिए निर्देश**

1. सभी प्रश्नों के उत्तर दीजिए।
2. सभी प्रश्नों के अंक समान हैं।
3. प्रत्येक प्रश्न का केवल एक ही उत्तर दीजिए।
4. एक से अधिक उत्तर देने की दशा में प्रश्न के उत्तर को गलत माना जाएगा।
5. प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं, जिन्हें क्रमशः 1, 2, 3, 4 अंकित किया गया है। अभ्यर्थी को सही उत्तर निर्दिष्ट करते हुए उनमें से केवल एक गोले अथवा बबल को उत्तर पत्रक पर नीले बॉल प्वाइंट पेन से गहरा करना है।
6. OMR उत्तर पत्रक इस परीक्षा पुस्तिका के अन्दर रखा है। जब आपको परीक्षा पुस्तिका खोलने को कहा जाए, तो उत्तर-पत्र निकाल कर ध्यान से केवल नीले बॉल प्वाइंट पेन से विवरण भरें।
7. प्रत्येक गलत उत्तर के लिए प्रश्न अंक का 1/3 भाग काटा जायेगा। गलत उत्तर से तात्पर्य अशुद्ध उत्तर अथवा किसी भी प्रश्न के एक से अधिक उत्तर से है। किसी भी प्रश्न से संबंधित गोले या बबल को खाली छोड़ना गलत उत्तर नहीं माना जायेगा।
8. मोबाइल फोन अथवा इलेक्ट्रॉनिक यंत्र का परीक्षा हॉल में प्रयोग पूर्णतया वर्जित है। यदि किसी अभ्यर्थी के पास ऐसी कोई वर्जित सामग्री मिलती है तो उसके विरुद्ध आयोग द्वारा नियमानुसार कार्यवाही की जायेगी।
9. कृपया अपना रोल नम्बर ओ.एम.आर. पत्रक पर सावधानीपूर्वक सही भरें। गलत अथवा अपूर्ण रोल नम्बर भरने पर 5 अंक कुल प्राप्ताकों में से काटे जा सकते हैं।

**चेतावनी :** अगर कोई अभ्यर्थी नकल करते पकड़ा जाता है या उसके पास से कोई अनधिकृत सामग्री पाई जाती है, तो उस अभ्यर्थी के विरुद्ध पुलिस में प्राथमिकी दर्ज कराते हुए विविध नियमों-प्रावधानों के तहत कार्यवाही की जाएगी। साथ ही विभाग ऐसे अभ्यर्थी को भविष्य में होने वाली विभाग की समस्त परीक्षाओं से विवर्जित कर सकता है।

**INSTRUCTIONS FOR CANDIDATES**

1. Answer all questions.
2. All questions carry equal marks.
3. Only one answer is to be given for each question.
4. If more than one answers are marked, it would be treated as wrong answer.
5. Each question has four alternative responses marked serially as 1, 2, 3, 4. You have to darken only one circle or bubble indicating the correct answer on the Answer Sheet using BLUE BALL POINT PEN.
6. The OMR Answer Sheet is inside this Test Booklet. When you are directed to open the Test Booklet, take out the Answer Sheet and fill in the particulars carefully with blue ball point pen only.
7. 1/3 part of the mark(s) of each question will be deducted for each wrong answer. A wrong answer means an incorrect answer or more than one answers for any question. Leaving all the relevant circles or bubbles of any question blank will not be considered as wrong answer.
8. Mobile Phone or any other electronic gadget in the examination hall is strictly prohibited. A candidate found with any of such objectionable material with him/her will be strictly dealt as per rules.
9. Please correctly fill your Roll Number in O.M.R. Sheet. 5 Marks can be deducted for filling wrong or incomplete Roll Number.

**Warning :** If a candidate is found copying or if any unauthorized material is found in his/her possession, F.I.R. would be lodged against him/her in the Police Station and he/she would liable to be prosecuted. Department may also debar him/her permanently from all future examinations.

इस परीक्षा पुस्तिका को तब तक न खोलें जब तक कहा न जाए।

Do not open this Test Booklet until you are asked to do so.



1. Minimum duration of secondary prophylaxis in rheumatic fever without carditis is
  - (1) 1 year
  - (2) 5 years
  - (3) 10 years
  - (4) Life long
  
2. A patient of Metastatic prostate cancer arrives in emergency with acute shortness of breath. Which among following will not help you to assess clinical likelihood of acute pulmonary embolism ?
  - (1) Tachycardia
  - (2) Hemoptysis
  - (3) Hypotension
  - (4) Homan's sign
  
3. According to 2015 ESC/ERS guidelines PAH due to left heart disease is classified as
  - (1) Group 1
  - (2) Group 2
  - (3) Group 3
  - (4) Group 5
  
4. Criteria for diagnosing Takayasu arteritis include following except
  - (1) Extremity claudication
  - (2) Reduced brachial pulsation
  - (3) Bruit
  - (4) Age > 40 years
  
5. CABG in comparison to PCI is preferred in a case of Multivessel disease in
  - (1) Syntax score > 33
  - (2) Setting of acute STEMI
  - (3) Previous CABG
  - (4) Comorbid COPD and high STS score
  
6. Not a cause of ST elevation in ECG
  - (1) Acute pericarditis
  - (2) LBBB
  - (3) Pneumothorax
  - (4) Hypothermia
  
7. Kussmaul's sign is seen in-
  - (1) Mediastinal lymphoma
  - (2) RVMI
  - (3) Ebsteins Anomaly
  - (4) Pneumothorax
  
8. LV diastolic dysfunction in echocardiography can be assessed by all except
  - (1) Velocity of Propagation
  - (2) Mitral inflow pattern
  - (3) Tissue doppler Imaging
  - (4) Contrast echocardiography

9. Paradoxical split of S2 occurs in
- (1) Post-operative RBBB
  - (2) Permanent Pacemaker implantation
  - (3) Severe MR
  - (4) ASD
10. Which of the following is Crescendo-decrescendo murmur ?
- (1) Graham steel murmur
  - (2) Austin-flint murmur
  - (3) Syphilitic AR
  - (4) Pulmonic Regurgitation due to Absent Pulmonary valve
11. Syncope is not a characteristic of
- (1) Pheochromocytoma
  - (2) Aortic dissection
  - (3) Pericardial tamponade
  - (4) HOCM
12. Myocardial perfusion imaging can help in diagnosis of all except
- (1) Detecting presence and extent of coronary artery disease
  - (2) Viability assessment after myocardial infarction
  - (3) Assessment of functional significance of Coronary artery lesion after CAG
  - (4) Assessment of diastolic dysfunction in patients with hypertension

13. Amyl Nitrite decreases all of the following murmurs except
- (1) AS
  - (2) MR
  - (3) VSD
  - (4) AR
14. According to 2013 ACC/AHA cholesterol and risk guidelines, Coronary artery calcium (CAC) score above which patient can be considered for need of statin particularly if other high risk markers are present was :
- (1) 0
  - (2) 100
  - (3) 300
  - (4) 1000
15. Normal pressure values for an adult in cardiac catheterization include
- (1) RA mean 8 mmHg
  - (2) LVEDP 10 mmHg
  - (3) PCWP 15 mmHg
  - (4) RVSP 40 mmHg
16. Anrep effect is
- (1) Slow adaptation of heart to abrupt increase in afterload
  - (2) Force-volume relation
  - (3) Force-length relation
  - (4) Progressive increase in force of contraction due to increase heart rate

17. Which of the following seen is not a routine recommendation for hospitalized patient with ADHF ?
- (1) Rule out ACS by ECG and Troponins
  - (2) Intravenous inotropes to maintain systemic perfusion in hypotensive patients
  - (3) Invasive hemodynamic monitoring in normotensive patients
  - (4) Fluid intake output charting
18. Which of following is not used a novel treatment in Acute decompensated heart failure ?
- (1) ANP analogue
  - (2) Direct renin inhibitors
  - (3) Endothelin antagonists
  - (4) Anti TNF alpha
19. In treatment of heart failure, following has not shown to provide mortality benefits :
- (1) Beta blockers
  - (2) ACE inhibitors/ARB
  - (3) Spironolactone
  - (4) Loop Diuretics
20. Following is major Framingham criteria :
- (1) Exertional dyspnoea
  - (2) Cardiomegaly
  - (3) Pedal edema
  - (4) Tachycardia
21. Regarding beta blockers in CHF, choose true statement :
- (1) Carvedilol is better than Metoprolol Tartrate
  - (2) Carvedilol is equal to metoprolol tartrate
  - (3) Carvedilol is inferior to metoprolol tartrate
  - (4) Cannot comment
22. SynCardia CardioWest device is
- (1) Micromed ventricular assist device
  - (2) Total artificial heart
  - (3) Paracorporeal pulsatile device
  - (4) Implantable assist device
23. BNP
- (1) Represent wall stretch
  - (2) Independent of renal function
  - (3) Differentiate between systolic and diastolic heart failure
  - (4) Independent of age of patient
24. Regarding heart failure with preserved LVEF
- (1) More common in males
  - (2) Incidence decreases with age
  - (3) No specific drug therapy
  - (4) Raised BNP is not often seen

25. In CRT implantation, lead placement is not intended for pacing :

- (1) LA
- (2) LV
- (3) RA
- (4) RV

26. Most important predictor of outcome of Cardiac transplant is

- (1) EF
- (2) VO<sub>2</sub>
- (3) HLA
- (4) Weight

27. Following is not a side effect of ARNI :

- (1) Amyloidosis
- (2) Hyperkalaemia
- (3) Anaphylaxis
- (4) Visual disturbance

28. Definition of Heart Failure with Mid-range EF includes LVEF of

- (1) 50-59%
- (2) 40-49%
- (3) 35-39%
- (4) No relation with EF

29. False regarding use of Digoxin in heart failure

- (1) Mortality Benefit
- (2) Reduces Rehospitalization
- (3) Morbidity Benefit
- (4) useful in patients of heart failure with Atrial fibrillation

30. In a patient of NYHA class III HF, which of following is not class I indication in management ?

- (1) ACEi/ARB
- (2) Beta blockers
- (3) Diuretics especially Aldosterone antagonist
- (4) Ivabradine.

31. Medical management of Vasovagal syncope includes all except

- (1) Paroxetine
- (2) Levodopa
- (3) Midodrine
- (4) Beta-blocker

32. A 17 years old boy presents with history of syncope. His resting ECG shows RBBB pattern with coved ST segment in chest leads. Best management would be

- (1) AICD
- (2) Beta- blockers
- (3) Isoprenaline
- (4) Sympathetic ganglionectomy

33. Early repolarisation syndrome (ERS) presenting as sudden cardiac death (SCD).  
False statement is
- (1) Also called J wave syndrome
  - (2) Magnitude of J point elevation is higher
  - (3) Associated with upsloping ST segments
  - (4) Features are similar to Brugada syndrome
34. AF can be caused by all except
- (1) AAI pacing
  - (2) Esophageal surgery
  - (3) Submassive PE
  - (4) Atrial infarct
35. Which is not true for Atrial Flutter :
- (1) Anti-coagulation is required
  - (2) Heart rate control is easier than in Atrial Fibrillation
  - (3) Can cause SCO
  - (4) Can be treated by RF Ablation
36. True for ARVD is
- (1) Pathologically LV can be involved
  - (2) RBBB morphology during VT
  - (3) RFA is highly successful
  - (4) Malignant arrhythmias can only occur with overt RV failure
37. Delayed After Depolarization seen in-
- (1) Digoxin toxicity
  - (2) TDP
  - (3) AVNRT
  - (4) Ventricular Parasystole
38. Drugs slowing conduction in accessory pathway include all except :
- (1) Class I A
  - (2) Class IC
  - (3) Class II
  - (4) Class III
39. A single chamber pacemaker (VVI) is choice in :
- (1) Sick sinus syndrome
  - (2) Associated long standing AF
  - (3) Complete heart block
  - (4) High degree AV block
40. Least energy required for electric cardioversion of
- (1) VT
  - (2) AF
  - (3) AFL
  - (4) Sinus tachycardia
41. Normal HV interval is-
- (1) 35-55 ms
  - (2) 10-20 ms
  - (3) 70-90 ms
  - (4) 30-200 ms

42. In ECG criteria favouring VT over SVT with aberrancy include

- (1) Initiation with premature P wave
- (2) AV dissociation
- (3) Normal QRS axis
- (4) Slowing or termination with vagal manoeuvres

43. Which of the following is not a long RP narrow QRS tachycardia ?

- (1) Atrial tachycardia
- (2) Permanent Junctional Reciprocating Tachycardia
- (3) Sinus node reentry
- (4) Typical AVNRT

44. Synchronized cardioversion is done on which segment of ECG ?

- (1) P wave
- (2) Q wave
- (3) R wave
- (4) T wave

45. High degree AV block is

- (1) Increase PR interval
- (2) Wenckebach phenomenon
- (3) Blockage of 2 or more P waves in succession
- (4) Any of above

46. Clinically atherosclerosis can present with following complications except

- (1) Arterial stenosis and stable angina
- (2) Plaque rupture and acute coronary syndrome
- (3) Healing and aneurysm formation
- (4) Progression and coronary perforation

47. Regarding lipids in atherosclerotic heart disease, choose the wrong statement :

- (1) Reduction in LDL-C correlates with decrease mortality
- (2) Interventions to increase HDL-C have shown to improve outcomes
- (3) Small dense LDL are associated with increase levels of TG
- (4) Triglycerides have shown to have causal risk for CAD

48. Regarding post-menopausal Hormone Replacement Therapy (HRT), false is :

- (1) Increases HDL-C and Lowers LDL-C
- (2) Provide prevention against atherosclerotic heart disease
- (3) Can be given even after 10 years of menopause for CAD prevention
- (4) Provide symptomatic relief against peri-menopausal symptoms

49. Non-conventional risk marker for atherosclerosis includes
- (1) Lp(a)
  - (2) LDL
  - (3) TG
  - (4) All of the above
50. Most common familial lipoprotein disorder is
- (1) Familial combined hyperlipidemia
  - (2) Dysbetalipoproteinemia
  - (3) Familial hypertriglyceridemia
  - (4) Tangier Disease
51. Secondary causes of dyslipidemia include following except
- (1) Diabetes
  - (2) CRF
  - (3) Hyperthyroidism
  - (4) Steroids
52. According to 2016 ACC consensus group, group of patients deriving benefit from statin include following except
- (1) Adult with clinical ASCVD
  - (2) Adults with LDL-C > 190 mg/dl
  - (3) Diabetic adult with LDL-C 70-189 mg/dl
  - (4) Adult without ASCVD or Diabetes with estimated 10 years ASCVD risk > 2.5 %
53. Heart friendly diet include more of
- (1) Saturated fats
  - (2) PUFA
  - (3) Sodium
  - (4) Sugar
54. Obesity is defined as BMI more than
- (1) 18.5
  - (2) 25.0
  - (3) 30.0
  - (4) 40.0
55. Detrimental effects of hyperglycaemia includes following except
- (1) Endothelial dysfunction
  - (2) High HDL-C
  - (3) Prothrombotic state
  - (4) Increased systemic inflammation
56. Heart friendly anti-diabetic drugs include following except
- (1) Thiazolidinediones
  - (2) SGLT2 inhibitors
  - (3) GLP-1 receptor agonists
  - (4) Metformin
57. Changes of aerobic exercise training- "athlete heart" include
- (1) Decreased Stroke volume
  - (2) Tachycardia
  - (3) Early repolarisation changes in ECG
  - (4) Increased sympathetic tone



58. First line antihypertensive drugs do not include
- (1) CCB
  - (2) Thiazide diuretics
  - (3) ARB
  - (4) Beta blockers
59. Masked hypertension is
- (1) Office reading less than home reading
  - (2) Home reading less than office reading
  - (3) Home reading equal to office reading
  - (4) None of the above
60. A hypertensive patient presents with Acute decompensated heart failure. After echocardiogram he was diagnosed as HF with preserved LV function. He is in which class of hypertensive heart disease ?
- (1) Class I
  - (2) Class IIb
  - (3) Class III
  - (4) Class IV
61. Clinical clue for secondary renovascular hypertension include following except :
- (1) Age of onset < 30 or > 50 years
  - (2) Weight loss
  - (3) Flash pulmonary edema
  - (4) AKI during treatment of hypertension
62. Drug of choice for patient of hypertension with aortic aneurysm is
- (1) Beta blocker
  - (2) CCB
  - (3) ACEi
  - (4) Diuretic
63. Hypertension in Very Elderly Trial (HYVET) studied which antihypertensive class ?
- (1) CCB + ARB
  - (2) Central sympatholytics
  - (3) ACEi + Diuretics
  - (4) ARB + Diuretics
64. Drug contra-indicated in hypertensive emergency
- (1) i.v. Labetolol
  - (2) i.v. NTG
  - (3) Frusemide
  - (4) s.l. Nifedipine
65. SPRINT (Systolic blood Pressure Intervention Trial) trial excluded patients with
- (1) Age > 50 years
  - (2) CAD
  - (3) DM
  - (4) 10 year CVD risk > 15%
66. Vulnerable atherosclerotic plaque is characterised by all of the following except
- (1) More smooth muscle cells
  - (2) More lipid contents
  - (3) More Macrophages
  - (4) Thin fibrous cap

67. Non cardiac surgery with low risk for cardiac complication include
- (1) Aortic surgery
  - (2) Prostate surgery
  - (3) Breast surgery
  - (4) Orthopedic surgery
68. Trans-esophageal echo (TEE) is superior to Trans Thoracic echo in
- (1) LVEF estimation
  - (2) Strain imaging
  - (3) Evaluation of AR in prosthetic Aortic valve
  - (4) Suitability of electric cardioversion in AF
69. Which of the following is not a perfusion tracer for Positron Emission Tomography(PET) scan ?
- (1) Oxygen 15
  - (2) Fluoride 18
  - (3) Nitrogen 13
  - (4) Rubidium 82
70. Catheter not used for hooking SVG graft during coronary angiography
- (1) JL
  - (2) MPA
  - (3) AL
  - (4) JR

71. In no reflow during Primary PCI, following can be used as intracoronary agent except
- (1) Adrenaline
  - (2) Nicorandil
  - (3) Adenosine
  - (4) Metoprolol
72. Which of the following is an absolute contraindication for Thrombolysis in acute MI ?
- (1) Blood Pressure at presentation 220/100 mmHg,
  - (2) Active menses
  - (3) Suspected aortic dissection
  - (4) Patient on Warfarin
73. Which of the following does not hold true for Prinzmetal angina ?
- (1) More than 2/3 patient will have fixed coronary obstruction
  - (2) It can cause SCD
  - (3) Smoking is an important risk factor
  - (4) Intracoronary acetylcholine is used as diagnostic test
74. Regarding LV free wall rupture in acute MI, following are true except
- (1) Can lead to cardiac tamponade
  - (2) Usually associated with small, localize infarct
  - (3) Increase chances with fibrinolysis than primary PCI
  - (4) Common in patients with Single vessel disease

75. Which of following is a feature of AV block during acute anterior wall MI ?
- (1) Intranodal
  - (2) Mobitz type I
  - (3) Heart rate < 30 bpm
  - (4) Low mortality
76. According to Third Universal definition of MI, one due to Stent Thrombosis is
- (1) Type I
  - (2) Type III
  - (3) Type IV a
  - (4) Type IV b
77. Which of the following is not a noninvasively high risk criteria for stable CAD ?
- (1) Resting LVEF <35% with Wall motion abnormality
  - (2) TMT score > 5
  - (3) Resting perfusion abnormality > 10%
  - (4) Stress induced LV dilatation
78. Following measures have class I indication in the treatment of stable CAD except
- (1) Regular physical activity
  - (2) Statins
  - (3) Smoking cessation
  - (4) Moderate alcohol intake
79. Radial access during Coronary intervention have following advantages except
- (1) Less vascular complications
  - (2) Early hospital discharge
  - (3) Less fluoroscopy time
  - (4) Patient preference
80. Stent thrombosis- a risk factor can be
- (1) Acute MI setting
  - (2) Large diameter vessel
  - (3) Bare metal stent
  - (4) Non polymer coated stent
81. Risk stratification for aortic stenosis includes all except
- (1) Severity of symptoms
  - (2) Valve calcification
  - (3) Elevated BNP
  - (4) Myocardial fibrosis
82. Transcatheter Aortic Valve Replacement (TAVR) was not studied in following trial :
- (1) PARTNER
  - (2) SURTAVI
  - (3) EVEREST
  - (4) EVOLUT-R
83. De-Musset sign in Aortic regurgitation is
- (1) Bobbing of head
  - (2) Nail pulsation
  - (3) Neck pulsation
  - (4) Pulsatile hepatomegaly

84. Severity of Mitral stenosis can be assessed with all except

- (1) PAH
- (2) LA size
- (3) A2-OS gap
- (4) Length of MDM

85. Causes of Normotensive TR include all except

- (1) Carcinoid
- (2) MS with PAH
- (3) Ebstein anomaly
- (4) IE

86. Regarding multi-valvular disease wrong statement is :

- (1) Mostly rheumatic in origin
- (2) Clinical examination can be fallacious
- (3) When of equal severity, clinical manifestation depends upon distal lesion
- (4) Cardiac catheterization may be indicated

87. St. Jude valve is a

- (1) Ball and socket valve
- (2) Tilting disc Valve
- (3) Bileaflet valve
- (4) Tissue valve

88. A bio-prosthetic heart valve will be preferred over mechanoprosthesis in patient with

- (1) Atrial fibrillation
- (2) Need for double valve replacement
- (3) CABG+MVR
- (4) Associated bleeding diathesis

89. Wilkins Score does not include

- (1) Valve Mobility
- (2) Valve area
- (3) Valve calcification
- (4) Valve thickening

90. Mitral valve Surgery is not indicated in

- (1) Asymptomatic chronic severe MR with LVEF > 30%
- (2) Symptomatic severe MR
- (3) Moderate MR in a patient undergoing CABG
- (4) Progressive MR(stage B)

91. Most common organism causing early prosthetic valve endocarditis is

- (1) Staphylococcus
- (2) Enterococcus
- (3) HACEK
- (4) Fungi

92. Surgical intervention is absolutely indicated in case of IE in all of the following except
- (1) Staphylococcus IE on left sided valve
  - (2) More than 10 mm size vegetation
  - (3) Valve dehiscence producing heart failure
  - (4) Persistent infection longer than 5-7 days despite treatment
93. Following is not an indication for IE prophylaxis :
- (1) Completely repaired CHD with prosthetic material after 6 month of procedure
  - (2) History of IE
  - (3) Prosthetic heart valve
  - (4) Post cardiac transplant with valvopathy
94. Regarding sub-cutaneous nodules in Acute Rheumatic fever, false is :
- (1) Best seen on pressure points
  - (2) 0.5-2 cm in size and occur in crops
  - (3) Usually last less than one month
  - (4) Tender and firm
95. According to AHA Revised Jones criteria -2015, which has not been accepted as Major criteria in high risk population ?
- (1) Monoarthralgia
  - (2) Polyarthralgia
  - (3) Monoarthritis
  - (4) Polyarthritis

96. Risk factors for SCD in HOCM include all except
- (1) Family history of SCD
  - (2) NSVT on Holter
  - (3) Hypertensive response on TMT
  - (4) Reduced LVEF
97. Osborn's J waves in ECG are manifestation of
- (1) Hypothermia
  - (2) Brugada syndrome
  - (3) Digitalis toxicity
  - (4) ARVD
98. Dallas criteria are used for
- (1) IE
  - (2) Myocarditis
  - (3) RCMP
  - (4) Takotsubo cardiomyopathy
99. Most common arrhythmia in "Holiday Heart syndrome" is
- (1) VT
  - (2) Sinus arrest
  - (3) AF
  - (4) Junctional Bradycardia
100. Which of following is not a common cardiovascular manifestation of HIV ?
- (1) Accelerated atherosclerosis
  - (2) Pulmonary hypertension
  - (3) Lipodystrophy
  - (4) Pericarditis

101. Typical ECG features of acute viral pericarditis is

- (1) Diffuse ST segment elevation with PR depression
- (2) PR prolongation
- (3) Diffuse ST segment depression with PR elevation
- (4) Pathological q waves

102. Which of the following cannot differentiate Cardiac tamponade from Constrictive pericarditis ?

- (1) Y descent in JVP
- (2) Square root sign in ventricular pressure curve
- (3) Kussmaul sign
- (4) Equal left/right filling pressure

103. Riociguat is indicated in

- (1) Idiopathic PAH
- (2) CTEPH
- (3) PAH secondary to COPD
- (4) OSAS

104. RV free wall hypokinesis involving base with sparing of RV apex is seen in

- (1) PPH
- (2) PTE
- (3) RV MI
- (4) COPD

105. Drug of choice for asymptomatic, uncomplicated patient of HOCM is

- (1) Beta blocker
- (2) Disopyramid
- (3) Lanoxin
- (4) Diuretic

106. At birth heart failure can be present in all except

- (1) Systemic AV fistula
- (2) HLHS
- (3) Severe TR
- (4) Large VSD

107. Step up of O<sub>2</sub> saturation in RA is seen in all except

- (1) ASD
- (2) PDA
- (3) VSD-TR
- (4) TAPVC

108. "Goose-neck deformity" in angiocardiogram is specific to

- (1) Complete AV canal defect
- (2) TOF
- (3) HLHS
- (4) DORV

109. Percutaneous Balloon Valvuloplasty is treatment of choice in :

A. PS B. TS C. MS D. AS

Please select the best possible combination :

(1) A and B

(2) B and C

(3) A and C

(4) B and D

110. Interrupted aortic arch is commonly associated with following except

(1) ASD

(2) VSD

(3) PDA

(4) Bicuspid aortic valve

111. Which of the following is not Duct dependant defect ?

(1) Pulmonary atresia

(2) HLHS

(3) D-TGA

(4) Interrupted aortic arch

112. Best survival (without any intervention) is seen with

(1) TOF

(2) L-TGA

(3) D-TGA

(4) DORV-PS

113. "Vertical ductus" configuration of PDA is seen in

(1) TOF with Pulmonary atresia

(2) Aortic atresia

(3) Bicuspid aortic valve

(4) D-TGA+VSD+PS

114. Regarding Asplenia syndrome all of the following are true except :

(1) Cyanotic heart disease

(2) Midline symmetrical liver present

(3) Complex cardiac abnormality present

(4) Bilateral hyparterial bronchi present

115. Interventional management with Device closure is not effective in

(1) Peri membranous VSD

(2) Inlet VSD

(3) Ruptured sinus of Valsalva aneurysm

(4) Patent ductus arteriosus

116. Congenital complete Heart Block is not associated with

(1) Maternal lupus

(2) Left Isomerism

(3) TOF

(4) L-TGA

117. William syndrome is associated with

- (1) Sub valvular AS
- (2) Valvular AS
- (3) Supra-valvular AS
- (4) AR

118. Sail like Anterior tricuspid leaflet and apical displacement of septal tricuspid leaflet are found in

- (1) RV dysplasia
- (2) Single ventricle
- (3) Congenital TS
- (4) Ebstein Anomaly

119. Scimitar syndrome is

- (1) ASD
- (2) PAPVC
- (3) TAPVC
- (4) Interrupted IVC with azygos continuity

120. Not a component of "Fallot's Triology"

- (1) RVOT obstruction
- (2) Inter-atrial communication
- (3) Over-riding of aorta
- (4) RV hypertrophy/enlargement

121. Pick up the false statement about "Cyanotic spell"

- (1) Usually occur after the age of 2 years
- (2) Begins with increased rate and depth of respiration
- (3) Can cause seizures, syncope or death
- (4) Do not coincide with degree of cyanosis

122. ALCAPA-false statement is

- (1) 80-90% mortality in first year
- (2) Continuous murmur can be heard
- (3) Echocardiography can establish diagnosis
- (4) ECG is usually normal

123. Most common site of distal opening in RSOV

- (1) RV
- (2) LV
- (3) LA
- (4) Ascending aorta

124. "Egg on side" appearance of cardiac silhouette in chest Xray is diagnostic of

- (1) DORV
- (2) TGA
- (3) Ebstein anomaly
- (4) TAPVC



125. "Sawing wood" or "See saw" murmur is heard in

- (1) Classical TOF
- (2) TOF with PDA
- (3) TOF with pulmonary atresia
- (4) TOF with absent pulmonary valve

126. Morphological Right Ventricle is identified by following except

- (1) Elliptical shape
- (2) Extensive trabeculation
- (3) Moderator band
- (4) Trileaflet AV valve

127. Which of the following is a venous palliative shunt for TOF ?

- (1) BT shunt
- (2) Pott shunt
- (3) Glenn shunt
- (4) Waterson shunt

128. Not an indication for closure of VSD

- (1) Symptomatic, large VSD
- (2) Outlet VSD with mild AR
- (3) Irreversible PAH
- (4) History of IE

129. Indication for intervention in adult after Total repair of TOF includes following except

- (1) Severe PR causing RV dilation
- (2) Arrhythmias
- (3) Residual Pulmonic stenosis
- (4) Residual VSD (shunt < 1.5/1)

130. Not common complication of Fontan operation

- (1) Thrombo-embolic complications
- (2) Brain abscess
- (3) Protein losing enteropathy
- (4) Supraventricular Arrhythmias

131. Equal O<sub>2</sub> saturation in all 4 cardiac chambers in an oximetry run is seen in

- (1) TOF
- (2) PAPVC
- (3) TAPVC
- (4) VSD

132. Cyanosis with continuous murmur- not a cause

- (1) Pulmonary AV fistula
- (2) Eisenmenger PDA
- (3) TOF pulmonary atresia
- (4) BT shunt

133. Snowman's Heart appearance in chest X-ray is seen in

- (1) TAPVC
- (2) D-TGA
- (3) Tricuspid atresia
- (4) Single ventricle

134. Crochetage-a notch in apex of R wave in inferior lead can be seen in

- (1) PDA
- (2) Coarctation of aorta
- (3) Bicuspid aortic valve
- (4) ASD

135. Which ASD is appropriate for device closure ?

- (1) Osteum Primum
- (2) Osteum secundum
- (3) Sinus venosus
- (4) Coronary sinus

136. Hemodynamic changes during pregnancy does not include

- (1) Increase Cardiac output
- (2) Increase peripheral vascular resistance
- (3) Increased Heart rate
- (4) Increased blood volume

137. Pregnancy is contraindicated in

- (1) Severe MR
- (2) Severe AR
- (3) Severe AS
- (4) Severe TR

138. Risk factors for Peri-partum cardiomyopathy are all except

- (1) White race
- (2) Increased age
- (3) Multiparity
- (4) Pre-eclampsia

139. Regarding hypertension during pregnancy, false is

- (1) HELLP syndrome can be a manifestation of Pre-eclampsia/eclampsia
- (2) Gestational hypertension is when hypertension is detected after 20 weeks of pregnancy
- (3) Chronic hypertension is defined as hypertension detected anytime during pregnancy
- (4) Gestational hypertension can progress to Pre-eclampsia/eclampsia in 25% cases

140. Regarding Oral Contraceptive Pills (OCP) in females with heart disease, false is

- (1) Increases risk of venous thrombo-embolism
- (2) Increases risk of hypertension, dyslipidemia and IHD
- (3) Increased risk in females with age >40 years
- (4) Progesterone only pills are equally risky

141. Hemodynamic alteration in hypothyroidism include

- (1) Increase SVR
- (2) Increase HR
- (3) Increase CO
- (4) Increase Blood volume

142. Regarding AF in hyperthyroidism, false is

- (1) Prevalence of AF can be as high as 20%
- (2) Can be the first symptom of hyperthyroidism
- (3) Beta blockers are drug of choice
- (4) Anticoagulation with VKA/DOAC is almost always indicated

143. True regarding Ticagrelor associated dyspnoea is all except

- (1) Can be seen in as many as 15% patients
- (2) Usually starts late after initiating Ticagrelor,
- (3) Usually self-limited
- (4) Adenosine induced

144. Vorapaxar is

- (1) Gp IIb/IIIa inhibitor
- (2) Factor Xa inhibitor
- (3) PAR-1 inhibitor
- (4) Direct thrombin inhibitor

145. Features of Heparin induced thrombocytopenia includes all except

- (1) Usually occur after 5-14 days of starting heparin
- (2) Venous thrombosis is more common than arterial thrombosis
- (3) Bivalirudin or Fondaparinux can be given as an alternative to Heparin
- (4) Platelet transfusion has a key role in management

146. Regarding Kawasaki disease, true all except

- (1) Most common in age > 5 years
- (2) Can be associated with fever, conjunctivitis, skin peeling and lymphadenopathy
- (3) Can cause coronary artery aneurysm as well as stenosis
- (4) Treatment in acute phase is Aspirin and IVIG

147. False statement regarding Atrial myxoma is

- (1) Usually pedunculated, attached to free wall of LA
- (2) Female preponderance
- (3) Commonly asymptomatic
- (4) Recurrence rate of 5-14%

148. ECG abnormality in Sub Arachnoid Haemorrhage (SAH) include all except

- (1) T wave inversion
- (2) QJ prolongation
- (3) AV blocks
- (4) Pathological Q waves

149. Cardiac and Renal involvement secondary to systemic disease is

- (1) Type I CRS
- (2) Type II CRS
- (3) Type IV CRS
- (4) Type V CRS

150. CIN can be prevented by all the following measures except

- (1) Pre-procedural hydration
- (2) Use of Iohexol over Iodixanol
- (3) Limiting the dose of contrast media
- (4) Trans radial access over transfemoral access

151. Valsalva manoeuvre false is

- (1) Phase I increase in BP
- (2) Phase II decrease in BP
- (3) Phase III increase in BP
- (4) Phase IV overshoot in BP

152. All of following are true about Carotid Sinus Hypersensitivity except

- (1) More frequent in females
- (2) Rarely seen in younger than 50 years of age
- (3) Baroreceptor sensitivity reduces with age
- (4) More commonly seen in patients with unexplained syncope

153. Target INR for a patient with metallic Mitral prosthesis will be

- (1) 1.5-2.0
- (2) 2.0-2.5
- (3) 2.5-3.5
- (4) 3.5-4.5

154. Direct Oral Anti Coagulants (DOAC) are contraindicated in

- (1) Non-valvular AF
- (2) Thromboprophylaxis in orthopedic surgery
- (3) Treatment of DVT
- (4) Anticoagulation in metallic heart valve

155. Initial reperfusion strategy of thrombolysis can be used over primary PCI in

- (1) Patient with high risk of Bleeding
- (2) Door to needle time >120 minute
- (3) Presence of Cardiogenic shock
- (4) Patient presented after 12 hours of symptoms

156. Regarding heart failure in women, all are true except-
- (1) Diastolic dysfunction is less common
  - (2) More in elderly
  - (3) More commonly misdiagnosed
  - (4) Presents with more disability compare to males with equivalent LVEF
157. Peculiarity of CAD in Indian subcontinent is
- (1) Largely subclinical disease
  - (2) Symptom of CHD arises 5-10 years earlier than in western countries
  - (3) Predominantly driven by conventional dyslipidaemia
  - (4) Prevalence is more in rural area than urban areas
158. Not a positive risk factor for 1st episode of MI in INTERHEART study :
- (1) Mental stress
  - (2) Tobacco
  - (3) Physical inactivity
  - (4) Moderate alcohol intake
159. Sensitivity of a test is high if it detects more
- (1) True positive
  - (2) False positive
  - (3) True negative
  - (4) False negative

160. Regarding hs-CRP, pick false statement :
- (1) A strong risk factor for atherosclerotic cardiovascular disease
  - (2) A value  $> 8-10$  mg/litre reflects high chances of CAD
  - (3) Statins, particularly rosuvastatin has shown to reduce hs-CRP
  - (4) Marker of high risk for acute coronary syndrome
161. DASH diet includes all except
- (1) More fruits and vegetable
  - (2) More beans and nuts
  - (3) Fewer carbohydrates
  - (4) More dairy products
162. High intensity statin therapy is
- (1) Atorvastatin 20 mg
  - (2) Simvastatin 20 mg
  - (3) Rosuvastatin 20 mg
  - (4) Pravastatin 20 mg
163. In NSTEMI initial antiplatelet strategy in emergency department should not include
- (1) Non-enteric coated chewable Aspirin 162-325 mg
  - (2) Clopidogrel 300 mg
  - (3) Ticagrelor 180 mg
  - (4) Prasugrel 60 mg

164. In a patient of acute aortic dissection, CT aortography revealed dissection flap limited to ascending aorta. This can be classified as

- (1) DeBakey Type I
- (2) DeBakey Type II
- (3) DeBakey Type III
- (4) Stanford Type B

165. Rest and nocturnal pain in a case of PVD classify the patient to which Fontaine class ?

- (1) I
- (2) IIb
- (3) III
- (4) IV

166. Provocation of Brugada syndrome is seen by all except-

- (1) Flecainide
- (2) Ajmaline
- (3) Procainamide
- (4) Amiodarone

167. Regarding CYP2C19 mutation in context with clopidogrel resistance. Choose the false statement :

- (1) Loss of function mutation
- (2) Associated with decrease responsiveness to Prasugrel and Ticagrelor also
- (3) Associated with increased risk of adverse clinical events
- (4) Co-administration with Omeprazole, another CYP2C19 inhibitor, has no clinical significance

168. All the following are linked with potassium Channel except-

- (1) LQT-1
- (2) SQT-1
- (3) CPVT-1
- (4) LQT-2

169. LQTS following are true except-

- (1) LQT3 is provoked by exercise
- (2) Competitive sports contra-indicated
- (3) Stress can increase QT
- (4) Can cause sudden death

170. Brugada Syndrome is-

- (1) X recessive
- (2) Autosomal dominant
- (3) X Dominant
- (4) Autosomal recessive

171. Most cases of familial DCMP are

- (1) Autosomal Recessive
- (2) Autosomal dominant
- (3) X linked Recessive
- (4) X linked Dominant

172. Herceptin (Trastuzumab) cardiotoxicity is mediated by

- (1) ERB B2
- (2) PPAR a
- (3) BMPR 2
- (4) Dopamine 2

173. Regarding Down syndrome false statement is

- (1) Trisomy 21
- (2) Mutation in NOTCH-1
- (3) Most common cardiac abnormality is AV canal defect
- (4) More early and more severe Pulmonary vascular disease

174. Regarding Prothrombin gene mutation false is

- (1) Most common thrombophilic disorder
- (2) Increase level of Prothrombin
- (3) Risk for venous thrombosis
- (4) Prevalence is lower in Asian in comparison to white population

175. Regarding fascicular VT, all are true except

- (1) Arises from left fascicle
- (2) Shows entrainment
- (3) Adenosine responsive
- (4) RF Ablation is effective

176. Choose the wrong combination :

- (1) ROCKET-AF - Rivaroxaban
- (2) ARISTOTLE - Acenocoumarol (Nicoumalone)
- (3) RE-LY - Dabigatran
- (4) PROTECT-AF - LAA closure

177. Most common target for RF ablation of atrial fibrillation include

- (1) Pulmonary veins
- (2) Tricuspid annulus
- (3) Inter-atrial septum
- (4) Isthmus

178. Epidemiology of Sudden Cardiac Death (SCD), false is

- (1) Dual peaks- 1st year of life and 45-75 years
- (2) More common in females, with a female to male ratio 2:1
- (3) More common in blacks than whites
- (4) Heredity can play an important role

179. FAME trial was related with

- (1) IVUS
- (2) FFR
- (3) OCT
- (4) LM intervention

180. Risk factor for aortic aneurysm include all except

- (1) Marfan syndrome
- (2) Bicuspid aortic valve
- (3) Hyperhomocysteinemia
- (4) Hypertension

