

PROVISIONAL ANSWER KEY

Question 19/2025/OL

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Department Health Services

Question1:-Which of the following statement/statements regarding the magnitude of the potential recorded by an ECG electrode at any site is/are false ?

- A. Directly proportional to the average rate of change of intracellular potential as determined by the action potential shape.
- B. Directly proportional to the size of the wavefront.
- C. Indirectly proportional to the cosine of the angle between the direction of activation spread and a line drawn from the site of activation to the recording site.
- D. Directly proportional to the square of the distance from the activation front to the recording site.

A:-A, B

B:-C, D

C:-A, C

D:-B, D

Correct Answer:- Option-B

Question2:-Which of the statement/statements regarding Wilson Central Terminal (WCT) is/are true ?

- A. The negative input is the mean value of the potentials recorded at each of the three limb electrodes.
- B. The positive input is the mean value of the potentials recorded at each of the three limb electrodes.
- C. $WCT = \text{mean of the potentials recorded at left arm, left leg and right leg.}$
- D. $WCT = \text{mean of the potentials recorded at left arm, left leg and right arm.}$

A:-A, C

B:-B, D

C:-A, D

D:-B, C

Correct Answer:- Option-C

Question3:-Which of the statement/statements regarding the augmented limb lead aVR is/are false ?

- A. In aVR lead, the positive input is right arm and negative input is Wilson central terminal.
- B. In aVR lead, the positive input is right arm and negative input is left arm plus left leg.
- C. In aVR lead, the negative input is right arm and positive input is Wilson central terminal.

D. In aVR lead, the negative input is right arm and positive input is left arm plus left leg.

A:-A, B, C

B:-B, C, D

C:-A, B, D

D:-A, C, D

Correct Answer:- Option-D

Question4:-Which of the statement/statements regarding the PR interval is/are true ?

A. Time taken by the wavefront to reach from sinus node to AV node.

B. Time taken by the wavefront to reach from sinus node to ventricular epicardium.

C. Time taken by the wavefront to reach from sinus node to ventricular endocardium.

D. Depicts the duration of atrioventricular conduction.

A:-B, D

B:-A, D

C:-C, D

D:-None of the above

Correct Answer:- Option-A

Question5:-Which of the statement/statements regarding the U wave is/are false ?

A. U wave is due to delayed depolarization in areas of the ventricle that undergo late mechanical relaxation.

B. U wave is usually <0.1-0.15V in amplitude.

C. U wave is generally largest in leads V4, V5.

D. U wave is low amplitude wave.

A:-A, B, C

B:-A, C, D

C:-D

D:-None of the above

Correct Answer:- Option-A

Question6:-Which of the statement regarding the EPSILON wave is TRUE ?

A:-It is high amplitude, low frequency spike/spikes

B:-It is high amplitude, high frequency spike/spikes

C:-It is low amplitude, low frequency spike/spikes

D:-It is low amplitude, high frequency spike/spikes

Correct Answer:- Option-D

Question7:-Which of the following statements are true regarding cornell voltage duration measurement for diagnosing left ventricular hypertrophy ?

A. QRS duration x cornell voltage > 2346 mm.sec.

B. QRS duration x cornell voltage > 2436 mm.sec.

- C. QRS duration x sum of voltages in all leads > 1742 mm.sec.
- D. QRS duration x sum of voltages in all leads > 1724 mm.sec.

A:-A, D

B:-A, C

C:-B, C

D:-B, D

Correct Answer:- Option-C

Question8:-Which of the following is not a criteria for right ventricular hypertrophy ?

A:-Tall R in V1 > 0.6mV

B:-Small R in V5-V6 < 0.3mV

C:-Increased R/S in V6 > 1

D:-R peak V1 > 0.035msec

Correct Answer:- Option-C

Question9:-Which of the following conditions can cause Tall R wave in leads V1 and V2 ?

A. Normal variant.

B. Chest lead misplacement.

C. Dilated cardiomyopathy.

D. Hypertrophic cardiomyopathy.

A:-A, B, C

B:-A, B, D

C:-B, C, D

D:-A, B, C, D

Correct Answer:- Option-B

Question10:-Which of the following can cause ST segment elevation ?

A. Acute pericarditis

B. Hypokalemia

C. Hypothermia

D. Immediately after cardioversion

A:-A, B, C

B:-A, C, D

C:-B, C, D

D:-None

Correct Answer:- Option-B

Question11:-What is the ink used for taking ECG ?

A:-Indian Ink

B:-Chinese ink

C:-Mix of Indian and Chinese ink

D:-None

Correct Answer:- Option-D

Question12:-In Einthoven's triangle which of the following is true ?

A:-I+II=III

B:-I+III=II

C:-II+III=I

D:-All are true

Correct Answer:- Option-B

Question13:-Total body oxygen uptake during exercise ($\dot{V}O_2$) is defined by

A:- $\dot{V}O_2 = \text{Heart Rate} \times \text{Systolic Blood Pressure}$

B:- $\dot{V}O_2 = \text{Cardiac Output} \times \text{Systolic Blood Pressure}$

C:- $\dot{V}O_2 = \text{Cardiac Output} \times \text{Arteriovenous Oxygen difference}$

D:- $\dot{V}O_2 = \text{Cardiac Output} \times \text{Heart Rate}$

Correct Answer:- Option-C

Question14:-Which of the following is not a contraindication for exercise stress test ?

A:-Acute myocardial infarction

B:-Congenital heart block

C:-Decompensated heart failure

D:-Symptomatic severe aortic stenosis

Correct Answer:- Option-B

Question15:-Which of the following is not true about six minute walk test ?

A:-Useful when standard treadmill test not available

B:-Useful in objective determination of myocardial ischemia

C:-Useful in follow up of pulmonary hypertension patient

D:-Distance walked is the primary outcome of the test

Correct Answer:- Option-B

Question16:-Cardiopulmonary exercise testing is useful in

A:-Evaluation of exercise capacity in patients with heart failure

B:-Estimation of prognosis of heart failure

C:-Assessing need for heart transplantation

D:-All of the above

Correct Answer:- Option-D

Question17:-Which of the following is not an indication for terminating exercise test ?

A:-ST depression $> 1\text{mm}$ in multiple leads

B:-Exercise induced hypotension

C:-Sustained ventricular tachycardia

D:-Moderate to severe angina

Correct Answer:- Option-A

Question18:-Choose correct option regarding exercise induced ST depression.

i) Exercise induced ST depression does not localize ischemia to precise region.

ii) ST depression limited to recovery is equally significant.

iii) Horizontal or downsloping ST depression > 1 mm in at least 3 leads is the criteria for positive test.

iv) Isolated inferior ST depression can be false positive.

A:-i, iv are correct

B:-i, iii, iv are correct

C:-i, ii, iv are correct

D:-ii, iii, iv are correct

Correct Answer:- Option-C

Question19:-Which is true about BP response during exercise ?

A:-Exercise induced hypotension is specific for multivessel CAD

B:-Normal rise in BP is approximately 20 mmHg per MET increase

C:-Systolic and diastolic BP rises steadily during exercise

D:-Pseudo-exercise induced hypotension occurs in anxiety

Correct Answer:- Option-D

Question20:-Which of the following does not interfere with interpretation of exercise ECG ?

A:-Right Bundle Branch Block

B:-Digitalis

C:-Left Bundle Branch Block

D:-Pacemaker rhythm

Correct Answer:- Option-A

Question21:-Which treadmill protocol is useful in peripheral artery disease ?

A:-Bruce protocol

B:-Modified Bruce protocol

C:-Naughton protocol

D:-Gardner protocol

Correct Answer:- Option-D

Question22:-Which of the following options is correct regarding exercise induced angina during TMT ?

i) Predicts adverse prognosis.

ii) Not significant in the absence of ST change.

iii) Dyspnea without angina is not significant.

iv) Predicts severity of CAD.

A:-i, ii, iv are correct

B:-i and iv are correct

C:-i, iii, iv are correct

D:-i and iii are correct

Correct Answer:- Option-B

Question23:-ST deviation during exercise is measured

A:-60-80 milliseconds after J point

B:-At the J point

C:-40 milliseconds after J point

D:-No relation to J point

Correct Answer:- Option-A

Question24:-Exercise ECG testing is not useful in which of the following situation ?

A:-Predicting risk of sudden cardiac death in HCM

B:-Risk stratification of ventricular preexcitation

C:-Assessing rhythm control of atrial fibrillation

D:-Evaluation of exercise induced ventricular arrhythmias

Correct Answer:- Option-C

Question25:-The fraction of time that the transducer is emitting ultrasound which is a unitless number between 0 and 1 is called

A:-Dead time

B:-Duty factor

C:-Half layer value

D:-Period

Correct Answer:- Option-B

Question26:-During contrast echo cardiography, agitated saline was injected into left upper extremity vein resulting in opacification of dilated coronary sinus before draining into right atrium. Most likely diagnosis is

A:-Large Ostium Secundum ASD

B:-Pulmonary AV Malformation

C:-Persistent left superior vena cava

D:-None of the above

Correct Answer:- Option-C

Question27:-Identify the false statement

A:-Systolic dysfunction is associated with shortening of isovolumetric relaxation time

B:-Systolic dysfunction is associated with shortening of ejection time

C:-Diastolic dysfunction leads to lengthening of isovolumic relaxation time

D:-Both systolic and diastolic dysfunction will result in increased myocardial performance index

Correct Answer:- Option-A

Question28:-Echocardiographic criteria for severe aortic regurgitation includes all except

A:-Jet area >60% of LVOT area

B:-LV end systolic dimension >45mm

C:-Pressure half time >250ms

D:-Regurgitant volume >60mL

Correct Answer:- Option-C

Question29:-Viable myocardium is identified during stress echocardiography by

A:-Rest-Normal; Stress-hyperkinetic

B:-Rest-Hypokinetic; Stress-Akinetic

C:-Rest-Normal; Stress-Hypokinetic

D:-Rest-Hypokinetic; Stress-Normal

Correct Answer:- Option-D

Question30:-What is the cutoff value for indexed orifice area of aortic prostheses to diagnose Severe patient prosthesis mismatch ?

A:- $\leq 0.85\text{cm}^2/\text{m}^2$

B:- $\leq 0.75\text{cm}^2/\text{m}^2$

C:- $\leq 0.65\text{cm}^2/\text{m}^2$

D:- $\leq 0.55\text{cm}^2/\text{m}^2$

Correct Answer:- Option-C

Question31:-Correct statement about echocardiographic evaluation of suspected infective endocarditis is

A:-Vegetations of the mitral valve appears on the ventricular aspect of leaflets

B:-Sensitivity of transthoracic echocardiography for detection of vegetations is <70%

C:-After successful antibiotic therapy, previously detected vegetations should not be visible by echocardiography

D:-Transthoracic and transesophageal echocardiography have similar sensitivities for detection of myocardial abscess formation

Correct Answer:- Option-B

Question32:-Correct statement concerning echocardiographic findings of hypertrophic cardiomyopathy (HCM) is

A:-Septal thickness is always abnormal in HCM

B:-Diastolic notching of the aortic valve on M-mode is typical in patients with outflow tract obstruction

C:-Presence of systolic anterior motion of mitral valve is consistent with dynamic outflow tract obstruction

D:-Myocardial relaxation velocities measured by tissue doppler imaging are typically normal

Correct Answer:- Option-C

Question33:-Identify the correct physiologic finding in the echocardiography of a pregnant patient

A:-Typically left atrium increases in size by 5-10% and left ventricle by 10-15%

B:-Reduced velocity time integral of aortic and pulmonary flow

C:-Altered mitral valve coaptation leading to mitral valve prolapse and regurgitation

D:-All the above

Correct Answer:- Option-C

Question34:-The expected range of doppler velocity index for aortic prostheses is

A:-0.3-0.5

B:-0.5-1

C:-0.3-0.7

D:-<0.3

Correct Answer:- Option-A

Question35:-The increase or decrease in frequency due to relative motion between the transducer and the target is referred to as

A:-Doppler phenomenon

B:-Doppler principle

C:-Doppler shift

D:-Doppler effect

Correct Answer:- Option-C

Question36:-Which of the following statements is FALSE regarding Doppler ?

A:-Misalignment of the interrogating beam will lead to underestimation of velocity/gradients

B:-The angle correction depends on the cosine of angle θ

C:-If a jet with gradient of 100 mm Hg is recorded at an incident angle of 30° , the calculated gradient will be approximately 75 mm Hg

D:-Misalignment of the interrogating beam will lead to overestimation of true velocity/gradients

Correct Answer:- Option-D

Question37:-In which of the following conditions, the aortic velocity is *lower* compared to pulmonary velocity ?

A:-Aortic stenosis

B:-Aortic regurgitation

C:-Atrial septal defect

D:-Patent ductus arteriosus

Correct Answer:- Option-C

Question38:-Which of the following statements is TRUE regarding continuous wave Doppler imaging ?

A:-Aliasing does not occur

B:-Very high velocities cannot be accurately resolved

C:-It is possible to know the origin of signal along the sample beam

D:-It cannot be performed using the same probe as for pulse wave Doppler imaging

Correct Answer:- Option-A

Question39:-Which among the options is the ideal transducer frequency for echocardiography in a newborn baby ?

A:-3MHz

B:-5MHz

C:-8MHz

D:-12MHz

Correct Answer:- Option-D

Question40:-Which among the following is NOT a Doppler artifact ?

A:-Mirror imaging

B:-Ghosting

C:-Billiard ball effect

D:-Shadowing

Correct Answer:- Option-C

Question41:-The flow in which among the following structures is demonstrated by red colour in a suprasternal view ?

A:-Superior vena cava

B:-Ascending aorta

C:-Persistent left superior vena cava

D:-Descending aorta

Correct Answer:- Option-B

Question42:-Which among the following cannot be calculated using principles of tissue Doppler imaging ?

A:-Strain rate

B:-E/e¹ ratio

C:-Valve area

D:-Longitudinal strain

Correct Answer:- Option-C

Question43:-Which among the following transesophageal views resemble the parasternal long axis view on transthoracic imaging ?

- A:-Mid esophageal view 0 degrees
- B:-Mid esophageal view 45 degrees
- C:-Mid esophageal view 90 degrees
- D:-Mid esophageal view 120 degrees

Correct Answer:- Option-D

Question44:-Which of the following statements is FALSE regarding care and maintenance of the Transesophageal echocardiography probe ?

- A:-Probe should be immediately wiped down after removal from the patient to remove all superficial material with an enzymatic product
- B:-Electrical leakage testing has to be performed before each use
- C:-Use of a cotton cloth is recommended for drying
- D:-Manual or automated high-level disinfection has to be performed with documentation

Correct Answer:- Option-C

Question45:-Among the following, the contraindication for performance of stress echocardiography is

- A:-Patient complaining of acute chest pain
- B:-Patient with aortic stenosis with mean gradient of 35 mm Hg
- C:-Patient who has undergone aortic valve replacement
- D:-Patient with hypertension controlled on drugs

Correct Answer:- Option-A

Question46:-Which among the following measurements is NOT an application of the Bernoulli equation ?

- A:-Maximum gradient in Aortic stenosis
- B:-Right ventricular systolic pressure estimation
- C:-Pulmonary artery diastolic pressure estimation
- D:-Estimation of aortic valve area

Correct Answer:- Option-D

Question47:-Which of the following events is abnormal if picked up during a Holter study ?

- A:-Type I second degree AV block
- B:-Type II second degree AV block
- C:-Sinoatrial exit block
- D:-Wandering atrial pacemaker

Correct Answer:- Option-B

Question48:-Holter study of which among the following patients is most likely to be normal ?

- A:-Patient with occasional palpitations
- B:-Hypertrophic cardiomyopathy
- C:-Pacemaker malfunction
- D:-Patient with unexplained recurrent syncope

Correct Answer:- Option-A

Question49:-Choose the option that records patients electrocardiogram for the longest period

- A:-Holter recording
- B:-Implantable loop recorder
- C:-Event recorder
- D:-Direct cardiac mapping

Correct Answer:- Option-B

Question50:-Ambulatory ECG monitoring is not indicated in which among the following scenarios ?

- A:-History of unexplained syncope
- B:-Patient with recurrent palpitations
- C:-Patients with atrial fibrillation on medications
- D:-Post myocardial infarction with normal LV function

Correct Answer:- Option-D

Question51:-Which is the S.I. unit for effective dose of radiation ?

- A:-Gray (Gy)
- B:-Sievert (Sv)
- C:-Roentgen (R)
- D:-RAD

Correct Answer:- Option-B

Question52:-Which of the following is not true about the "LAO caudal" view ?

- A:-It is called a "spider view"
- B:-Best view to demonstrate lesions in the LMCA and its bifurcation
- C:-There is significant foreshortening of LMCA and LAD
- D:-Good separation of vessels is seen in vertically displaced hearts

Correct Answer:- Option-D

Question53:-Which of the following is false regarding the radiation safety of the staff in the catheterization laboratory ?

- A:-Scattered radiation is the main source of radiation to staff
- B:-More use of the left lateral view will help to reduce the operator radiation

C:-Most staff receive radiation less than one mSv/year only

D:-Radiation received by the staff should be monitored by badges

Correct Answer:- Option-B

Question54:-Which of the following is an Iso-Osmolar contrast agent ?

A:-Iothalamic acid

B:-Iopamidol

C:-Iohexol

D:-Iodixanol

Correct Answer:- Option-D

Question55:-Which of the following is a source of hazard for both the staff and the patient in the Catheterisation Laboratory ?

A:-From pharmaceutical agents

B:-Fall from table

C:-Ergonomic injury

D:-Ionizing radiation

Correct Answer:- Option-D

Question56:-All the following are advised for infection prevention in the Cath-lab except:

A:-Wearing glasses or goggles while removing the sheath

B:-Hepatitis B vaccination of staff

C:-Use of prophylactic antibiotics by the staff

D:-Use of manifolds with closed drainage system

Correct Answer:- Option-C

Question57:-What is the phenomenon of dissipation of energy oscillation of a pressure measurement system due to friction is called

A:-Overshooting

B:-Damping

C:-Frequency Response

D:-Natural frequency

Correct Answer:- Option-B

Question58:-Which is not true about the "zeroing" of the transducer ?

A:-It is the process of calibrating transducer against atmospheric pressure

B:-Air bubble in the line can cause false zero levels

C:-The signal can drift from the initial zero calibration over time

D:-For zeroing transducer is kept at the level of sternum

Correct Answer:- Option-D

Question59:-Which of the following is true regarding intra-aortic balloon pump

(IABP)?

A:-Inflation occurs during systole

B:-CO₂ is the commonly used gas for balloon inflation and deflation

C:-Commonly inserted through radical access

D:-Needs a stable cardiac rhythm for its function

Correct Answer:- Option-D

Question60:-Which of the following statements is/are true regarding normal cardiovascular haemodynamics ?

(i) 'A' wave is larger than 'V' wave in right atrium

(ii) Mean right atrial pressure is larger than mean left atrial pressure

(iii) Mean systemic vascular resistance is 70 dyne-sec.cm⁻⁵

A:-All are true

B:-Only (i) and (ii) are true

C:-Only (i) is true

D:-All are false

Correct Answer:- Option-B

Question61:-Which of the following is false regarding drug allergies in Catheterisation Laboratory ?

A:-Low osmolar or iso-osmolar contrast media have lower incidence of allergic reaction

B:-Re-testing with contrast agents is of no value in predicting allergic reaction

C:-The incidence of protamine allergy is less among patients on NPH Insulin

D:-Patients with prior allergic reactions to contrast media should be pre-medicated with prednisolone and diphenhydramine

Correct Answer:- Option-C

Question62:-Which of the following is not true regarding patient preparation before cardiac catheterisation ?

A:-All patients should have got checked for identity and known allergies

B:-All patients should have a restraint to prevent fall from catheterisation table

C:-All patients should have a secure intravenous line

D:-All patients should have ECG monitoring

Correct Answer:- Option-B

Question63:-Which of the following imaging modalities can be co-registered with fluoroscopy ?

A:-Multidetector computer tomography (MDCT)

B:-Magnetic resonance imaging (MRI)

C:-Optical coherence tomography

D:-All of the above

Correct Answer:- Option-D

Question64:-Which of the following is not true for Digital Subtraction Angiography (DSA) ?

A:-First image in a series of images is used as a mask

B:-Quantum noise is not removed by the subtraction process

C:-The dose needed for a single DSA frame is approximately double that of a Cine frame

D:-The DSA frame should be acquired at the lowest possible frame rate

Correct Answer:- Option-C

Question65:-The standard rate of injection for left ventriculography with a power injector is

A:-10-20 mL/s

B:-3-8 mL/s

C:-40-60 mL/s

D:-None of the above

Correct Answer:- Option-A

Question66:-The concentration of alcohol used for alcohol septal ablation is

A:-95%-96%

B:-90%-92%

C:-100%

D:-92%-94%

Correct Answer:- Option-A

Question67:-The following about Phlebostatic axis in supine position for catheterisation studies in catheterisation lab is true except

A:-It is located in the 4th left intercostal space

B:-It is located in mid way between the anterior and posterior border of the chest wall

C:-It is located in anterior axillary line

D:-It is always used for positioning the transducers

Correct Answer:- Option-C

Question68:-5 F sized catheter has an outer diameter of

A:-1.67 mm

B:-16.7 mm

C:-0.167 mm

D:-1.55 mm

Correct Answer:- Option-A

Question69:-The Balloon sizing based on Lau-Hung empiric formula for BMV with Inoue balloon is

A:-Height \times 10-10

B:-Height $\times 0.1 + 10$

C:-Height $+ 10/10$

D:-Height $- 10/10$

Correct Answer:- Option-B

Question70:-The following balloons are used for Balloon mitral valvotomy EXCEPT

A:-Inoue

B:-Accura

C:-Joseph's

D:-IVL balloon

Correct Answer:- Option-D

Question71:-The following is not an angiographic catheter

A:-Gensini

B:-Cournand

C:-NIH

D:-Eppendorf

Correct Answer:- Option-B

Question72:-The following are used for functional assessment of a coronary lesion EXCEPT

A:-Fractional flow reserve

B:-Instantaneous Wave free ratio

C:-Resting full cycle ratio

D:-Optical Coherence Tomography

Correct Answer:- Option-A

Question73:-The following is most useful tool for removing intraluminal calcium

A:-IVL (Intravascular lithotripsy)

B:-Rotablation

C:-Orbital Atherectomy

D:-All of the above

Correct Answer:- Option-D

Question74:-The hemodynamics in a patient with shortness of breath is as follows
RA a 6 V7 mean 6 RV 72/5
PCWP a18 v 25 mean 22 PA 70/30 LV 120/8 Ao 110/40
er diagnosis is

A:-PAH

B:-VSD with PAH

C:-MS AR PAH

D:-LV failure with PAH

Correct Answer:- Option-C

Question75:-The following are CTO wires except

A:-Conquest Pro 12

B:-Miracle 12

C:-Progress 80

D:-FIELDER FC

Correct Answer:- Option-D

Question76:-The following are microcathters except

A:-Sting ray

B:-Corsair

C:-FinecrossMG

D:-Caravel

Correct Answer:- Option-A

Question77:-In the "MLD MAX" algorithm in OCT study protocol MLD stands for

A:-Pre stenting OCT assessment

B:-Post stent OCT assessment

C:-Minimal lumen diameter in OCT

D:-None of the above

Correct Answer:- Option-A

Question78:-In FFR testing the following agents are used as microvascular vasodilators except

A:-Adenosine

B:-Regadeonson

C:-Papverine

D:-Nitroglcerine

Correct Answer:- Option-D

Question79:-The pressure setting in pressure injector for LV angiogram is

A:-300-450 psi

B:-900-1200 psi

C:-700-1000 psi

D:-600-900 psi

Correct Answer:- Option-C

Question80:-The ideal balloon size for performing balloon pulmonary valvotomy in Pulmonary valve stenosis with annular diameter 18 mm is

A:-21.5 to 23.4 mm

B:-16 to 18 mm

C:-25 to 27 mm

D:-18 to 20 mm

Correct Answer:- Option-A

Question81:-The first letter in the standardized code for pacemaker nomenclature given by North American Society of Pacing and Electrophysiology (NASPE) and British Pacing and Electrophysiology Group (BPEG), also referred to as NBG code indicates

A:-Chamber sensed

B:-Chamber paced

C:-Response

D:-Manufacturer

Correct Answer:- Option-B

Question82:-The most common battery used in permanent pacemaker

A:-Lithium-iodine

B:-Silver oxide

C:-Cadmium

D:-Nickel-Iron

Correct Answer:- Option-A

Question83:-In radio frequency ablation of AV Nodal Re-entrant Tachycardia (AVNRT), what is ablated ?

A:-Proximal AV Node

B:-Distal part of His Bundle

C:-Fast pathway

D:-Slow pathway

Correct Answer:- Option-D

Question84:-Early good response to ablation of AV Nodal Re-entrant Tachycardia (AVNRT) is indicated by appearance of

A:-Jacksonian potentials

B:-Idioventricular rhythm

C:-Slow junctional rhythm

D:-Fast junctional rhythm

Correct Answer:- Option-C

Question85:-The site of ablation of Classical atrial flutter is

A:-Cavo-tricuspid isthmus

B:-Crista terminalis

C:-Os of coronary sinus

D:-Trabeculae carneae

Correct Answer:- Option-A

Question86:-AV dissociation is most commonly a feature of

- A:-AV nodal re-entrant tachycardia
- B:-Atrio-ventricular re-entrant tachycardia
- C:-Ectopic atrial tachycardia
- D:-Ventricular tachycardia

Correct Answer:- Option-D

Question87:-The drug of choice to revert AV Nodal Re-entrant Tachycardia (AVNRT) is

- A:-Lignocaine
- B:-Atropine
- C:-Adenosine
- D:-Amiodarone

Correct Answer:- Option-C

Question88:-The electrocardiogram (ECG) of a patient with an accessory atrio-ventricular (AV) pathway will show

- A:-Left ventricular hypertrophy
- B:-Delta wave
- C:-ST segment depression
- D:-U wave

Correct Answer:- Option-B

Question89:-The most important complication of Brugada syndrome

- A:-Sick sinus syndrome
- B:-Ventricular tachycardia
- C:-Junctional rhythm
- D:-Atrial fibrillation

Correct Answer:- Option-B

Question90:-Long QT syndrome is a risk factor for the development of

- A:-Hypertrophic cardiomyopathy
- B:-Dilated cardiomyopathy
- C:-Ventricular tachycardia
- D:-Sick sinus syndrome

Correct Answer:- Option-C

Question91:-What is the primary goal of cardiopulmonary resuscitation ?

- A:-Restore sinus rhythm immediately
- B:-Maintain cerebral and coronary perfusion

C:-Improve pulmonary ventilation

D:-Reduce lactic acid levels

Correct Answer:- Option-B

Question92:-What is the effect of epinephrine administration during cardiac arrest ?

A:-Reduce myocardial oxygen consumption

B:-Increase coronary and cerebral perfusion pressure

C:-Directly restores sinus rhythm

D:-Decreases peripheral vascular resistance

Correct Answer:- Option-B

Question93:-In cardiogenic shock, hypotension is primarily caused by

A:-Decreased total peripheral resistance

B:-Reduced cardiac contractility

C:-Increased venous return

D:-Excessive blood loss

Correct Answer:- Option-B

Question94:-Which of the following systems is activated first during acute hypotension ?

A:-Renin angiotensin- aldosterone system (RAAS)

B:-Sympathetic nervous system

C:-ADH secretion

D:-Natriuretic peptide release

Correct Answer:- Option-B

Question95:-What is the classic triad of clinical findings in cardiac tamponade, known as Beck's triad ?

A:-Hypotension, muffled heart sounds, jugular venous distension

B:-Hypertension, clear heart sounds, peripheral edema

C:-Bradycardia, loud heart sounds, pulmonary edema

D:-Tachycardia, normal heart sounds, ascites

Correct Answer:- Option-A

Question96:-The treatment of cardiac tamponade due to coronary perforation is

A:-Intravenous diuretics

B:-Pericardiocentesis

C:-Beta-blockers

D:-Anticoagulation therapy

Correct Answer:- Option-B

Question97:-Which of the following is the First-line treatment of anaphylaxis ?

A:-Antihistamines

B:-Corticosteroids

C:-Epinephrine

D:-Beta-blockers

Correct Answer:- Option-C

Question98:-Which of the following medication is primarily used to counteract severe bradycardia during cardiac catheterization procedure ?

A:-Epinephrine

B:-Atropine

C:-Adenosine

D:-Amiodarone

Correct Answer:- Option-B

Question99:-All are indications for IABP insertion in acute STEMI except ?

A:-Severe aortic regurgitation

B:-Angina refractory to medications

C:-As a support to perform coronary intervention in a hemodynamically unstable patient

D:-None of the above

Correct Answer:- Option-A

Question100:-Which factor is most critical in maintaining perfusion pressure during Cardio Pulmonary Resuscitation (CPR) for cardiac arrest ?

A:-Diastolic aortic pressure

B:-Systolic aortic pressure

C:-Left ventricular end systolic volume

D:-Right atrial pressure

Correct Answer:- Option-A