

28/2015

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. The instrument used to give electric shock to patients with cardiac arrest :  
(A) Pacemakers (B) Defibrillator  
(C) Holter monitor (D) None of these
2. The covering of Lungs :  
(A) Pericardium (B) Peritonium  
(C) Pleura (D) Plasma membrane
3. Recording of Heart sound is called :  
(A) Electrocardiography (B) Electromyography  
(C) Electroencephalography (D) Phonocardiography
4. Right atrial hypertrophy is also called :  
(A) P-Pulmonale (B) P-mitral  
(C) ASD (D) VSD
5. Smallest Ear Ossicle :  
(A) Malleus (B) Stapes  
(C) Cochlea (D) Incus
6. In which year William Einthoven got the Nobel prize for his contributions in ECG?  
(A) 1903 (B) 1934  
(C) 1906 (D) 1924
7. In Transistor Biasing rule, Emitter-Base junction is always :  
(A) Forward bias (B) Reverse bias  
(C) Forward-Reverse bias (D) None of these
8. The part of the middle ear cavity above the level of tympanic membrane is called :  
(A) Tympanic cavity (B) Mesotympanum  
(C) Hypotympanum (D) Epitympanum

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9. The foot plate of Stapes is fixed into :  
(A) Round window (B) Oval window  
(C) Bony labyrinth (D) Membranous labyrinth
10. Which device convert ionic potentials into electronic potentials?  
(A) Transducer (B) Transistor  
(C) Electrons (D) Electrodes
11. Reason for 'M'shaped P-wave seen in Lead I & Lead II :  
(A) Right atrial hypertrophy (B) Left atrial hypertrophy  
(C) Aortic stenosis (D) Mitral stenosis
12. Difference between Air conduction threshold and Bone conduction threshold is called :  
(A) ABC Gap (B) ABSR  
(C) ABLB (D) AB Gap
13. The loss of rhythmical activity of the Heart is called :  
(A) Cardiac arrest (B) Arrhythmia  
(C) Bradycardia (D) Tachycardia
14. Self recording audiometry is known as :  
(A) Bekesy Audiometry (B) BSERA  
(C) Speech Audiometry (D) Pure tone Audiometry
15. The universally accepted colour code for Right Leg Lead :  
(A) Red (B) Yellow  
(C) Black (D) White
16. Which is the fluid seen inside bony labyrinth?  
(A) Perilymph (B) Endolymphatic sac  
(C) Endolymph (D) Cortilymph
17. Natural Pacemaker of Heart :  
(A) SA node (B) AV node  
(C) Right ventricle (D) Left ventricle

18. The audible continuous vibrations produced inside the heart for a long time in each cardiac cycle :
- (A) First heart sound (B) Murmur  
(C) Second heart sound (D) Heart beat
19. In solar cells which effect is used :
- (A) Thermoelectric effect (B) Photoelectric effect  
(C) Piezo-electric effect (D) Peltier effect
20. Middle ear pressure can be measured by :
- (A) Audiometry (B) Tympanometry  
(C) Speech audiometry (D) Pure tone audiometry
21. What is the emergency first aid given in massive cardiac arrest?
- (A) CPR (B) Treadmill test  
(C) ECG (D) None of these
22. Which Tympanogram indicates the presence of fluid in the middle ear?
- (A) Type B (B) Type C  
(C) Type D (D) Type A
23. Cardiac output = \_\_\_\_\_  $\times$  Heart rate.
- (A) Blood volume (B) Stroke volume  
(C) Venous return (D) Pulse rate
24. The volume of air remaining in the lung even after a forcible expiration?
- (A) Tidal volume (B) Residual volume  
(C) Total lung capacity (D) Expiratory reserve volume
25. In which signal, 1mv is equal to 10mm?
- (A) Standardization signal (B) Under Standardization signal  
(C) Over Standardization signal (D) Critical damped signal
26. In which test the patient's ability to hear and understand speech is measured?
- (A) Bekesy Audiometry (B) Speech audiometry  
(C) Impedance Audiometry (D) Tympanometry

27. While taking ECG which Lead is placed on the 5<sup>th</sup> left intercostal space at mid clavicular line?
- (A) V<sub>1</sub> (B) V<sub>2</sub>  
(C) V<sub>6</sub> (D) V<sub>4</sub>
28. The movable bone in skull :
- (A) Maxilla (B) Mandible  
(C) Sphenoid (D) Ethmoid
29. The space in which heart is situated :
- (A) Sternum (B) Intercostal space  
(C) Pleural space (D) Mediastinum
30. Unit of Frequency :
- (A) Decibel (B) Farad  
(C) Hertz (D) Ampere
31. Which is the objective test for hearing loss particularly used in children?
- (A) Impedance Audiometry (B) ABC test  
(C) Weber test (D) Rinne test
32. Which deafness results from defective function of the cochlea or auditory nerve?
- (A) Sensory neural deafness (B) Conductive deafness  
(C) Mixed deafness (D) Mild deafness
33. Who did first heart transplant?
- (A) Masson sones (B) Augustus Waller  
(C) Rene Favaloro (D) Christian Bernard
34. Which of the following is correct on the basis of Einthoven Triangle?
- (A) Lead I + Lead III = Lead II (B) Lead I + Lead II = Lead III  
(C) Lead II + Lead III = Lead I (D) All the above
35. Which of the following is a semiconductor in its pure form?
- (A) Extrinsic semiconductor (B) N-type semiconductor  
(C) Intrinsic semiconductor (D) P-type semiconductor

36. In which circulation blood flows from the Right ventricle through the Lungs to the left ventricle?
- (A) Systemic circulation (B) Portal circulation  
(C) Pulmonary circulation (D) Coronary circulation
37. Which electrode is commonly used to record the unipolar chest lead?
- (A) Limb electrode (B) Suction cup electrode  
(C) Micro electrode (D) Skin surface electrode
38. The covering of neuron :
- (A) Myelin sheath (B) Axone  
(C) Axolemma (D) Synaptic knob
39. The time interval between the beginning of QRS complex to the end of T wave :
- (A) P-R Interval (B) Q-T Interval  
(C) QRS Interval (D) PR segment
40. The closure of which valve produce the second heart sound?
- (A) Semi lunar (B) Mitral  
(C) Tricuspid valve (D) Pulmonary valve
41. First 7 pairs of ribs are called :
- (A) False ribs (B) A typical ribs  
(C) True ribs (D) Typical Ribs
42. The space between lungs :
- (A) Manubrium (B) Xiphoid process  
(C) Thoracic cage (D) Mediastinum
43. Which cell organelle is known as suicidal bag?
- (A) Lysosome (B) Mitochondria  
(C) Ribosome (D) Golgi complex
44. Anatomical term '*lateral*' means :
- (A) towards the midline (B) front of the body  
(C) away from the mid line (D) back of the body

45. Which valve connects Right atrium and right ventricle?  
 (A) Tricuspid Valve (B) Mitral Valve  
 (C) Semilunar (D) None of these
46. The number of bones in adult human body :  
 (A) 212 (B) 206  
 (C) 202 (D) 216
47. Duration of cardiac cycle :  
 (A) 0.01 S (B) 0.6 S  
 (C) 0.10 S (D) 0.8 S
48. Tachycardia means :  
 (A) Pulse rate above 60 b/mt (B) Pulse rate below 60 b/mt  
 (C) Pulse rate above 100 b/mt (D) Pulse rate below 100 b/mt
49. Which wave is produced due to atrial depolarization?  
 (A) Q-wave (B) T-wave  
 (C) P-wave (D) U-wave
50. In a particular lead all the signals obtained will be inverted. Identify that lead :  
 (A)  $aV_R$  (B)  $aV_L$   
 (C)  $aV_F$  (D) Lead - I
51. An electronic device used for the measurement of hearing loss :  
 (A) Speech Audiometry (B) Hearing Aid  
 (C) Tympanometry (D) Audiometer
52. Which chamber of the heart has thickest walls?  
 (A) Right Atrium (B) Right Ventricle  
 (C) Left Atrium (D) Left Ventricle
53. In which area of brain the auditory centre is located?  
 (A) Occipital lobe  
 (B) Temporal lobe just below the longitudinal fissure  
 (C) Broca's area  
 (D) Front part of the Temporal lobe

54. The first heart sound resemble for the word :  
(A) DUP (B) Murmur  
(C) LUBB (D) Pulse
55. Which muscle contraction give rise to an acoustic reflex?  
(A) Stapedial (B) Utricle  
(C) Sacculle (D) Vestibule
56. From which chamber of the heart Aorta arises?  
(A) Right Atrium (B) Right Ventricle  
(C) Left Atrium (D) Left Ventricle
57. Angle of Louis corresponds to which rib?  
(A) 1<sup>st</sup> (B) 3<sup>rd</sup>  
(C) 2<sup>nd</sup> (D) 5<sup>th</sup>
58. The part of the brain which maintains body balance :  
(A) Cerebrum (B) Cerebellum  
(C) Hypothalamus (D) Medulla
59. Which of the following terms mean the insertion of a catheter in to a chamber of heart?  
(A) Cardiac catheterization (B) CPR  
(C) Holter monitoring (D) ICU monitoring
60. Which separate external ear from the middle ear?  
(A) Semicircular canal (B) Tympanic membrane  
(C) Oval window (D) Round window
61. Location of SA node :  
(A) Right Ventricle (B) Right Atrium  
(C) Left Atrium (D) Left Ventricle
62. The central part of the bony labyrinth :  
(A) Vestibule (B) Semicircular canal  
(C) Cochlear dud (D) Modeolus

63. The only artery which carry impure blood :
- (A) Aorta (B) Coronary artery  
(C) Pulmonary vein (D) Pulmonary artery
64. Calculate the heart rate, if the number of the small boxes between two successive R wave in ECG is 30 and the paper speed is 50mm / Sec. :
- (A) 50 b/m (B) 15 b/m  
(C) 50 m/s (D) 15 m/s
65. Which is the nerve of hearing?
- (A) Optic nerve (B) Auditory nerve  
(C) Vestibular nerve (D) Auditory cortex
66. World Heart day :
- (A) September 11 (B) December 1  
(C) September 26 (D) October 16
67. The person who introduced ECG :
- (A) William Harvey (B) William Einthoven  
(C) Thomas Lewis (D) John Gibbon
68. The phenomenon of abnormal growth of loudness :
- (A) Tinnitus (B) Noise  
(C) Recruitment (D) None of these
69. Which Electrical event is happening in the cell?
- (A) Diffusion (B) Bioelectricity  
(C) Biodiversity (D) Bulk transport
70. Biggest artery in the human body :
- (A) Pulmonary artery (B) Right coronary artery  
(C) Left coronary artery (D) Aorta
71. The Eustachian tube connect the tympanic cavity with :
- (A) Nasopharynx (B) Tympanic cavity  
(C) Ear ossicles (D) Cochlea



72. Which protects the spinal cord from injuries?  
(A) Vertebral column (B) Thoracic vertebrae  
(C) Tibia (D) Fibula
73. Normal paper speed of ECG machine :  
(A) 15mm/s (B) 10s  
(C) 25m/s (D) 25mm/s
74. Which collects and diverts the sound waves from the atmosphere to the ear?  
(A) External ear (B) External auditory canal  
(C) Pinna (D) Tympanic membrane
75. Heart day theme for the year 2014 :  
(A) Heart and Exercise  
(B) Ageing and Health  
(C) Creating Heart healthy environments  
(D) High blood pressure
76. The colour used in graph paper for plotting the audiogram of air conduction for left ear :  
(A) Red (B) Green  
(C) Blue (D) Black
77. Which instrument helps for hearing by magnifying the Sound electrically or mechanically?  
(A) Ear mould (B) Audiometer  
(C) Speech audiometer (D) Hearing aid
78. The nerve of body balance :  
(A) Olfactory nerve (B) Vestibular nerve  
(C) Cochlear nerve (D) None of these

79. In which conduction the Sound is transmitted through the external ear, middle ear and internal ear?
- (A) Air conduction (B) Bone conduction  
(C) Both (D) None of these
80. Which limb lead is called the "ground" or "reference electrode"?
- (A) Right arm (B) Left arm  
(C) Right leg (D) Left leg
81. Who founded M.A.O College at Alligarh in 1875?
- (A) Moulana Abdul Kalam Azad  
(B) Sir Syed Ahemadkhan  
(C) Tej Bahadur Sapru  
(D) Madan Mohan Malavya
82. Who was the head of the women regiment of INA?
- (A) Aruna Asaf Ali (B) Bicajicama  
(C) Annie Besant (D) Laxmi Sehgal
83. The first Sathyagraha of Mahatma Gandhi was :
- (A) Ahammedabad Mill Strike (B) Non Co-operation Movement  
(C) Kheda Satyagraha (D) Champaran Sathyagraha
84. Mrs. Annie Besant became the first women president of Indian National Congress in the year :
- (A) 1915 (B) 1916  
(C) 1917 (D) 1920
85. Which pre-congress association was headed by Surendra Nath Banerjee?
- (A) Indian Association (B) Madras Mahajana Sabha  
(C) Bombay association (D) Poona Sarvajanika Sabha

86. When was first factory commission was setup in India?  
 (A) 1850 (B) 1875  
 (C) 1863 (D) 1871
87. Which region or state was the pioneer in the field of Indian Journalism?  
 (A) Bombay (B) Bengal  
 (C) Delhi (D) Kerala
88. Which National leader's birthday is celebrated as National Education Day?  
 (A) Dr. S. Radhakrishnan (B) Jawaharlal Nehru  
 (C) Maulana Abdul Kalam Azad (D) Dadabhai Nauroji
89. Grand old man of South India :  
 (A) G. Subrahmanya Iyyer (B) Dadabhai Nauroji  
 (C) Barrister G.P. Pillai (D) Potty Sree Ramalingam
90. Who organised 'Thathwa Bodhini Sabha'?  
 (A) Debendranath Tagore (B) Benkim Chandra Chattergee  
 (C) Rabindranath Tagore (D) Kesab Chandrazen
91. In the general election of 1952, K kelappan was elected from Ponnani Loksabha seat, contested on the ticket of :  
 (A) Kisan Masdoor Praja Party (B) Indian National Congress  
 (C) Socialist Party (D) Praja Socialist Party
92. Father of Kerala Renaissance :  
 (A) Chattampi Swamikal (B) Sreenarayan Guru  
 (C) Ayyankali (D) Vagbhadanandan
93. 'Sivayoga Rahasyam' was written by Brahmanda Sivayogi is a :  
 (A) Short story (B) Novel  
 (C) Article (D) Poem

94. Who was the founder of 'Samathwa Samajam'?
- (A) Jyothibha Phule (B) Chattampi Swamikal  
(C) Vaikunda Swami (D) Kesab Chandrasen
95. Who started the 'Swadeshabhimani' Newspaper :
- (A) K. Ramakrishnapillai (B) A.K. Gopalan  
(C) Vakkom Abdulkadir Maulavi (D) K. Kelappan
96. Whose penname is 'Keralan'?
- (A) K. Kelappan  
(B) Keralavarma Valiyakoi Thampuran  
(C) Vallathol  
(D) K. Ramakrishnapillai
97. Who declared Temple Entry Proclamation?
- (A) Sri. Avittom Thirunnaal  
(B) Sri. Chithira Thirunnaal Balaramavarma  
(C) Sri. Karthika Thirunnaal Balaramavarma  
(D) Rani Gouri Laxmi
98. Who is the renaissance leader known as 'Pulayarajavu'?
- (A) Ayyankali (B) K.P. Karuppan  
(C) Sahodaran Ayyappan (D) T.K. Madhavan
99. The Nair Service Society founded by the late Sri. Mannathu Padmanabhan on :
- (A) September 1914 (B) October 1914  
(C) November 1914 (D) December 1914
100. The book 'Treatment of Thiyas in Travancore' was written by :
- (A) Dr. Naidu (B) Sreenarayana Guru  
(C) Dr. Palpu (D) Pattam Thanupillai