Instructions:

i. Read the instructions on the MCQ Response Form carefully.
ii. Attempt all questions.
iii. Question Paper to be returned along with MCQ Response Form.
iv. Candidates are strictly prohibited to give any identification mark except Roll No. & Signatures in the specified column only.

Q.1 Fallot’s tetrology is characterized by:
   a) Patent ductus arteriosus.
   b) Pulmonary stenosis.
   c) Overriding of pulmonary trunk.
   d) Atrial septal defect.
   e) Left ventricular hypertrophy.

Q.2 Pericardiocentesis is best achieved by passing a needle through:
   a) The subcostal angle.
   b) Left 2nd intercostal space at the sternal angle.
   c) Left 4th intercostal space at midclavicular line.
   d) Left 2nd intercostal space at the midclavicular angle.
   e) Left 6th intercostal space at the paravertebral border.

Q.3 Occlusion of descending thoracic aorta would cause decrease in blood flow in the following intercostal arteries:
   a) Upper six anterior.
   b) All of posterior.
   c) Upper two posterior.
   d) Lower anterior.
   e) Lower nine posterior.

Q.4 Regarding the right dominance of coronary arterial supply, the posterior interventricular artery is a branch of:
   a) Left coronary artery.
   b) Right coronary artery.
   c) Circumflex artery.
   d) Anterior interventricular artery.
   e) Coronary sinus.

Q.5 Stab wound in the anterior surface of the heart can injure:
   a) The coronary sinus.
   b) The great cardiac vein.
   c) The mitral valve.
   d) The left atrium.
   e) The atroventricular node.

Q.6 Which artery is involved if a patient has an anterior wall myocardial infarction?
   a) Right coronary artery.
   b) Pulmonary trunk.
   c) Left circumflex artery.
   d) Marginal artery.
   e) Left anterior descending artery.

Q.7 Damaged heart muscle resulting from blockage of the circumflex branch of left coronary artery would most likely be found in the:
   a) Apex.
   b) Right atrium.
   c) Right and left ventricles.
   d) Left atrium and left ventricle.
   e) Right ventricle and interventricular septum.

Q.8 While attempting for homicide, a sharp knife was penetrated in right 5th intercostal space, which structure might be damaged?
   a) Right atrium.
   b) Right ventricle.
   c) Pulmonary trunk.
   d) Apex of heart.
   e) Liver.

Q.9 Regarding the interior of right atrium:
   a) Its smooth part is derived developmentally due to absorption of pulmonary veins.
   b) Venae cordis minimae drain only its septal wall.
   c) The opening of superior vena cava is guarded by a valve.
   d) The opening of coronary sinus is not guarded by a valve.
   e) Its septal wall presents the fossa ovalis.

(Continued)
Q.10 Regarding conducting system of heart:
   a) The sinuatrial node is situated deep to the sulcus terminalis.
   b) The atrioventricular node is situated in the muscular interventricular system.
   c) The conducting tissue of the heart is derived developmentally from the epicardium.
   d) The sinuatrial node is avascular.
   e) The atrioventricular bundle is sited in the sinus venarum part of right atrium.

Q.11 Regarding the coronary arteries:
   a) Right coronary artery arises from the right anterior aortic sinus.
   b) Posterior interventricular artery is the branch of left coronary artery.
   c) Anterior aortic sinus is termed as non-crown sinus.
   d) The left coronary artery supplies a greater volume of myocardium.
   e) The circumflex artery is the branch of right coronary artery.

Q.12 The mitral valve sound is best audible on the anterior chest wall over the:
   a) Left second intercostal space.
   b) Right side of the sternal angle.
   c) Left 5th intercostal space at the apex beat.
   d) Left side of the sternum at the 5th intercostal space.
   e) Left 4th intercostal space in midclavicular line.

Q.13 Following vein drains directly into the cavity of the right atrium:
   a) Great cardiac.
   b) Anterior cardiac.
   c) Middle cardiac.
   d) Oblique vein of the left atrium.
   e) Pulmonary.

Q.14 The pain from pericardium is frequently referred to:
   a) The shoulder.
   b) Medial side of the arm.
   c) Medial side of the forearm.
   d) Hypogastrium.
   e) Epigastrium.

Q.15 A young male patient was subjected to open cardiac surgery. The surgeon passed a rubber tube in the transverse sinus of pericardium. The blood vessel in front of the tube would be:
   a) Superior vena cava.
   b) Inferior vena cava.
   c) Superior left pulmonary vein.
   d) Pulmonary artery.
   e) Abdominal aorta.

Q.16 The end-diastolic ventricular volume depends mainly upon:
   a) Atrial contraction.
   b) Distensability of the ventricle.
   c) Duration of the diastole.
   d) Respiratory movement.
   e) Venous return.

Q.17 Current flow occurs in the heart to produce waves in the ECG when the heart is:
   a) Completely polarized.
   b) Completely depolarized.
   c) Completely repolarized.
   d) In the refractory period.
   e) Partially depolarized and partially polarized.

Q.18 A patient with an electrolyte disturbance shows tall peaked T-wave and widened QRS complex in the ECG. He is most likely to have raised plasma level of:
   a) Calcium.
   b) Chloride.
   c) Magnesium.
   d) Potassium.
   e) Sodium.

Q.19 Coronary blood flow is regulated mainly by:
   a) Autonomic nerve stimulation.
   b) Arterial blood pressure.
   c) Heart rate.
   d) Hormones.
   e) Myocardial oxygen consumption.

Q.20 Emotional fainting (vasovagal syncope) is due to:
   a) Anaphylactic shock.
   b) Blood loss.
   c) Loss of vasomotor tone.
   d) Strong vagal stimulation.
   e) Sympathetic stimulation.

Q.21 Starling’s law of the heart:
   a) Does not operate during exercise.
   b) Explains the increase in heart rate during exercise.
   c) Explains the increase in cardiac output when venous return increases.
   d) Explains the increase in cardiac output due to sympathetic stimulation.
   e) Is not obeyed by the failing heart.
Q.22 For the arterial blood pressure regulation, the most rapidly acting mechanism is:
   a) Baroreceptor reflex.
   b) Capillary fluid shift.
   c) Rennin angiotensin mechanism.
   d) Stress relaxation.
   e) Vasopressin.

Q.23 The a-c interval of jugular venous pulse corresponds to which of the interval in ECG:
   a) RR.
   b) QRS.
   c) PR.
   d) QT.
   e) VAT.

Q.24 In a patient with congestive cardiac failure, there is an increased:
   a) Cardiac output.
   b) Cardiac reserve.
   c) Ejection fraction.
   d) Peripheral venous pressure.
   e) Stroke volume.

Q.25 Neurogenic shock is due to:
   a) Antigen-antibody reaction.
   b) Blood loss.
   c) Decreased pumping ability of the heart.
   d) Loss of vasomotor tone.
   e) Severe infection.

Q.26 A middle aged man suffering from hypoxia has arterial PO\textsubscript{2} 50 mmHg. His red cell count is 6.5 million/m\textsuperscript{3}. He is most likely having:
   a) Carbon monoxide poisoning.
   b) Cyanide poisoning.
   c) Hypoxic hypoxia.
   d) Polycythemia vera.
   e) Stagnant hypoxia.

Q.27 Oxygen hemoglobin dissociation curve is shifted to the left by:
   a) Fall in pH.
   b) Fetal hemoglobin.
   c) Increased body temperature.
   d) Increased PCO\textsubscript{2}.
   e) Increased 2:3 diphosphoglycerate.

Q.28 Duration and rate of inspiratory ramp signals generated from the dorsal respiratory neurons in the medulla oblongata is controlled by impulses from:
   a) Carotid baroreceptors.
   b) Aortic baroreceptors.
   c) Cerebral cortex.
   d) Hypothalamus.
   e) Pneumotaxic center.

Q.29 Inside the blood vessels, blood clotting occurs when:
   a) Blood comes in contact with collagen fibers.
   b) Calcium ions are activated.
   c) Clotting factor X is first activated.
   d) There is release of tissue thromboplastin.
   e) There is tissue injury.

Q.30 Mr. Shahid was traveling through a desert. He had limited quantity of water to drink. During this travel, he was having high plasma level of:
   a) Aldosterone.
   b) Antidiuretic hormone.
   c) Atrial natriuretic hormone.
   d) Cortisol.
   e) Epinephrine.

Q.31 A child came to the hospital with complaint of difficulty in breathing. Clinical examination and laboratory investigation revealed coarse facial features, corneal opacity and bronchopneumonia. Child was diagnosed as a case of Hurler disease (MPSI/H). The disease is inherited as:
   a) Antosomal recessive disorder.
   b) Autosomal dominant disorder.
   c) Sex linked disorder.
   d) Monosomal disorder.
   e) Trisomal disorder.

Q.32 In systemic amyloidosis the site of deposition in heart is:
   a) Coronary vessels.
   b) Subendocardium.
   c) Aortic valve cusp.
   d) Mitral valve cusp.
   e) AV node.

Q.33 The disease in which enlarged spleen pathologically called Sago spleen is seen:
   a) Congestive heart failure.
   b) Thalassemia.
   c) Amyloidosis.
   d) Sickle cell disease.
   e) Von Willibrand disease.

Q.34 A 35 year old male was brought to emergency after road side accident. There were multiple fracture of his femur and tibia. After resuscitation Plaster of Paris was applied to his fracture site. Within next 24 hours the patient became serious, he developed pulmonary insufficiency, neurological symptoms, anemia and thrombocytopenia. The patient is suffering most likely from:
   a) Air embolism.
   b) Fat embolism.
   c) Drug reaction.
   d) Hematological manifestation due to excessive bleeding.
   e) Reaction to transfusion.
Q.35 A 56-year-old man has noted chest pain after ascending a flight of stairs. He smokes 2 packs of cigarettes per day. He is found to have a blood pressure of 155/95 mm Hg. Laboratory findings include a total serum cholesterol of 245 mg/dl with an HDL cholesterol of 22 mg/dl. Which of the following vascular abnormalities is most likely to be his most serious health risk?

a) Hyperplastic arteriolosclerosis.  
b) Takayasu's Arteritis.  
c) Medial calcific sclerosis.  
d) Atherosclerosis.  
e) Kawasaki disease.

Q.36 In case of hypoxia, generation of which of the following substance is most likely to reduce the formation of free radicals:

a) Catalase.  
b) Hydrogen peroxide.  
c) Super oxide dismutase.  
d) Glutathion peroxidase.  
e) Myeloperoxidase.

Q.37 A patient was admitted to the hospital with complaint of anorexia, emaciation, & poly myopathy. Laboratory investigation diagnosed him as a case of beriberi. Which vitamin should be prescribed to the patient?

a) Vitamin-A.  
b) Vitamin-C.  
c) Thiamine.  
d) Riboflavin.  
e) Pyridoxine.

Q.38 40 year old male presents with dry eyes and xerostomia. Histological examination of the conjunctiva revealed metaplasia of the epithelium with reduced number of goblet cell and chronic inflammatory cell infiltrate. The man is suffering most likely from:

a) Sjogren's syndrome.  
b) Scleroderma.  
c) Pleomorphic adenoma.  
d) Cystic fibrosis.  
e) Sarcodosis.

Q.39 Which of the following tumour can arise in the heart:

a) Pheochromocytoma.  
b) Melanoma.  
c) Hemangiopericytoma.  
d) Rhabdomyosarcoma.  
e) Ewing's sarcoma.

Q.40 Autopsy of an old man revealed a small shrunken heart with finely granular, yellow brown pigment in his cardiac myocytes. The condition is termed as:

a) Dystrophic calcification.  
b) Melanosis.  
c) Hemochromatosis.  
d) Brown atrophy.  
e) Ochronosis.

Q.41 Which of the following is APPROPRIATE for investigation of fever in a patient with a new heart murmur:

a) Take blood culture only when the temperature is more than 38 °C.  
b) Take three sets of blood culture by three venepunctures.  
c) Take 5 ml of blood only for each set of blood culture to prevent iatrogenic anemia.  
d) Perform arterial puncture to take blood for culture.  
e) Take blood culture by nerve puncture.

Q.42 Humma Khan is a 4 year old girl who is noted on routine medical examination to have a heart murmur. She is referred to a paediatric cardiologist who diagnoses a small ventricular septal defect. Should Humma be suffering bacterial endocarditis, the most likely causative agent would be:

a) A species of oral streptococci.  
b) Staphylococcus aureus.  
c) Coagulase negative staphylococci.  
d) A Gram-negative (enteric) rod.  
e) Coagulase positive staphylococci.

Q.43 An 18-year-old heroin addict is diagnosed as having bacterial endocarditis. In addition to clinical evidence of endocarditis, the physical examination shows signs of recent direct intravenous injection of narcotics. There is no prior history of valvular heart disease. The most probable bacterial cause of endocarditis will be:

a) Streptococcus pyogenes.  
b) Staphylococcus aureus.  
c) Enterococcus faecalis.  
d) Propionibacterium acnes.  
e) Streptococcus salivarius.

Q.44 A 30-year-old female with rheumatic valvular heart disease develops fatigue, low grade fever for at least a week, a transient loss of the ability to form words and there is a mild weakness in the right arm. Her physical examination is normal except for the fever and a heart murmur. What is the most important diagnostic investigation?

a) Blood culture.  
b) Cerebral angiogram.  
c) C-reactive protein.  
d) Lumbar puncture.  
e) MRI brain.
Q.45  Abdul karim is 3 years old and has a systolic murmur noted on routine examination. A ventricular septal defect (VSD) is diagnosed. If endocarditis does develop, this is most likely due to:
   a) Coagulase negative staphylococcus.
   b) Coagulase positive staphylococcus, eg staph aureus.
   c) Gram negative rods.
   d) Streptococcus sp, eg strep viridans.
   e) E. coli.

Q.46  A young man who is addicted to morphine injections suffered from high grade fever, palpitation and dyspnoea. On physical examination he has low blood pressure raised JVP and a systolic murmur. There is monoparesis of right arm. There is leucocytosis and blood culture revealed a growth of enterococcus faecalis. Which of the following sign will not be a pathognomic feature of the disease:
   a) Haematuria.
   b) Roth’s spot.
   c) Splinter haemorrhage.
   d) Mc Callum plaque.
   e) Janeway lesion.

Q.47  Which one of the following condition does not induce cor-pulmonale:
   a) Bronchial asthma.
   b) Left atrial myxoma.
   c) Pickwickian syndrome.
   d) Fibrosing alveolitis.
   e) Syphilitic aortitis.

Q.48  A 35 years old mother who is lactating her baby for the last 2 months develop exertional dyspnoea, peripheral edema. The chest X-ray revealed moderate cardiac enlargement and pulmonary edema. Echocardiography showed reduced ejection fraction and abnormal valvular function. There is prominent 3rd heart sound and mitral regurgitation. The provisional diagnosis of the following disease is made:
   a) Loeffler's endocarditis.
   b) Chaga's disease.
   c) Dilated cardiomyopathy.
   d) Ch.constrictive pericarditis.
   e) Sub-endocardial infarction.

Q.49
   a)
   b)
   c)
   d)
   e).

Q.50  The essential hypertension is one of the commonest vascular disease. Which one of the following disorder is not associated with development of hypertension:
   a) Liddle syndrome.
   b) Marfan syndrome.
   c) Gitelman syndrome.
   d) Barter syndrome.
   e) Cushing syndrome.

Q.51  Which one of the following agent is not involved in cardiac muscle damage in 35 years old man:
   a) Carbon tetra chloride.
   b) Adriamycin.
   c) Haemochromatosis.
   d) Cobalt.
   e) Lithium.

Q.52  In myocardial ishaemia there is marked depletion of the ATP level. At which of the following level there is onset of irreversible cell injury to the cardiac muscles:
   a) 70%.
   b) 10%.
   c) 60%.
   d) 50%.
   e) 30%.

Q.53  A 30 years old female visitor from China complains of weakness and coldness of her fingers, transient loss of eye sight and giddiness. The examination revealed sinus rhythm, normal heart sounds, normal JVP and X-RAY of chest. Doppler ultrasound reported as decreased perfusion of sub-clavian artery. What is the most likely diagnosis:
   a) Poly arteritis nodosa.
   b) Kawasaki's disease.
   c) Takayasu disease.
   d) Giant cell arteritis.
   e) Churg-Strauss syndrome.

Q.54  A 42 years old man is brought to emergency with severe chest pain for the last 12 hours. Which one is the most specific test to confirm the provisional diagnosis of myocardial infarction:
   a) Myoglobin.
   b) LDH.
   c) Troponin "t".
   d) CK mb.
   e) CPK.

Q.55  Which one of the following will not result in mitral valve disorder:
   a) Infective endocarditis.
   b) Rupture of papillary muscle.
   c) Ankylosing spondylitis.
   d) Atrial myxoma.
   e) Dilated cardiomyopathy.

(Continued)
Q.56 Which of the following is a phase-II drug metabolizing reaction:
   a) Oxidation.          d) Hydrolysis.
   b) Reduction.          e) Deamination.
   c) Acetylation.

Q.57 A 60 year old patient with a myocardial infarction has severe cardiac arrhythmias. He is receiving a continuous intravenous infusion of lignocaine which has half-life 1.8h. How much time will be taken to achieve a steady-state plasma concentrations:
   a) 3.6h.              d) 18h.
   b) 5.4h.              e) 26h.
   c) 7.2h.

Q.58 Propranolol is rarely useful in the treatment of:
   a) Hypertension.      d) Partial AV-heart block.
   b) Angina.            e) Idiopathic hypertrophic subaortic cardiomyopathy.
   c) Familial tremor.

Q.59 A known patient of “endogenous depression” has been examined by a physician for his mild hypertension. The physician obviously wants to avoid:
   a) Guanethidine.      d) Hydralazine.
   b) Reserpine.         e) Propranolol.
   c) Clonidine.

Q.60 Which of the following has been shown to prolong life in a CCF-patient but has a negative inotropic effect on cardiac contractility:
   a) Carvedilol.        d) Digoxin.
   b) Dobutamine.        e) Furosemide.
   c) Enalapril.

Q.61 A 55 year old male is having a history of frequent episodes of renal colic with high calcium renal stones. The most useful diuretic for him will be:
   a) Furosemide.        d) Spironolactone.
   b) Acetazolamide.     e) Mannitol.
   c) Hydrochlorothiazide.

Q.62 A 24 year old computer programmer is suffering from palpitation due to generalized anxiety disorder; the most appropriate drug would be:
   a) Buspirone.        d) Triazolam.
   b) Zolpidem.         e) Phenobarbitone.
   c) Midazolam.

Q.63 A 20 year old male was anesthetized for his hernia surgery with halothane, nitrous oxide with tubocurarine, but the patient rapidly developed tachycardia, hypertension, generalized muscular rigidity and hyperthermia with hyperkalemia and acidosis. He should be immediately treated by:
   a) Paracetamol.      d) Dantrolene.
   b) Aspirin.          e) Succinylcholine.
   c) Baclofen.

Q.64 A 20 year old pregnant lady has consulted for the gonorrhea; the medical history shows amoxicillin-allergy and a non-compliant patient. Which of the following drugs would be ideal in a single dose regimen:
   a) Cefixime.         d) Ciprofloxacin.
   b) Ceftriaxone.     e) Doxycycline.
   c) Spectinomycin.

Q.65 A 40 year old patient has been put on cyclosporine after his heart-transplantation. The mechanism of action of cyclosporine is to:
   a) Decrease the synthesis of prostaglandins, leukotrienes cytokines etc. d) Bind immunophilins.
   b) Suppress both b-and t-lymphocyte activation. e) Inhibit enzymes involved in purine metabolism.
   c) Bind TNF-alpha.

Q.66 Pulmonary thromboembolism may cause shock because of:
   a) Pooling of blood in periphery. d) Pump (heart) failure.
   b) Hypovolemia.                e) Infarction of the right ventricle.
   c) Dilatation of venous system.
Q.67 Concerning the left ventricular hypertrophy resulting from severe chronic pressure overload, which of the following is NOT correct?
   a) Force-velocity relationship would show depressed myocardial contractility.
   b) It does not affect long term prognosis.
   c) There is an increase in the number of sarcomeres.
   d) Myocardial oxygen demand is increased.
   e) Myocardial oxygen supply is impaired.

Q.68 Chest X-ray or echocardiogram in moderately severe mitral stenosis will show:
   a) Left atrial enlargement and prominence of pulmonary artery.
   b) Left atrial and left ventricular enlargement.
   c) Right and left ventricular hypertrophy.
   d) Left ventricular dilatation.
   e) Dilated aortic root.

Q.69 The risk of coronary atherosclerosis is lowest when which of the following lipid or lipoprotein levels in serum is high?
   a) Low density lipoprotein.
   b) Very low density lipoprotein.
   c) High density lipoprotein.
   d) Total cholesterol.
   e) Triglycerides.

Q.70 Which enzyme level in the plasma may be expected to be elevated five days after a moderately sized myocardial infarction?
   a) Aspartate transferase (AST or SGOT).
   b) MM fraction of creatine kinase (CK).
   c) MB fraction of creatine kinase (CK).
   d) Total creatine kinase (CK).
   e) Lactic dehydrogenase (LDH).

Q.71 Streptococcus viridans endocarditis:
   a) Rarely presents as an acute endocarditis.
   b) Is frequently difficult to diagnose bacteriologically because blood cultures are negative.
   c) Frequently does not respond to penicillin therapy alone.
   d) Often involves previously healthy heart valves.
   e) Commonly follows a genitourinary tract procedure.

Q.72 Broadening of the QRS complex of the electrocardiogram is typically produced following administration of:
   a) Lidocaine.
   b) Quinidine.
   c) Nifedipine.
   d) Propranolol.
   e) Verapamil.

Q.73 Analysis of pleural fluid obtained from a patient with severe, biventricular congestive heart failure is likely to reveal which of the following?
   a) Relative density (specific gravity) greater than 1.015.
   b) A total protein of 30 g/L (3 g/dL).
   c) A pH of 7.20 [H+] 60 mmol/L.
   d) A lactic dehydrogenase level about 90% of the serum level.
   e) Protein content less than half of the serum protein content.

Q.74 In a case of early mitral stenosis, one would expect to see which of the following on a P-A chest x-ray?
   a) Diffuse increase in the vascular markings of the lungs from the apex to base.
   b) Decrease in the basal lung vascular markings.
   c) Increase in the upper lung vascular markings.
   d) Generalized decrease in lung vascular markings.
   e) All of the above.

Q.75 A 50-year-old man presents for an insurance physical. Which of the following is NOT a risk factor for premature coronary artery disease?
   a) An elevated total serum cholesterol level.
   b) An elevated LDL cholesterol level.
   c) An elevated HDL cholesterol level.
   d) Obesity.
   e) Diabetes mellitus.

Q.76 Arterial blood gas analysis on a patient who has had a cardiac arrest reveals the following values: pO\textsubscript{2} 43 mm Hg, pCO\textsubscript{2} 83 mm Hg, H\textsuperscript{+} 35 mmol/L (pH 7.45), oxygen saturation 76%. This patient has:
   a) Mixed respiratory acidosis and metabolic acidosis.
   b) Compensated metabolic acidosis.
   c) Mixed respiratory acidosis and metabolic alkalosis.
   d) Compensated metabolic alkalosis.
   e) Compensated respiratory alkalosis.

(Continued)
Q.77 A normal cardiac silhouette with pulmonary venous hypertension on chest x-ray are common findings in patients with which one of the following disorders?
   a) Chronic mitral regurgitation.
   b) Aortic regurgitation.
   c) Systemic hypertension.
   d) Acute myocardial infarction.
   e) Congestive cardiomyopathy.

Q.78 A patient had an anteroseptal myocardial infarction five years ago. Which of the following electrocardiographic abnormalities is NOT likely to be related to that event?
   a) Absent R waves in V1 to V3.
   b) Elevated ST segments in the right precordial lead.
   c) Left axis deviation.
   d) Deep Q waves measuring 0.04 seconds in aVF.
   e) Right bundle branch block.

Q.79 In the setting of an acute myocardial infarction, which of the following electrocardiographic findings is most specific for myocardial necrosis?
   a) Ventricular fibrillation.
   b) Pathological Q waves.
   c) Elevated ST segments.
   d) Deeply inverted, symmetrical T waves.
   e) Intraventricular conduction defects.

Q.80 Which of the following is the most sensitive indicator of active myocardial ischemia?
   a) Chest pain.
   b) ST segment depression.
   c) ST segment elevation.
   d) Exercise-induced dysrhythmias.
   e) Raised cardiac enzymes.

Q.81 Among primary pericardial neoplasms following are benign:
   a) Most.
   b) Few.
   c) 50%.
   d) 70%.
   e) 30%.

Q.82 An arterial vasodilator might be expected to have the most beneficial hemodynamic effects in a patient with heart failure due to which one of the following lesions?
   a) Aortic stenosis.
   b) Mitral regurgitation.
   c) Mitral stenosis.
   d) Pulmonary stenosis.
   e) Pulmonary embolism.

Q.83 B-blockers may be even more widely used in the future because of their likely ability to prevent which of these:
   a) Hyperuricemia and gout.
   b) Peripheral vascular disease.
   c) Myocardial infarction.
   d) Peptic ulcer disease.
   e) Control hypertension.

Q.84 The ST segment occurs during which phase of the myocardial action potential?
   a) Phase 1.
   b) Phase 2.
   c) Phase 3.
   d) Phase 4.
   e) Phase 5.

Q.85 The premiere sign in suggesting transposition of the great arteries in the posteroanterior chest film is:
   a) A narrow mediastinum.
   b) Ascending aorta convex to the right without a pulmonary trunk.
   c) Absence of the normal triad of great artery densities.
   d) A right aortic arch without a pulmonary trunk.
   e) Pulmonary venous congestion.

Q.86 George Engel put forward the concept of Biopsychosocial perspective of health and disease which stresses on the understanding of:
   a) Holistic medicine.
   b) Social milieu of the patient.
   c) Better communication skills.
   d) Personality of the patient.
   e) Psychosocial environment of patient in the same way as pathophysiological processes.

Q.87 While the physician is expected to know the patient’s language, the patient is often unaware of the medical jargon. Therefore:
   a) The responsibility lies with the physician to bridge the communication gap.
   b) The physician must first simplify and explain the medical terminology.
   c) The physician must explore the psychosocial background of each patient.
   d) Medical jargon must be banned.
   e) The physician must learn other languages.
Q.88  Active listening is a complex process which involves a simultaneous focus on patient’s words as well as:
   a) Body language.
   b) Paralinguistic aspects.
   c) Active prompting.
   d) Adequate eye contact.
   e) Open ended questions.

Q.89  Empathy building refers to the statements of the doctor that:
   a) Conveys to the patient that his feelings have been well-understood.
   b) Show his sincere sympathy for the patient.
   c) Relaxes the patient.
   d) Reflect his good upbringing.
   e) Indicate good communication skills.

Q.90  Empathic skills are essential for better therapeutic relationship and include reflection, validation, support, respect and:
   a) Exclusivity.
   b) Unconditional positive regard.
   c) Informational care.
   d) Partnership.
   e) Friendship.

Q.91  Counselling is a technique which aims at:
   a) Making people less emotional.
   b) Achieving a greater depth of understanding and clarification of the problem.
   c) Comparing the patient’s experiences with one’s own.
   d) Giving sincere advice and solutions to the patients problems.
   e) Breaking bad news in a professional manner.

Q.92  A doctor aiming to adopt the role of a counsellor must exhibit and develop attributes such as:
   a) Wide ranging knowledge base.
   b) Charismatic personality.
   c) Mastery of the local dialect.
   d) Unconditional positive regard.
   e) Honest and simple life style.

Q.93  A 56 years old male patient has just been diagnosed with Diabetes Mellitus. His physician is concerned about his treatment compliance with the prescribed regimen of medication and dietary changes. The patient is most likely to follow the instructions given by the physician if the conversation with the physician makes the patient:
   a) Calm and collected.
   b) Calm and questioning.
   c) Concerned and attentive
   d) Worried and distracted.
   e) Fearful and self absorbed.

Q.94  Consent is the agreement of the patient to an examination, procedure, treatment or intervention. Which of the following pillars of medical ethics does it represent?
   a) Justice.
   b) Beneficence.
   c) Autonomy.
   d) Non-malaficence.
   e) Confidentiality.

Q.95  A patient constantly defying prohibitions by the doctors in spite of repeated warnings of serious consequences is displaying the phenomena of:
   a) Transference.
   b) Resistance.
   c) Counter-transference.
   d) Non-compliance.
   e) Emotional instability.

Q.96  A researcher wishes to start a research topic in a community. He opts for a 'need driven' plan. Which of the following would be his / her best option:
   a) Selecting a disease which is most difficult to manage.
   b) Testing a drug which can be commercially important.
   c) Finding an additional management for a problem which already has three modes.
   d) Selecting a problem which is self limiting.
   e) Selecting a problem by its seriousness of chronicity, complications and mortality.

Q.97  A physician follows up 100 patients exposed to a risk factor and 200 subjects not exposed to the factor. At the end of the study he / she observes the number of cases developing a disease in both the groups. What type of risk analysis does he / she get at the end:
   a) Prevalence rate.
   b) Odd’s ratio.
   c) Coefficient of correlation.
   d) Incidence rates.
   e) Standard error.
Q.98 Qualitative research is an important investigation in many health fields. If a physician was to undertake this form of research, which of the following steps would he/she undertake:

a) Observations and in-depth interviews.

b) Finding mean, median and modes of the problem.

c) Following up a group of say hypertensives to record improvement in blood pressure readings.

d) An advanced laboratory test to know the levels of a continuous variable.

e) Identifying confounding variables which are likely to disturb the research.

Q.99 A physician undertakes a ‘screening’ study to test a new technique in a problem for which an invasive ‘gold standard’ test is available. Which of the following statements would be valid in this study:

a) Finding the confirmatory role of the test against the gold standard.

b) Assessing the power of the test to diagnose both positive and negative cases.

c) Assessing cost-effectiveness of the new test.

d) Identifying the flaws of the gold standard test for improvement.

e) Assessing the acceptability of the test by community.

Q.100 In a desire to find the association of levels of cholesterol with different ages a physician examines a large population of different ages and records their cholesterol levels. Which of the following procedures will help in this study in final analysis:

a) Calculating standard deviation and mean to develop a normal curve.

b) Calculating regression value to find the critical value by which the cholesterol behaves with age.

c) Calculating coefficient of correlation (r value) to find the type of correlation.

d) Calculating coefficient of variation.

e) Calculating standard error.