

**1995 Tamil Nadu Public Service Commission (TNPSC)
Medical Officer Recruitment Exam**

1. Choose the most appropriate statement. A rapid increase in arterial Pressure causes a decrease in heart rate and vasodilatation through
A) Inhibition of vagal supply which reduces heart rate B) Stimulation of vagal supply which reduces heart rate
C) Activation of sympathetic outflow which results in vasodilation D) Activation of vagal supply and inhibition of sympathetic outflow
2. The Anencephaly
A) Is seen in 1:10,000 births B) Results in hydramnios
C) Is characterized by failure of caudal part of neural tube to close D) Is more frequent in males
3. Before a spermatozoan can fertilize an oocyte, it must undergo a process of capacitation during which
A) A glycoprotein coat and seminal plasma proteins are removed from its head B) Enzyme hyaluronidase is released to penetrate the oocyte barriers
C) It acquires a mitochondrial sheath to meet its energy requirements D) it completes its second meiotic division
4. The most common site of impaction of gall stones is the hepatopancreatic ampulla because of
A) The peristaltic movement in the duodenum B) Its oblique course in the wall of duodenum
C) The affinity of the lining epithelium with the gall stone material D) It being surrounded by a sphincter which makes it the narrowest part of the passage
5. In lesions of the right hypoglossal nucleus, the tip of the tongue on protrusion turns to
A) Left side because of the paralysis of left side tongue muscles B) Right side because of the unopposed action of left genioglossus muscle
C) Right side because of the unopposed action of left genioglossus muscle D) Left side because of the unopposed action of left genioglossus muscle
6. The most powerful stimulus for the Respiratory centre is
A) O₂ excess B) O₂ lack
C) Increased pH of Blood D) CO₂ Excess
7. The functions of Surfactant include the following except
A) Preventing collapse of the lung B) Maintaining elasticity of the lung
C) Preventing oedema in the lung D) Stabilizing the size of the alveoli
8. Artificial respiration is indicated in the following condition
A) Congestive heart failure B) Severe Anaemia

- C) Drowning
D) Pneumonic consolidation of the lung
9. Consider the statement about Cyanosis
I Cyanosis occurs in Hypoxic Hypoxia
II Cyanosis occur in Anaemic Hypoxia
III It occurs in stagnant Hypoxia
IV It occurs in Histotoxic Hypoxia
A) I is correct
B) I & II are correct
C) I & III are correct
D) All the correct
10. The most important source of Calcium ion for skeletal muscle contraction is
A) Mitochondria of the cell
B) Troponin molecule
C) Sarcoplasmic Reticulum
D) It is derived for Extracellular fluid
11. The peripheral resistance depends on
A) Stroke volume
B) Degree of contraction of veins
C) Diameter of arterioles
D) Blood volume
12. During the process of compensation for metabolic acid-base imbalance, which of the following would become increasingly abnormal?
1. Plasma pH
2. blood PCO₂
3. Base excess
4. Plasma HCO₃
A) If 1, 2 and 3 are correct
B) If 1 and 3 are correct
C) If 2 and 4 are correct
D) If only 4 is correct
13. Which of the following produce (s) H⁺?
1. Formation of bicarbonate ion from Co₂ and H₂ O
2. Formation of carbamino hemoglobin from Co₂ and hemoglobin
3. Binding of oxygen by hemoglobin
4. Oxidation of sulphur containing amino acids
A) If 1, 2 and 3 are correct
B) If 1 and 3 are correct
C) If 2 and 4 are correct
D) if all are correct
14. Sphingomyelins differ from the other sphingolipids in that they are
A) Not based on ceramide core
B) acidic rather than neutral at physiological pH
C) The only types containing N-acetylneuraminic pH
D) The only types that are phospholipids
15. All of the following statement regarding type II a hyperlipidemia (familial hypercholesterolemia) are correct except
A) There is increased risk of coronary artery disease
B) The serum low-density lipoprotein (LDL) levels are high
C) Cholesterol synthesis in extra hepatic cells is deregulated
D) It is a rare, recessive, autosomal condition
16. Bile acids are characterized by all of the following statements except
A) The rate limiting step in the formation of cholic acid from
B) Conjugation of cholic acid with glycine and taurine occurs in the intestine

- cholesterol is the hydroxylation at C-7
- C) Chenodeoxycholate differs from cholate in that it is not hydroxylated at C-12
- D) The primary bile acids lose their C-7 hydroxyl group in the intestine
17. Which of the following statements regarding very low-density lipoproteins (VLDL) is correct?
- A) VLDL contains about 40% to 50% triacylglycerols and are formed chiefly in the liver
- B) VLDL contains about 40% to 50% cholesterol and are formed chiefly in the mucosal cells of the small intestine
- C) VLDL gives rise to HDL by delipidation in the circulation
- D) VLDL contains lipid covalently bound to protein
18. In diabetic coma, the drug of choice is
- A) Crystalline Insulin
- B) Lente Insulin
- C) Protamine Zinc Insulin
- D) Ultra Lente Insulin
19. The following are ovulation inducing drugs except
- A) Bromocriptine
- B) Clomiphene citrate
- C) Danazol
- D) Cyclofenil
20. In the treatment of Megaloblastic Anemia the preferred treatment is
- A) Cyanacobalamin alone
- B) Folic Acid alone
- C) Cyanacobalamin + Folic Acid
- D) Folic Acid + Ferrous sulphate
21. Specific Antidote for Heparin overdose is
- A) Vitamin K
- B) Protamine sulphate
- C) Amino caproic Acid
- D) Streptokinase
22. A drug used in the emergency treatment of ventricular arrhythmia following myocardial infarction is
- A) Aubain
- B) Diltiazem
- C) Lidocaine
- D) Phenytoin
23. The following drugs are used in the treatment of hyper lipoproteinemia except
- A) Probucol
- B) Clofibrate
- C) Genfibrosil
- D) Chlorothiazide
24. Which of the following characters of bacteria is not true?
- A) Unicellular
- B) Free living
- C) Having either RNA or DNA
- D) Cell wall contains muramic acid
25. Following scheme represents the tissue phase of P.Vivax, P.Malaria & P. Ovale. Arrange in correct order
- A) Erythrocytic schizogony → Primary malaria → Pre erythrocytic schizogony
- B) Pre-erythrocytic Schizogony → Erythrocytic schizogony → Primary Malaria
- C) Primary Malaria → Erythrocytic schizogony → Pre erythrocytic Schizogony
- D) Primary Malaria → Pre erythrocytic schizogony → Erythrocytic Schizogony

26. The sequence of different phases in the sexual cycle of malaria parasite is one of the following sequences
 A) exflagellation → Zygote → Ookinete → Oocysts → sporozoites
 B) Zygote → Ookinete → Exflagellation → Oocysts → Sporozoites
 C) Sporozoites → Zygote → Ookinete → Oocyst → Exflagellation
 D) Exflagellation → Ookinete → Oocyst → Zygote → Sporozoites
27. Direct acting luminal or contact amoebicides include
 A) Halogenated hydroxyquinolines
 B) Dichloroacetamide
 C) Pentavalent arsenicals
 D) Paraomomycin
28. Match the following:
 A. Pneumococcus
 B. Neisseria gonorrhoea
 C. Bacteroides species
1. Gram negative diplococcus
 2. Gram positive bacillus
 3. Gram positive diplococcus
 4. Gram negative anaerobic
- A) A3, B1, C4, D2
 B) A1, B3, C4, D2
 C) A2, B1, C4, D3
 D) A1, B2, C3, D4
29. Match the following:
 A. Autoclave
 B. Seitz filter
 C. Fumigation with formaldehyde gas
 D. Radiation
1. Sterilization of antiserum
 2. Sterilization of surgical equipment
 3. Sterilization of disposable
 4. Sterilization of operation theatre
- A) A2, B1, C4, D3
 B) A1, B2, C4, D3
 C) A2, B1, C3, D4
 D) A3, B2, C1, D4
30. Chemotaxis for Eosinophils in allergy is mediated by
 A) Complete fragments
 B) histamine
 C) Transfer factor
 D) A chemotactic factor derived from basophils
31. Which one of the following is not associated with thrombosis?
 A) Activation of the coagulation mechanism
 B) Endothelial damage
 C) Formation of platelet aggregates
 D) Thrombocytopenia
32. Of the following pigments, which is toxic to neurons?
 A) Melanin
 B) Ceroid
 C) Hematin
 D) Unconjugated bilirubin

33. The osmotic pressure of intra vascular compartment depends on the presence of
A) Sodium
B) Potassium
C) Albumin
D) Polysaccharides
34. Each of the following is known to occur in septic shock except
A) Vasoconstriction of post-capillary veins
B) Peripheral pooling of blood
C) Elevated central venous pressure
D) Falling cardiac output
35. Transudate
A) Has a high protein content
B) Has a specific gravity less than 1.012
C) Results from hydrostatic alteration across the vascular endothelium
D) Clots on standing
36. At autopsy, heart should be opened under water to
A) Confirm fat embolism
B) Confirm air embolism
C) Confirm myocardial infarction
D) Confirm constrictive pericarditis
37. The single most important factor in determining the development of an infarct is
A) Collateral circulation
B) Size of the thrombus
C) Severity of atherosclerosis
D) Age of the patient
38. Dysplastic alteration of a tissue
A) Always leads to neoplasia
B) Always is preceded by a metaplastic change
C) Is an irreversible preneoplastic alteration
D) Sometimes leads of neoplasia
39. Fatality in malignant neoplasms most closely relates to
A) Production of toxic metabolites
B) Rapidity of growth
C) Invasion of the adjacent tissue
D) Metastasis
40. LE cell test is not useful in
A) SLE
B) Rheumatoid arthritis
C) Dermatomyositis
D) Myositis ossificans
41. Bone marrow aspiration is essential to diagnose
A) Iron deficiency anaemia
B) Hemolytic anaemia
C) Megaloblastic anaemia
D) chronic myeloid leukemia
42. Factor... is required for both intrinsic and extrinsic pathways of coagulation
A) XII
B) X
C) VII
D) VIII
43. Antibody dependent cytotoxicity in the pathogenesis of
A) Auto immune haemolytic anaemia
B) Tuberculoid leprosy
C) Extrinsic allergic alveolitis
D) Infantile eczema
44. Characteristic ECG change in acute pericarditis is

- A) Pathological Q wave in chest leads
B) ST depression in all leads except aVR leads
C) ST elevation in all leads except in aVR
D) T inversion in limb leads
45. Which of the following drugs when used for long produces systemic lupus erythematosus like syndrome (S.L.E.)
A) Digoxin
B) Mexilitine
C) Procainamide
D) Aspirin
46. With which of the following may osteoporosis be associated
A) Cushing's Syndrome
B) Myxoedema
C) Malabsorption
D) Vitamin A Deficiency
47. Which of the following statements is true of ESR?
A) Normal value fall slowly with age
B) Values are increased by the presence of Anaemia
C) In Dermatomyositis a normal level excludes active disease
D) It is usually abnormal in osteoarthritis
48. In which of the following disorder may an increase in dietary fibre be beneficial?
A) Iron deficiency anaemia
B) Osteomalacia
C) Diverticulosis
D) Diarrhoea
49. Which one of the following is true of tropical sprue?
A) Occurs only in the tropics
B) Commonly present with iron deficiency Anaemia
C) Jejunal biopsy shows villous atrophy
D) A gluten free diet is indicated
50. Parkinsonism may be induced by which of these drugs?
A) Paracetamol
B) Chlordiazepoxide
C) Phenothiazines
D) Thiazide Diuretics
51. Which one of the following is incorrectly matched?
A) Squatting-increase systemic vascular resistance
B) Isometric handgrip-decreases LV volume
C) Standing-decreases venous return
D) Valsalva Maneuver-reduces coronary blood flow
52. False statement regarding venous hum is
A) It is more common in children
B) It is often bilateral
C) It is reduced in intensity by Valsalva maneuver
D) It is increased in intensity by recumbency
53. Which one of the following differentiates Austin Flint murmur from mitral stenosis murmur?
A) Opening snap
B) Presystolic murmur
C) Mid-diastolic murmur
D) Both presystolic and mid-diastolic murmur

54. Which one of the following is incorrectly matched?
 A) Dilated cardio myopathy-Early diastolic murmur
 B) Congenital pulmonary regurgitation-Mid-diastolic murmur
 C) Mitral Valve prolapse-Late systolic murmur
 D) Acute tricuspid regurgitation-Early systolic murmur
55. In congenital pulmonary regurgitation the type of murmur is a
 A) High pitched murmur
 B) Decrescendo murmur
 C) Early diastolic murmur
 D) Murmur ends well before S₁
56. Which one of the following is incorrectly matched?
 A) Dopamine - β_1 receptors
 B) Dobutamine - Dopaminergic receptors
 C) Norepinephrine - α receptors
 D) Isoproterenol - β_2 receptors
57. Consider the following statements :
 Assertion (A) : Corticosteroids in Acute rheumatic carditis prevents the development of Rheumatic valvular disease
 Reason (R) : corticosteroids have anti-inflammatory effect. Now select your answer according to the coding system given below
 A) Both (A) and (R) are true, and (R) is the correct explanation of (A)
 B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
 C) (A) is true, but (R) is false
 D) (A) is false, and (R) is true
58. Which one of the following drugs is not useful in primary prophylaxis of Rheumatic fever?
 A) Sulphonamide
 B) Erythromycin
 C) Amoxicillin
 D) Cephalosporin
59. Commonest cause of Portal Hypertension in adults is
 A) Pre-hepatic obstruction
 B) Intra-hepatic obstruction
 C) Post-hepatic obstruction
 D) Regurgitation
60. Match List I correctly with List II and select your answer using the codes given below:
 List I
 A. Metacentric Chromosomes
 B. Homologous chromosomes
 C. Isochromosomes
 D. Acrocentric chromosomes
 List II
 1. Chromosomes with two identical arms
 2. Centromere near one end of the chromosomes
 3. Chromosomes bearing genes for the same character
 4. Centromere in the middle of the chromosomes
 A) A3, B4, C2, D1
 B) A4, B2, C1, D3
 C) A4, B3, C1, D2
 D) A3, B4, C1, D2
61. somatostatin inhibits release of
 A) Prolactin
 B) TRH
 C) Growth Hormone
 D) ACTH

62. The process by which normal serum enhances phagocytosis is called
A) Chemotaxis
B) Opsonization
C) Proteolysis
D) Bacteriolysis
63. Properties of haptens include
A) Immunogenicity and reactivity
B) Reactivity but no immunogenicity
C) Immunogenicity but no reactivity
D) Neither immunogenicity nor reactivity
64. The monokine (macrophage derived hormone) that is intimately involved in the immune response is
A) Interleukin – 1
B) Interleukin – 2
C) Macrophage - activating factor (MAF)
D) Migration - inhibiting factor (MIF)
65. The following is B cell specific antigen
A) Pokeweed mitogen (PWM)
B) Phytohemagglutinin (PHA)
C) Concanavalin A (Con A)
D) Sheep red blood cells (SRBSs)
66. Smoking as a Risk factor and Occupational exposure were found to have the following affect for Bladder Cancer:
A) Additive effect
B) Synergistic effect
C) Causative
D) Contributory
67. The prevention of development of risk factor in populations in which they have not yet appeared is termed as
A) Population strategy
B) High risk strategy
C) Primordial prevention
D) Primary prevention
68. The Epidemiological tool which measures the occurrence of some particular event in a population, during a given time period is termed as
A) Rate
B) Ratio
C) Proportion
D) Incidence
69. diseases which are imported into a country in which they do not otherwise occur (eg.) Rabies in U.K. is termed as
A) Epidemic
B) Sporadic
C) Exotic
D) Pandemic
70. Children who go on to develop anti social personality disorder in adulthood would be LEAST likely to
A) Engage in thievery
B) Attempt suicide
C) Be truant
D) Stay out late
71. Which of the following drugs is narcotic antagonist?
A) Chlordiazepoxide
B) Haloperidol (Haldol)
C) Methadone (Dolophine)
D) Naloxone (Narcan)
72. Wernicke-Korsakoff syndrome is seen in chronic alcohol abuse and is characterized by all the following symptoms except
A) Ataxia
B) Nystagmus and paralysis of certain ocular muscles

- C) Confabulation
D) Loss of remote memory
73. Delirium tremens, which can develop in persons who abstain from drinking after a prolonged period of alcohol use, is characteristically associated with all the following except
A) Bradycardia
B) Tremor
C) Vivid visual hallucinations
D) Disorientation to time and place
74. All the following drugs are commonly used to treat anxiety disorders except
A) Phenobarbital
B) Alprazolam (Xanax)
C) Buspirone (Buspar)
D) Imipramine (Tofranil)
75. Proptosis is the result of involvement of
A) 2nd Nerve
B) 3rd Nerve
C) 6th Nerve
D) 5th Nerve
76. Chromatolysis involves which?
A) Golgi apparatus
B) Mitochondria
C) Nissle granules
D) Neurofibrils
77. Non-bilious vomiting in infants presenting from birth is most commonly due to
A) Gastro-oesophageal reflux
B) Congenital hypertrophic pyloric stenosis
C) Achalasia cardia
D) Congenital oesophageal strictures
78. In new-born infants haematuria is usually due to
A) Posterior urethral valve
B) Urinary tract infection
C) Renal vein thrombosis
D) Ureterocele
79. Presence or absence of obstruction in equivocal hydro-nephrosis is best found out by
A) Intravenous urography
B) Diuresis renography using ^{99m}Tc diethylene triamine penta-acetic acid (DTPA)
C) Contrast CT Scan
D) Ultra Sound
80. Children with congenital neuropathic bladder dysfunction are best managed by
A) Providing ideal conduit
B) Clean intermittent catheterization
C) Urinary tract infection
D) Uretero sigmoidostomy
81. The high incidence of mortality and morbidity in neonates with posterior urethral valve is due to
A) Obstruction of ureters
B) Refluxing ureters
C) Urinary tract infection
D) Renal dysplasia
82. In congenital hypertrophic pyloric stenosis the biochemical abnormalities are
A) Hyperchloremic hypernatremic acidosis
B) Hyperchloremic hyperkalemic acidosis
C) Hypochloremic hyponatremic hypokalemic alkalosis
D) Hypochloremic hyponatremic hyperkalemic alkalosis
83. The unique feature of renal dysplasia is

- A) Tubules lined by primitive epithelium surrounded by swirls of mesenchyme
B) Primitive glomeruli
C) Foci of hyaline cartilage
D) Bizarre pelvi calyceal system
84. Double bubble appearance in a skiagram is indicative of
A) Duplication cyst of duodenum
B) Gastric web
C) Malrotation
D) Duodenal atresia
85. Nuclear scan is more advantageous than CT scan because
A) Images are of better resolution
B) Imaging could be done in moving and restless patient
C) Both anatomy and function of the system could be studied
D) Less expensive
86. The etiology of intestinal atresias is
A) Viral
B) Defective Vacuolisation
C) Hereditary
D) Vascular accident (intra-uterine)
89. Endotoxins produced by gram negative bacteria are usually
A) Proteins
B) Lipopolysaccharides
C) Fatty acids
D) Lecithin
90. Cryoprecipitate is produced from
A) Plasma
B) Fresh Blood
C) Fresh Frozen plasma
D) Platelet concentrate
91. Claudication pain occasionally occurs in Jaw Muscles due to
A) Atherosclerosis
B) TAO
C) Takayasu's disease
D) Tetanus
92. The integrity of Palmar arch is tested by
A) Allen's Test
B) Homan's Test
C) Paget's Test
D) Schwartz's Test
93. Carcinoma of the posterior third of the Tongue is best treated by
A) Partial glossectomy
B) Radical excision with Block Dissection
C) Radium Needle Implantation
D) Mega voltage X-ray from a linear accelerator
94. During reversal of Anaesthesia the drugs commonly used are
A) D-Tubocurarine
B) Neostigmine and Atropine
C) Scoline
D) Adrenaline or Nor-adrenaline
95. The early forces in wound healing include all of the following except
A) Migration of inflammatory cells
B) Fibrin clot
C) Fibro-elastic proliferation
D) Collagen Deposition
96. Circumcision is contraindicated in
A) Phimosi
B) Paraphimosi
C) Diabetes mellitus
D) Hypospadias

108. The combined Oral Contraceptive pill (O.C) is protective against the following except
A) Epithelial ovarian carcinoma B) Endometrial carcinoma
C) Cervical dysplasia D) Benign breast diseases
109. Episiotomy helps the following except
A) Avoids damages to pelvic floor B) Avoids post-partum haemorrhage
C) Prevents trauma to foetal head D) Allows better healing than tears
110. Indications for instituting single agent chemotherapy following evacuation of a hydatidiform mole usually include the following except
A) A rise in HUG titers B) A plateau of HCG titers for 3 successive weeks
C) Appearance of liver or brain metastasis D) Failure of HCG tires to return to normal 8 weeks after evacuation
111. Absolute contraindication to intrauterine contraceptive is
A) Uterine fibroids B) Immunosuppressive therapy
C) Previous caesarean section D) Lactation
112. The level of prolactin is highest in
A) Maternal serum B) Fetal serum
C) Amniotic fluid D) Cerebrospinal fluid of fetus
113. The commonest cause of abortion in the first trimester is
A) Germ plasm defect B) Incompetent OS
C) Infections D) Trauma
114. The indication for classical caesarean section in modern obstetrics is
A) Carcinoma cervix B) Foetal distress
C) Fundal Fibroid D) Mobile Head
115. Which of these scientists is called "Father of Microbiology"?
A) Robert Koch B) Pasteur
C) Lord Lister D) Antony Van Leeuwenhoek
116. P.Carinii are stained by the following technique:
A) Silver methanamine B) Giemsa stain
C) Leishmann stain D) Romanowsky stain
117. The parasites which do not require a second host for their lifecycles include
A) Rhizopodea B) Intestinal flagellates
C) Ciliatae D) Entamoeba histolytica
118. The mature quadrinucleate cysts of entamoeba histolytica passed in stool are resistant to
A) Dry atmosphere B) Moist atmosphere
C) Public water supply chlorination D) Boiling
119. Of the following vascular changes of aging, which is least harmful?

- A) Atherosclerosis
C) Degeneration of elastic lamina
- B) Intimal thickening
D) Medial fibrosis
120. Commonest cause of Portal Hypertension in adults is
A) Pre-hepatic obstruction
C) Post-hepatic obstruction
- B) Intra-hepatic obstruction
D) Regurgitation
- 121 The following are high risk factors for preterm labour except
A) Over distended uterus
C) Anaemia in mother
- B) Twin pregnancy
D) Diabetes mellitus complicating pregnancy (GDM)
- 122 In trigeminal neuralgia
A) Ophthalmic division is most frequently affected
C) Maxillary division is most frequently affected
- B) Mandibular division is most frequently affected
D) All the above divisions are equally affected