

PAPER C PRE-PROFF KGMC

1. Expiratory muscles contract at the time of

- A. Deep inspiration
- B. Normal inspiration and Expiration
- C. Forceful expiration
- D. Normal expiration
- E. Slow expiration

Ans: C

2. Inflammation of the lung covering causing severe chest pain is

- A. Emphysema
- B. Pleurisy
- C. Asphyxia
- D. Hypoxia
- E. Pneumonia

3. The impulse for voluntary muscles for forceful breathing starts in

- A. Medulla (Pons)
- B. Vagus nerve
- C. Cerebral hemispheres
- D. Spinal cord
- E. Cerebrospinal fluids

4. Fick's law of diffusion is related to

- A. Diffusion and Surface area
- B. Diffusion and membrane potential
- C. Diffusion and water content
- D. Diffusion and pore diameter.
- E. Surface area and membrane potential

5. The main respiratory control neurons

- A. Send out regular bursts of impulses to expiratory muscles during quiet respiration
- B. Are unaffected by stimulation of pain receptors
- C. Are located in the pons
- D. Send out regular bursts of impulses to inspiratory muscles during quiet respiration
- E. Are unaffected by impulses from the cerebral cortex

6. With respect to dead space

- A. Dead space volume is equal to the person's weight in kg
- B. For a constant minute ventilation, alveolar ventilation is decreased as respiratory rate increases
- C. Anatomic dead space is less than physiological dead space in healthy persons
- D. Physiological dead space is measured by analysis of single breath nitrogen curves
- E. Total dead space = physiological space + anatomic dead space

7. Substances synthesised by all of the following except

- A. Arachidonic acid
- B. Histamine

- C. Kallikrein
 - D. Angiotensin I
 - E. Surfactant
8. Pulmonary compliance
- A. Is decreased in emphysema
 - B. Is defined as the change in pressure per unit change in volume
 - C. Compliance is slightly greater when measured during deflation than when measured during inflation
 - D. Is increased by pulmonary fibrosis
 - E. Is independent of lung volume
9. Pulmonary vascular resistance
- A. Increases as venous pressure rises
 - B. Is increased at both high and low lung volumes
 - C. Is decreased by histamine
 - D. Increases with recruitment
 - E. Is increased by muscular pulmonary arterioles which regulate flow to various regions of the lungs
10. When walking up a stair, the increase in respiratory rate is due to
- A. Decreased pO_2
 - B. Increased CO_2
 - C. Increased pH
 - D. Increased pH CSF
 - E. increased blood flow
11. which of the following causes increased pulmonary vascular resistance
- A. high altitude
 - B. forced expiration
 - C. standing
 - D. in sleeping
 - E. in exercise
12. carotid body stimulation occurs with
- A. decreased BP
 - B. decreased pO_2
 - C. increased pO_2
 - D. increased pH
 - E. increased BP
13. exposure to altitude
- A. shifts the O_2 -Hb dissociation curve to the right due to alkalosis
 - B. is associated with an increase in RBC_{2,3}DPG
 - C. is associated with a decrease in $p50$
 - D. is associated with a respiratory acidosis
 - E. has no effect on EPO secretion
- 14- A 60-year-old man presented to the cardiology OPD with left sided heart failure. His echocardiography report showed mitral stenosis. This condition markedly
- A. Decreases pulmonary venous pressure
 - B. Decreases left atrial pressure
 - C. Decreases systemic venous pressure
 - D. Increases pulmonary venous pressure

- E. Increases systemic venous pressure
15. Columnar cells with numerous microvilli that act as sensory receptors in the respiratory system are called
- Mucous cells
 - goblet cells
 - Brush cells
 - Basal cells
 - Granule cells
16. Asphyxia due to insufficiency of oxygen in the inspired air e.g. in deep well is an example of:
- Environmental asphyxia
 - iatrogenic asphyxia
 - Mechanical asphyxia
 - Pathological asphyxia
 - Toxic asphyxia
17. With regards to pulmonary gas exchange
- Transfer of nitrous oxide is perfusion limited
 - Transfer of oxygen is typically diffusion limited
 - At altitude the profound systemic hypoxaemia favours oxygen diffusion
 - The diffusion rate for CO₂ is double that of oxygen
 - Diffusion is inversely proportional to the partial pressure gradient
18. With regard to the distribution of pulmonary blood flow
- Typically there is a zone at the apex that is not perfused
 - The mean pulmonary arterial pressure is 8mmHg
 - In some areas flow is determined by the arterial/alveolar pressure difference
 - Hypoxia leads to pulmonary vasodilation
 - The net balance of Starling forces act to keep the alveoli dry
19. lung compliance
- is normally 100mL/cm water
 - falls if the lung remains unventilated for long periods
 - rises if the pulmonary venous pressure is increased
 - falls as the lung ages
 - is the area under the pressure volume curve
20. The most important short term response to high altitude is
- Hyperventilation
 - Polycythaemia
 - Chronic mountain sickness
 - Acidosis
 - Decreased EPO release
21. In CO₂ transport
- The HCO₃ content of venous blood is reduced compared to arterial blood

B. The osmolarity of RBCs in venous blood is increased compared to arterial blood

C. The haematocrit of venous blood is 3% less than arterial blood

D. The solubility of CO₂ in blood is less than O₂

E. CO₂ does not react with plasma proteins

22. With regard to the neural control of respiration

A. There are 3 neural mechanisms regulating respiration

B. The dorsal group of respiratory centre has excitatory neurons

C. The ventral group of respiratory centre is located in the pons

D. The main respiratory control centre is located in the pons

E. Voluntary control system is located in the cerebral cortex

23. Surfactant

A. Is produced by class II pneumocytes

B. Is increased in smokers

C. Helps keep the alveoli moist

D. Decreases alveolar stability in preterm babies

E. Maturation is impaired by glucocorticoids

14-The respiratory diverticulum (lung bud) appears, when the embryo is approximately

A-02 weeks old

B-04 weeks old

C- 05 weeks old

D. 06 weeks old

E. 08 weeks old

25.Regarding various types of esophageal atresia or tracheoesophageal fistulae, the commonest type is, the upper esophagus

ending in a blind pouch and the lower segment forming a fistula with the

A. Duodenum

B. Right bronchus

C. Left bronchus

D. Trachea

E. Stomach

26. The outer wall of the trachea is formed by the

A. Ectoderm

B. Endoderm

C. Mesoderm

D. Hypoblast

E. Neural crest

27. Regarding maturation of the Lungs, the alveolar period ends by:

A. One month to two months

B. Three months to four months

C. Six months to eight months

D. Seven months to 9 months

E. Eight month to childhood

28.Respiratory distress syndrome mainly affects the:

- A. Vocal cord
- B. Trachea
- JC. Right bronchus
- D. Left bronchus
- VE.

Alveoli

29. In which part of the respiratory system, gaseous exchange takes place?

- A. Alveoli
- B. Pharynx
- C. Larynx
- D. Trachea
- E. esophagus

30. Which of the following statement is true about involuntary breathing?

- A. It is controlled by the bronchioles
- B. It is controlled by the pulmonary arterioles
- C. It is controlled by the alveolar-capillary network
- D. It is controlled by the neurons, located in the medulla and pons
- E. It is controlled by the lungs parenchyma

31. Which one of the following statements is false about the trachea?

- A. Has C-shaped rings
- B. It is covered by epiglottis
- C. It splits into the right and left lungs
- D. It has hyaline cartilage
- E. None of the above

32. _____ is located between two pleural sacs and is the central compartment of the thoracic cavity'

- A. Hilum
- B. Pleura
- C. Mediastinum
- D. Thoracic cage
- E. Lung

33. Which of the following functions by filterin and keeping the mucus and dirt away from ou lungs?

- A. Cilia
- B. Bronchioles
- C. Hair in the lungs
- D. Air in the lungs
- E. All of the above

34. The Following structure in posterior mediastinum is found immediately posterior to the left atrium:

- A. Azygous vein
- B. Thoracic duct
- C. Esophagus
- D. Bifurcation of aorta
- E. Great Cardiac vein

35. The most characteristic feature of thoracic vertebra is :

- A. The body is heart shaped
- B. Spine is oblique
- C-Body has costal facets
- D. Vertebral foramen is smaller & circular
- E. Not arranged in a straight line.

36. Visceral pleura is :
- A. Is insensitive to pain
 - B. Develops from splanchnopleura
 - C. Covers all the surfaces of lung except hilum
 - D. Innervated by autonomic nerves
 - E. Adherent to the heart and blood vessels
37. The apex of heart
- A- Situated in 5th intercostal space
 - B- Just medial to the mid clavicular line
 - C- Directed downwards, backwards & to the Right
 - D- Cannot be heard by a stethoscope
 - E- is formed by right ventricle
38. One of the following is the function of diaphragm in expiration?
- A. production of energy
 - B. relaxation
 - C. contraction
 - D. gaseous exchange
 - E. helping the lungs to stay inflated
39. The lungs are attached to the walls of the thorax by means of the:
- A. pericardial membrane
 - B. parietal pleural membrane
 - C. visceral pleural membrane
 - D. mesentery
 - E. diaphragm
40. The cells that make and secrete mucus which protects the lining of the respiratory tract are called:
- A. squamous epithelium
 - B. pneumothorax
 - C. terminal bronchioles
 - D. alveolar cells
 - E. goblet cells
41. Which of the following does not belong to conducting portion of the respiratory system
- A. Nose
 - B. Pharynx
 - C. Alveoli
 - D. Bronchioles
 - E. none
42. The structure which closes of larynx is during swallowing is
- A. Epiglottis
 - B. Vocal cords
 - C. Adam's apple
 - D. Glottis
 - E. Laryngopharynx
43. Increasing or decreasing the substrate will increase or decrease the ES complex with corresponding change in
- A. V_i
 - B. V_{max}
 - D. enzymes
 - E. V_i & V_{max}
44. When further increase in substrate concentration do not further increase the V_i , the enzyme is
- A. exhausted
 - B. saturated

- C available
D. inactive
E. active
45. A Holo-enzyme is
A. co-enzyme + cofactor
B. coenzyme + prosthetic group
C. apoenzyme + active site
D. apoenzyme + cofactor
E. incomplete
46. In most enzymes the active site on the enzyme's surface takes the form of
A: substrate
B. coenzyme
C. cleft
D. acetyl residues
E. acyl residues
47. The term apoenzyme is applicable to
A. simple enzyme
B. protein part of conjugate enzyme
C. organic cofactor of a conjugate enzyme
D. inorganic cofactor of a conjugate enzyme
E. complete enzyme
48. Lock and Key theory of enzyme action was proposed by
A. Fischer
B. Koshland
C. Kühne
D. Arrhenius
E. Nicholas
49. According to Bohr's effect, the oxygen dissociation curve will be shifted to the right when:
A. Increase oxyhemoglobin release, decrease pH, increase P_{CO_2} .
B. Decrease oxy-hemoglobin release, Increase pH, decrease P_{CO_2} .
C. Increase oxyhemoglobin release, Increase pH, decrease P_{CO_2} .
D. Increase oxyhemoglobin release, decrease pH, decrease P_{CO_2} .
E. Increase oxy-hemoglobin release, Increase pH, increase P_{CO_2} .
50. In addition to transporting O_2 from the lungs to the tissues, Hb also transports
A. CO_2 & H_2O
B. CO_2 & protons
C. NH_3 & CO_2
D. NH_3 & H_2O
E. H_2CO_3
51. The left ventricle has a thicker wall than the right ventricle because:
A. it is richer in blood supply
B. it ejects blood through a narrower orifice
C. it ejects a greater cardiac output.
D. it ejects blood against a higher pressure
E. it contracts at a higher rate
52. The atrio-ventricular valves:
A. have three cusps for each valve

- B. their closure is initiated when the ventricular pressure exceeds atrial pressure
- C. open by contraction of papillary muscles
- D. are not closing simultaneously..
- E. all of the above

53. The action potential of the cardiac muscle is characterized by the presence of plateau which:

- A. in the ventricular muscle it reached 100 m sec
- B. in the artial muscle, it is reached 300 m sec
- C- it result from a balance between Ca^{++} influx
- D. it is shorter than the ARP of skeletal muscle.
- E-it occurs before each repolarization

54.It is impossible to tetanize (stiff) a heart because:

- A. there is a long mechanical refractory period
- B. the refractory period is very short.
- C. the heart muscles do not contain Ca^{++} .
- D. depolarization is shorter
- E-repolarization is longer

55. The absolute refractory period in the ventricle:

- A. increases during sympathetic stimulation
- B. coincides with the phase of rapid depolarization and the plateau
- C. corresponds with the whole duration of action potential. and K^{+} efflux.
- D. it result from an inflow of K and Na .
- E. it is the same as in SA node

56.In cardiac cycle the ventricular pressure in increased than atrial pressure

- A. isometric contraction phase.
- B. atrial systole phase.
- C.maximum ejection phase.
- D. reduced ejection phase.
- E.just after the QRS complex formation

57. In cardiac cycle, the diacrotic notch in aortic pressure is due to:

- A. sudden closure of AV valves.
- B. sudden closure of aortic valve.
- C. sudden decrease in aortic pressure.
- D. marked decrease in ventricular pressure.
- E. high pressure of the left ventricle

58-C wave in atrial pressure occursin:

- A. isometric contraction phase.
- B. isometric relaxation phase.
- C. maximum ejection phase.
- D. atrial systole phase.
- E- none

59.In ECG, the P wave is formed due to;

- A. atrial depolarization.
- B, atrial repolarization.
- C-atrial systole.
- D. atrial diastole.
- E. right atrial stimulation

60.After a mild hemorrhage, compensatory

responses initiated by the baroreceptor reflex keeps blood pressure at or close to its normal value. Which one of the following values is less after compensation for the hemorrhage than it was before the hemorrhage?

- A. Venous reservoir
- B. Heart rate
- C. Ventricular contractility
- D. Total peripheral resistance
- E. Coronary blood flow

61. Which of the following conditions causes tachycardia?

- A. 1st degree heart block.
- B. 2nd degree heart block
- C. 3rd degree heart block
- D. Hypertension
- E. Hypotension

62. Sudden standing evokes the baroreceptor reflex. Which one of the following will be greater after a person suddenly stands up than it was before the person stood?

- A. The end-diastolic volume
- B. The renal blood flow
- C. The venous return
- D. The pulse pressure
- E. The ejection fraction

63. In the post-mortem report the medicolegal officer mentions the development of postmortem lividity, which is:

- A. A change in eye after death
- B. Early sign after death
- C. Immediate sign of death
- D. Late change after death
- E. Sign of somatic death

64. Increasing vagal stimulation of the heart will cause an increase in

- A. Heart rate
- B. PR interval
- C. Ventricular contractility
- D. Ejection fraction
- E. Cardiac output

65. During exercise, there is an increase in a person's

- A. Stroke volume
- B. Diastolic pressure
- C. Venous compliance
- D. Pulmonary arterial resistance
- E. Total peripheral resistance

66. Lymph capillaries differ from systemic blood capillaries in that they

- A. Are less permeable
- B. Are not lined by endothelium
- C. Lack valves
- D. Are absent in the central nervous system
- E. Collapse when interstitial pressure increases

67. At birth, changes that occur in the fetal circulation include

- A. Increased systemic arterial pressure

- B. Increased pulmonary vascular resistance
- C. Increased pulmonary arterial pressure
- D. Decreased left atrial pressure
- E. Decreased pulmonary blood flow

68. Turbulence is more likely to occur in a blood vessel if:

- A. The velocity of blood within the vessel increases
- B. The viscosity of blood within the vessel increases
- C-The diameter of the vessel decreases
- D.the density of the blood decreases
- E-The length of the vessel increases

69.Systemic arteriolar constriction may result from an increase in the concentration of

- A. Nitric oxide
- B. Angiotensin II
- C. Atrial natriuretic peptide
- D. Beta receptor agonists
- E. Hydrogen ion

70.In complete heart block, there is usually

- A. Increased ventricular contractility
- B. Increased Heart rate
- ul increased mean blood pressure
- D, slow P waves
- E.No relation of P waves with QRS complex

71- After an episode of exercise training, the trained individual will have a:

- A. Decreased density of mitochondria in the trained muscles
- B. Increased resting heart rate
- C-Decreased maximum oxygen consumption
- D-Increased stroke volume with decreased heart rate.
- E-Decreased extraction of oxygen by exercising muscles

72- when the blood pressure in the body increases, baroreceptors are activated causing

- A- decreasing heart rate and myocardial contractility
- B.Excitation of vasoconstrictor area
- C.Increased heart rate and myocardial contractility
- D. Inhibition of vagal center
- E.Vasoconstriction of veins and arterioles

73. CNS ischemic response is a direct respiratory response of vasomotor center to

- A.Arterial pressure above 60 to 70 mmHg
- B-Decreased blood flow and carbon diox concentration
- C.Excessive urinary output by kidneys
- D. powerful activation of sympathetic vasoconstriction
- E.Rapid rise in arterial pressure

74.A 55-year-old man presented in the outpatient department with headaches. His blood pressure was 180/100 mmHg. Further investigations show that he had renovascular hypertension as a result of stenosis in left kidney. The following changes will be seen in

his total peripheral resistance, plasma renin, plasma aldosterone concentrations respectively

- A. Decrease, decrease, increase
- B. Decrease, increase, increase
- C. Increase, increase, increase
- D. Increase, decrease, increase
- E. Increase, increase, decrease

75. In patients with Beriberi, pulmonary disease, hyperthyroidism, hypothyroidism, the total peripheral resistance, and cardiac output varied but arterial pressure was maintained within a normal range because of normal

- A. Brain
- B. circulation
- C. heart
- D. lungs
- E. kidneys

76. Right axis deviation in an electrocardiogram is usually caused by:

- A. Aortic valve regurgitation
- B. Aortic valve stenosis
- C. Excess abdominal fat
- D. Pulmonary hypertension
- E. Systemic hypertension

77. A 35-year-old man has dyspnea. His electrocardiogram shows no P waves, and he has a heart rate of 42 beats/min. Most likely diagnosis?

- A. First degree heart block
- B. Second degree heart block
- C. Sinoatrial heart block
- D. Sinus bradycardia
- E. Third degree heart block

78. A 55-year-old man reports to his physician that he becomes easily fatigued while doing routine work around the house. The electrocardiogram was recorded at his physician's office, which shows small R waves and deep S waves in leads I and II and R waves in lead III. Most likely diagnosis:

- A. Complete left bundle branch block
- B. Left ventricular hypertrophy
- C. Pulmonary valve stenosis
- D. Right bundle branch block
- E. Right ventricular hypertrophy

79. A 65-year-old man had the electrocardiogram recorded during his annual physical examination. Which show missing QRS complexes after some P waves. What is the most likely diagnosis?

- A. Atrial flutter
- B. Atrial paroxysmal tachycardia
- C. First degree A-V block
- D. Second degree A-V block
- E. Third degree A-V block

80. In compensated hemorrhagic shock, which of the physiological mechanism is involved?

- A. Central nervous system ischemic response
- B. Decreased absorption of interstitial fluid through the capillaries
- C. Decreased Antidiuretic hormone release
- D. Decreased heart rate

E. Stress relaxation

81. An increase in shear stress in a blood vessel results in:

A. Decreased cyclic guanosine monophosphate production

B. Decreased endothelin production

C. Decreased prostacyclin production

D. Increased nitric oxide release

E. Increased rennin production

82. An increased venous return of blood to the heart is normally associated with:

A. Acute large vein dilation

B. Decreased mean systemic filling pressure

C. Decreased sympathetic tone

D. Increased blood volume

E. Increased venous compliance

83. Cardiac output is often increased in:

A. Anaphylactic shock

B. Hemorrhagic shock

C. Hypovolemic shock

D. Neurogenic shock

E. Septic shock

84. A healthy, 25-year-old male participates in a 100 meter run. Following muscles are used during expiration:

A. Diaphragm and external intercostals

B. Diaphragm and internal intercostals

C. Diaphragm only

D. Internal intercostals and rectus abdominis

E. Sternocleidomastoid

85. A preterm infant has a surfactant deficiency. Without surfactant, many of the alveoli collapse at the end of each expiration, which leads to pulmonary failure. Following sets of changes is present in a preterm infant compared with a normal infant.

Alveolar surface tension Pulmonary compliance

A- decreased Decreased

B- decreased Increased

C- decreased No change

D- increased Decreased

E- increased Increased

86. A change in which ion movement that give rise to the Pacemaker potential in sinoatrial node

A. Sodium

B. Potassium

C. Chloride

D. Calcium

E. Bicarbonate

87. In which structure is propagation of the action potential the fastest in the heart?

A. The sinus node

B. The AV-node

C. The bundle of His

D. The atrial myocardium

E. The ventricular myocardium

88. 50 year old man comes to cardiac OPD with a history of hypertension for the last 5 years

wants a guidance from doctor about the diet. Which of the option mention below is not included in the. Dietary changes advocated by WHO for prevention of heart diseases

- A. Reduction of fat intake to 20-30% of caloric intake.
- B. A decrease in complex carbohydrate consumption,
- C- Consumption of saturated fats must be limited to less than 10 % of total energy intake
- D- Reduction of salt intake to 5 g /day or less.
- E. Reduction of cholesterol to below 100mg per 1000Kcal per day.

89.If circumflex art. gives the posterior interventricular branch, this circulation is described as:

- A Right Dominance
- B Left dominance
- C Codominance
- D Undetermined
- E Equal dominance

90.aortic opening transmits all Except :

- A- aorta
- B- thoracic duct
- C- vagus nerves
- D- azygos vein
- E- lymphatics

91. In standing position, venous return to heart from the lower limbs is affected by all of the following except

- A-Competent valves
- B-Deep fascia
- C.Arterial pressure
- D.Contraction of the calf muscles
- E-Force of contraction

92. The pericardium is the double sac membrane that:

- A-encloses the heart
- B. line the aorta
- C. makes up the heart valves
- D. is found only in the capillaries
- E Surrounds the major blood vessels

93. Blood returning to the heart from the body organs enters the:

- A. left atrium through the aorta
- B. right atrium through the vena cava
- C. left ventricle by the pulmonary artery
- D. right ventricle by the pulmonary vein
- E. directly into lungs

94, The only vein in the body that transports oxygen-rich blood is the:

- A. coronary vein
- B, hepatic portal vein
- C-pulmonary vein
- D- aortic vein
- E. Coronary veins

95-a a blockage within the heart arteries caused by death of heart muscle cell is known as

- A-an embolism

- B- an infarct
- C. an abscess
- D. a mass
- E. Blood

96. The branches into Circumflex artery and left anterior descendary artery

- A. Left main coronary artery
- B. right marginal artery
- C. Posterior descendary artery
- D. anterior descendary artery
- E. None of these

97. A 52-year-old woman was admitted to the hospital with a diagnosis of right-sided pleurisy with pneumonia. It was decided to remove a sample of pleural fluid from her pleural cavity. The resident inserted the needle close to the lower border of the eighth rib in the anterior axillary line. The next morning he was surprised to hear that the patient had complained of altered skin sensation extending from the point where the needle was inserted downward and forward to the midline of the abdominal wall above the

- A. The needle was inserted too low down in the intercostal space
- B. The needle was inserted too close to the lower border of the eighth rib and damaged the eighth intercostal nerve
- C. The needle had impaled the eighth rib
- D. The needle had penetrated too deeply and pierced the lung
- E. The needle has injured the major blood vessels

98. A 43-year-old man was involved in a violent quarrel with his wife over another woman. In a fit of rage, the wife picked up a carving knife and lunged forward at her husband, striking his anterior neck over the left clavicle. The husband collapsed on the kitchen floor, bleeding profusely from the wound. The distraught wife called an ambulance. On examination in the emergency department of the hospital, the following conditions were found except which?

- A. Auscultation revealed diminished breath sounds over the left hemithorax
- B. The trachea was deflected to the left
- C. The left upper limb was lying stationary on the table, and active movement of the small muscles of the left hand was absent
- D. The patient was insensitive to pin prick along the lateral side of the left arm, forearm, and hand
- E. The patient was in hypovolemic shock,

99. All the structures are seen in transverse section of T4 vertebral level except:

- A. Arch of aorta
- B, thymus
- C, azygous vein
- D. thoracic duct
- E. Lymphatics

100. A 59 yr, old man complains of recurrent attacks of pain in the region of left shoulder radiating to sternum & pit of stomach. The attacks of pain came at lengthy intervals until the last 2 days when it became continuous. The physician diagnosed it as angina pectoris. In this case the pain pathway from the heart is carried by:

- A. Sup, cervical cardiac n,
- B. Middle & inf, cervical cardiac n.
- C. Inferior cervical cardiac nerve
- D. Thoracic splanchnic n.
- E. Vagus n.

101. The angiogenesis is development of vessel from:

- A. Existing vessels
- B. Neural crest
- C. Ectoderm
- D. Endoderm
- E. Blood islands

102. Foramen ovale closes after birth because of increased pressure in

- A. Lungs
- B. Right atrium
- C. Right ventricle
- D. Left atrium
- E. Left ventricle

103. The heart tube continues to elongate and bend on day:

- A. Twenty three of development
- B. Thirty three of development
- C. Forty three of development
- D. Fifty three of development
- E. Sixty three of development

104. In dextrocardia, the heart loops to the:
Ans- right side instead of the left

105. Induction of heart development is related to endoderm of which of the following organ?

- A. Trachea
- B. Bronchi
- C. Esophagus
- D. Duodenum
- E. Left lung

106. Cardiac muscle fibres electrically connect to neighbouring fibres by

- A. Desmosomes
- B. Intermediate discs
- C. Gap junctions
- D. Contractile fibres
- E. Chordae tendinae

107. The requirements of which vitamin increases when the intake of carbohydrates increases in diet.

- A. Ascorbic acid
- B. Cholecalciferol
- C. Retinoic acid

D. Tocopherol

E-Thiamine

108. Pinky is 6 years old girl brought by her parents with complain of pain in lower limbs and arms, She is lagging behind in growth from her followers. Examination reveals some wasting of muscles of lower limbs with formation of pits by pressure on shins. Blood examination reveals mild elevation of lactate and pyruvate, The most probable diagnosis is

A. Beri-beri

B. Pallegra

C. Pernicious anemia

D. Rickets

E. Scurvy

109. Leukotriens are synthesized by addition of hydroperoxy groups to which unsaturated fatty acid

A. arachidonic acid

B. linolenic acid

C. linoleic acid

D. oleic acid

E. palmitic acid

110. Autosomal TaySach's disease is caused by

A. gangliosidosis

B. cerebrosides deficiency

C. lipidosis

111- not here

112. A 40 years old male with normal weight, leading a healthy lifestyle is diagnosed as case of coronary heart disease. His Lipid profile shows elevated LDL levels and hypercholesterolemia. Further investigations reveal defective LDL receptors and mutation in ligand region of apo B-100. What is your diagnosis.

A. tangier disease

B. fish-eye disease

C. familial alpha lipoproteinemia

D. familial lipoprotein lipase deficiency

E. familial hypercholesterolemia (type 2 a)

113. The lipoprotein that absorb cholesterol from the peripheral tissues and transport it to the liver is

A. VLDL

B. IDL

C. LDL

D- HDL

E. Chylomicrons

114-The lipoprotein that transports triglycerides from liver to adipose tissues

A. VIDL

B. HDL

C IDL

D. LDL

E. Chylomicrons

115. In humans ,a dietary essential fatty acid is

A. Palmitic acid

- B. stearic acid
- C. oleic acid
- D. linoleic acid
- E. Butyric acid

116. The process of Eicosanoids synthesis from twenty-carbon essential fatty acids is

- A reduction
- B. oxidation
- C. cyclization
- D. oxidoreduction
- E acylation

117. Cephalin consists of

- A glycerol, fattyacid, phosphoric acid and choline
- B. glycerol,fattyacid,phosphoric acid and ethanolamine
- C.glycerol,fattyacid,phosphoric acid and inositol
- D.glycerol,fattyacid,phosphoric acid and serine
- E. glycerol,fattyacid,phosphoric acid and sugar

118. Phospholipid acting as a surfactant is

- A. cephalin
- B. phosphatidyl inositol
- C. lecithin
- D. phosphatidyl serine
- E. ganglioside

119. A 60 yrs old man is brought to the emergency room with 6 hours history of severe chest pain radiating towards jaw and back along with vomiting and shortness of breath. what specific test is indicated,

- A Serum urea
- B. trop T
- C. SGPT
- D. ALT
- E. myoglobin

120. Troponin is not normally found in the blood. it is released into blood when heart muscles become damaged. It reaches its peak level in

- A. 12-18 hrs
- B. 72 hrs
- C. 8-24 hrs
- D. 10 days
- E- 4-6 hrs