

PG-2011

MEDICAL

Test Admission Ticket No.				

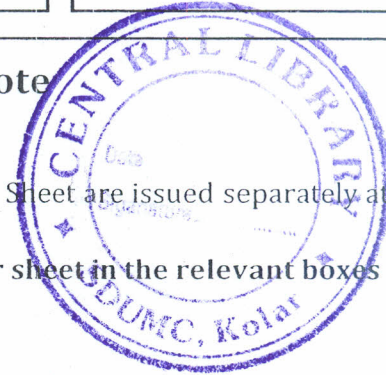
OMR Serial Number				

Question Booklet Version Code
B
(Write this Code on your OMR Answer Sheet)

Question Booklet Sr. No.
2239
(Write this number on your Answer Sheet)

Candidates Kindly Note

- There are totally 180 questions in this booklet.
- The question paper and OMR (Optical Mark Reader) Answer Sheet are issued separately at the start of the examination.
- **Please ensure to fill in the following on your OMR answer sheet in the relevant boxes :**
 - Name
 - Question Booklet Version Code
 - Question Booklet Serial Number
 - Test Admission Ticket Number
- Kindly sign on your OMR answer sheet, only in the presence of the invigilator.
- Candidate should carefully read the instructions printed on the Question Booklet and OMR Answer Sheet and make correct entries on the Answer Sheet. As Answer Sheets are designed for OPTICAL MARK READER (OMR) SYSTEM, special care should be taken to mark the entries accurately.
- Special care should be taken to fill your QUESTION BOOKLET VERSION CODE and SERIAL No. and TEST ADMISSION TICKET No. accurately. The correctness of entries has to be cross-checked by the invigilators.
- Mark your responses only as indicated on the OMR Answer Sheet.
- Choice and sequence for attempting questions will be as per the convenience of the candidate.
- Kindly **DO NOT** use whitener or scribble, make stray marks on this question booklet as well as on the OMR answer sheet.
- Fill the appropriate circle completely like this ● for answering the particular question with **BLACK/BLEU BALL POINT PEN** only. **USE OF PENCIL FOR MARKING IS PROHIBITED.**
- Before commencing the examination, please verify the all pages are printed correctly, if not please draw the attention of your room invigilator for further assistance.
- Each correct answer is awarded one mark.
- **There will be no Negative Marking.**
- No Mark/s will be awarded for multiple marking (marking multiple responses) of any question.
- **On the OMR answer sheet, use of whitener or any other material to erase/hide the circle once filled is not permitted.**
- Avoid overwriting and/or striking of answer once marked. **THINK BEFORE YOU INK.**
- Immediately after the prescribed examination time is over, the OMR sheet is to be returned to the invigilator.



1. Sheehan's Syndrome is due to:
 - a) Puerperal infection
 - b) Postpartum pituitary necrosis
 - c) Antepartum hemorrhage
 - d) Mastitis
2. Particulate inclusion from red cells are removed by spleen is called:
 - a) Pitting
 - b) Filtering
 - c) Phagocytosis
 - d) Culling
3. Which of the following is usually not a feature of peripheral neuropathy?
 - a) Pins and needles sensation
 - b) Impaired joint-position sense
 - c) Brisk tendon reflexes
 - d) Erectile dysfunction
4. A typical relaxed sarcomere is about $2.3 \mu\text{m}$ in length and contracts to about $2 \mu\text{m}$ in length. Within the sarcomere, the thin filaments are about $1 \mu\text{m}$ long and the thick filaments are about $1.5 \mu\text{m}$ long. What would be the overlaps of thick and thin filaments in the relaxed and contracted sarcomere?
 - a) $0.6 \mu\text{m}$ on each side in relaxed state; and in contracted it would be $0.75 \mu\text{m}$
 - b) $0.75 \mu\text{m}$ on each side in relaxed state; in contracted it would be about $0.6 \mu\text{m}$
 - c) $1.2 \mu\text{m}$ on each side in relaxed state; and in contracted it would be $1.5 \mu\text{m}$
 - d) None of the above
5. In a random sampling from a population chance of selecting a unit is:
 - a) Same and not known
 - b) Same and known
 - c) Not same
 - d) Not same and known
6. Tuberculin test was discovered by:
 - a) Von Pirquet
 - b) Heaf
 - c) Robert Koch
 - d) Ehrlich



7. The Estimated Average Requirement (EAR) of a nutrient is:
- The same as the RDA of that nutrient
 - An amount that should meet the requirement of half of the healthy individuals of a particular group
 - Based on the observed nutrient intake of a particular group
 - The highest level of nutrient deemed to pose no risk or adverse health effects on the particular population.
8. The property of cellular immortality refers to a cell's ability to:
- Grow new blood vessels
 - Invade through the basement membrane of its tissue
 - Resist apoptosis
 - Continue to divide indefinitely without limit to the number of cell generations
9. The transitional epithelium lining the urinary bladder is derived from
- Ectoderm
 - Endoderm
 - Mesoderm
 - Endoderm and Mesoderm
10. Ankyrin of the human erythrocyte membrane is a:
- Peripheral protein
 - Integral protein
 - Dimeric protein
 - None of the above
11. The neurotoxin Tetrodotoxin:
- Binds to voltage gated Na^+ channel and blocks Na^+ influx
 - Binds to nicotinic- ACh activated channels and blocks Na^+ influx
 - Binds to Ca^{++} channels blocking Ca^{++} influx
 - Binds to voltage gated K^+ channel and blocks K^+ efflux
12. The drug used in treating inoperable insulinomas is:
- Diazoxide
 - Hydralazine
 - Metyrosine
 - Fenoldopam

13. Human viruses characterized by helical symmetry of viral nucleic acid are:

- a) All enveloped viruses
- b) All DNA viruses
- c) Empty helical particles containing no nucleic acid produced in infected cells
- d) All classified into same virus family

14. Dry Submarine is a type of torture, which means:

- a) Tying of a plastic bag over the head
- b) Forced immersion of head in water
- c) Hitting with palms on both the ears
- d) Hitting to the soles of the feet

15. Relatively sensitive biomarker for heart failure with depressed ejection fraction is:

- a) Troponin T
- b) Troponin I
- c) C-Reactive protein
- d) B-Type natriuretic peptide

16. Which of the following is true in case of a compensated shock?

- a) Lactic acidosis
- b) Anuria
- c) Hypotension
- d) Increased respiratory rate

17. A high FSH (Follicle Stimulating Hormone) level denotes:

- a) Primary gonadal failure
- b) Obstructive lesion in the vasa epididymis
- c) Pituitary or hypothalamic failure
- d) Leydig cell dysfunction

18. All are features of Epidemic Dropsy **EXCEPT:**

- a) Convulsions
- b) Glaucoma
- c) Diarrhea
- d) Heart failure

19. J shaped population growth curve should be associated with:

- a) Exponential growth
- b) Biotic potential
- c) No environmental resistance
- d) All of the above

20. An infant born to alcoholic mother had microcephaly, cardiac abnormalities and died despite resuscitative efforts. During which period of pregnancy is alcohol most teratogenic:
- a) First two weeks
 - b) Third to ninth week
 - c) Ninth to twelfth week
 - d) Twelve to sixteenth week
21. Normal Anion Gap is generally observed in:
- a) Renal Tubular Acidosis
 - b) Methanol Toxicity
 - c) Lactic Acidosis
 - d) None of the above
22. Trientine is used in:
- a) Alzheimer's disease
 - b) Parkinsonism
 - c) Wilson's disease
 - d) Huntington's disease
23. Most specific test for organophosphorus poisoning is:
- a) RBC Cholinesterase level
 - b) Plasma cholinesterase level
 - c) RBC Uroporphyrin level
 - d) Serum organophosphorus level
24. Hypofluorescence in Fundus Fluorescein Angiography is seen in:
- a) Macular hole
 - b) Drusen
 - c) Subhyaloid hemorrhage
 - d) Choroidal neovascularisation
25. Cystoid macular edema is associated with the following ocular condition **EXCEPT:**
- a) Macular dystrophy
 - b) Panretinal Photocoagulation
 - c) Retinitis pigmentosa
 - d) Following Penetrating Keratoplasty

26. Buspirone acts selectively on the:
- a) 5HT 2C receptor
 - b) 5HT 1D receptor
 - c) 5HT 1A receptor
 - d) 5HT 2A receptor
27. The following are Cluster B Personality disorders **EXCEPT:**
- a) Antisocial Personality Disorder
 - b) Borderline Personality Disorder
 - c) Paranoid Personality Disorder
 - d) Histrionic Personality Disorder
28. Acute Physiology And Chronic Health Evaluation II (APACHE II) includes all of the following **EXCEPT:**
- a) Rectal temperature in degree Celsius
 - b) Mean blood pressure in mm of Hg
 - c) Blood urea
 - d) Heart rate
29. Systemic Inflammatory Response Syndrome (SIRS) is diagnosed by following **EXCEPT:**
- a) Fever (oral temperature of more than 38°C)
 - b) Tachypnea (respiratory rate more than 24 breaths / minute)
 - c) Bradycardia (heart rate less than 50 / minute)
 - d) Leukopenia (total leucocyte count less than 4000 / micro litre)
30. In Crohns disease all are true **EXCEPT:**
- a) Can affect any part of gastrointestinal tract
 - b) Affects full thickness of bowel wall
 - c) Recurrence uncommon after resection
 - d) Causes stricture and fistulation
31. Which of the following benign breast condition has increased risk of developing cancer
- a) Adenosis
 - b) Apocrine metaplasia
 - c) Squamous metaplasia
 - d) Atypical hyperplasia
32. Disseminated intravascular coagulation is commonly seen in:
- a) Placenta Praevia
 - b) Abruptio Placenta
 - c) Vasa Praevia
 - d) Succenturiate Lobe

33. Estrogen content of 3rd generation oral contraceptive pills is:
- a) 20-30 microgram
 - b) 40-50 microgram
 - c) 60 microgram
 - d) 100 microgram
34. Conversion of the cell to an acidophilic opaque "Tombstone" is seen in:
- a) Caseous Necrosis
 - b) Liqifaction Necrosis
 - c) Fat Necrosis
 - d) Coagulation Necrosis
35. The Muscles of the Tongue developed from:
- a) Pre-occipital myotomes
 - b) Occipital myotomes
 - c) Cervical myotomes
 - d) Mesenchyme locally
36. The most appropriate laboratory findings in Type IV Renal Tubular Acidosis:
- a) The urine pH<5.5; with K⁺ normal or low
 - b) The urine pH>5.5; with hypokalemia
 - c) The urine pH<5.5; with hyperkalemia
 - d) None of the above
37. Among the Oncofetal Antigens as tumour markers; The Tennessee Antigen is a:
- a) Glyco protein with molecular weight 600 KD
 - b) Glyco protein with molecular weight 100 KD
 - c) Glyco protein with molecular weight 40 KD
 - d) Cytokeratins
38. In which of the following parasites all the stages are infectious for man:
- a) Cryptosporidium parvum
 - b) Blastocystis
 - c) Toxoplasma gondii
 - d) Sarcocystis
39. The media used for cultivation of Legionella pneumophila:
- a) Skirrow's media
 - b) 20% horse serum & yeast extract
 - c) Buffered charcoal yeast extract media
 - d) Ellinghausen, McCullough, Johnson, Harris media

40. Non vascular soft tissue calcification and hypocalcaemia occurs in:

- a) Hypoparathyroidism
- b) Secondary hyperparathyroidism
- c) Sarcoidosis
- d) Pseudo hyperparathyroidism

41. Clinical features of miliary tuberculosis include all of the following **EXCEPT:**

- a) Night sweats
- b) Bronchial breathing
- c) Headache
- d) Hepatosplenomegaly

42. In hypertrophic ventricular myopathy the loudness of the mid-systolic crescendo decrescendo murmur :

- a) Increases during Valsalva manoeuvre due to increased venous return
- b) Decreases on standing due to decreased venous return
- c) Decreases on standing due to increased ventricular filling
- d) Increases on squatting due to increased venous return

43. Homologous recombination in E.coli forms heteroduplex regions of DNA containing mismatched bases. Why are these mismatches not eliminated by mismatch repair system?

- a) Because both the strands are methylated
- b) Because one of the strands methylated
- c) Because both strands are acetylated
- d) None of the above

44. Amyloid stroma is characteristically seen in:

- a) Papillary carcinoma
- b) Follicular carcinoma
- c) Medullary carcinoma
- d) Anaplastic carcinoma

45. Gastrinomas are commonly seen in:

- a) Sherren's Triangle
- b) Passaro Triangle
- c) Calot's Triangle
- d) Cardio-oesophageal junction

46. Tubal patency can be detected by the following test:
- a) Colposcopy
 - b) Hysterosalpingogram
 - c) Hysteroscopy
 - d) None of the above
47. What statistical test of hypothesis could be used to compare the difference in mean of two independent samples:
- a) Chisquare test
 - b) Unpaired or independent t-test
 - c) Analysis of variance
 - d) Paired t-test
48. The intrinsic pathway of coagulation includes all the following **EXCEPT:**
- a) Factor VII
 - b) Factor VIII
 - c) Factor IX
 - d) Factor XI
49. The vascular type of Ehlers – Danlos syndrome results from abnormalities of:
- a) Type – I Collagen
 - b) Type – II Collagen
 - c) Type – III Collagen
 - d) Type – IV Collagen
50. All of the following are derivatives of Neural Crest **EXCEPT:**
- a) Melanocyte
 - b) Adrenal medulla
 - c) Sympathetic ganglion
 - d) Cauda equina
51. Grains containing gluten to be omitted in diet in celiac disease are all **EXCEPT:**
- a) Wheat
 - b) Rye
 - c) Barley
 - d) Corn

52. Progressive mental and physical debilitation beginning at age one with corneal opacity as well as with an enzyme deficiency of alpha-L-Iduronidase is suggestive of a lysosomal storage disease:
- a) Gaucher's disease
 - b) Krabbe's disease
 - c) Fabry's disease
 - d) Hurler's disease
53. Methoxsalen is used in all these conditions **EXCEPT:**
- a) Vitiligo
 - b) Psoriasis
 - c) T-cell lymphoma
 - d) Melanoma
54. Sickle cell anaemia is an important predisposing feature in the development of osteomyelitis caused by:
- a) Staphylococcus aureus
 - b) Salmonella typhi
 - c) Escherichia coli
 - d) Pseudomonas aeruginosa
55. Tribadism is:
- a) Having sexual intercourse with an animal
 - b) Female homosexuality
 - c) Anal intercourse
 - d) A desire to be identified with opposite sex
56. A 35 years old lady was operated for conductive deafness 2 years back. She had dramatic improvement in hearing following the surgery. However, she developed deafness in the operated ear since 1 week. She also complained of disequilibrium, and tinnitus in the affected ear and fullness in the affected ear. Above symptoms started 1 week back following severe sneezing while shifting heavy and dusty luggage in her house. On examination, there was no external scar, the tympanic membrane was intact, and audiogram showed mixed hearing loss. Patient had nystagmus on using seigle's pneumatic ear speculum.

The most likely diagnosis is:

- a) Menieres disease
- b) Cochlear otosclerosis
- c) Perilymph Fistula
- d) Lermoyez syndrome

57. Retinal Pigment Epithelium is embryologically derived from:

- a) Neural crest cells
- b) Neural ectoderm
- c) Surface ectoderm
- d) Mesoderm

58. Which of the following has maximum MAC(Minimum Alveolar Concentration) value:

- a) Sevoflurane
- b) Ether
- c) Xenon
- d) Desflurane

59. The commonest precipitating factor for recurrent Erythema multiforme is:

- a) NSAID's
- b) Streptococcal infection
- c) Herpes simplex infection
- d) Histoplasmosis

60. Which of the following statements is false regarding congenital renal anomalies?

- a) Incidence of unilateral renal agenesis is 1 in 1000 to 1 in 2000
- b) Thoracic kidney can present as a posterior mediastinal mass
- c) Horse-shoe kidney is associated with increased risk of neuroblastoma
- d) There is increased incidence of vesico-ureteric reflux in crossed, fused and ectopic kidneys

61. The following apply for Factitious disorder EXCEPT::

- a) Previously known by the eponym Munchausen syndrome
- b) The symptoms are intentionally produced
- c) The patients have clear-cut motives that drive them to feign the symptoms
- d) High rates of substance abuse, mood disorder and borderline personality disorder seen in such patients

62. In a child with suspected neck and spine trauma, to open the airway the following manouvre is done:

- a) Head tilt
- b) Chin lift
- c) Jaw thrust
- d) Finger sweep

63. Absent thumb and hyperpigmentation in a child with anemia are clues to the diagnosis of:
- a) Dyskeratosis congenita
 - b) Myelodysplastic anemia
 - c) Pure red cell aplasia
 - d) Fanconi's anemia
64. A young man suffered third degree burns over much of his body and is hospitalized in a severe catabolic state. An individual in this state requires about $40 \text{ kcal kg}^{-1} \text{ day}^{-1}$ and $2 \text{ g protein kg}^{-1} \text{ day}^{-1}$ to be in positive caloric and nitrogen balance. This young man weighs 140 lb (64 kg). Total parenteral nutrition (TPN) is started with a solution containing 20% glucose and 4.25% amino acids (the form in which protein is supplied).
- If 3000 g. of solution is infused per day:
- a) The patient would not be getting sufficient protein
 - b) The calories supplied would be inadequate
 - c) Both protein and calories would be adequate to meet requirements
 - d) This is too much protein being infused
65. Transjugular Intrahepatic Porto Systemic Stent (TIPSS) shunt involves creation of shunt between:
- a) Portal vein and vena cava
 - b) Portal vein and hepatic vein
 - c) Hepatic vein and vena cava
 - d) Portal vein and hepatic artery
66. Cystic glandular hyperplasia of the endometrium is characteristic of:
- a) Polymenorrhoea
 - b) Hypometrorrhagia
 - c) Metropathica hemorrhagica
 - d) Ammenorrhoea
67. The drug of choice for suppression of lactation is:
- a) Combined oral contraceptive
 - b) Cabergolin
 - c) Progesterone only pill
 - d) Mifepristone
68. Basic measure of disease frequency is:
- a) Rate
 - b) Ratio
 - c) Both of the above

d) None of the above

69. **"FRAMINGHAM STUDY"** is about:

- a) Risk factors of Coronary Heart Disease
- b) Risk Factors of Schizophrenia
- c) Risk Factors of Diabetes
- d) Risk Factors of Road Traffic Accidents

70. Ovariectomy before 6 weeks of pregnancy:

- a) Does not affect pregnancy as it depends on placental hormones
- b) Affects pregnancy as it depends on corpus luteum
- c) Affects pregnancy as it depends on Gonadotropins
- d) Does not affect pregnancy as it does not depend on ovary

71. Decreased extracellular calcium is associated with increased:

- a) Clotting tendency
- b) Nerve excitability
- c) Muscle flaccidity
- d) Bone deposition

72. Establishment of latent infection frequently occurs in:

- a) Filo viruses
- b) Herpes viruses
- c) Calci viruses
- d) Pox viruses

73. Non-oncogenic retroviruses (Lenti viruses)

- a) Have related sequences endogenous in normal cells
- b) Contain DNA genome
- c) Cause rapidly progressive neurologic disease
- d) Infect cells of immune system

74. Paltauf's Haemorrhage occurs in:

- a) Strangulation
- b) Hanging
- c) Drowning
- d) Choking

75. A 45 years old man presented with hoarseness of voice of 3 months duration. Laryngoscopy showed an ulceroproliferative growth involving (Rt.) vocal cord and anterior commissure. (Rt.) vocal cord was fixed. Biopsy showed squamous carcinoma. There was no erosion of the thyroid cartilage.

The treatment of choice would be:

- a) Radiotherapy + Salvage Surgery
- b) Concurrent Radiotherapy + Chemotherapy
- c) Neo adjuvant Chemotherapy + Surgery
- d) Neo adjuvant Chemotherapy followed by Radiotherapy

76. Multiple ovarian cysts are features of:

- a) Infantile polycystic kidney disease
- b) Stein Leventhal syndrome
- c) Gardner's syndrome
- d) Metropathia hemorrhage

77. The deformity in club foot is:

- a) Equinus
- b) Equino valgus
- c) Equino varus
- d) Calcaneo valgus

78. In a patient who has sustained multiple fractures following RTA, the first thing to do is:

- a) Splint all fracture
- b) Get x-ray done
- c) Open reduction of fractures
- d) Secure airway and treat shock

79. Bronchial Asthma is best diagnosed by:

- a) Wheeze
- b) Cough and Dyspnea
- c) FEV₁ values (Forced expiratory volume in one second)
- d) Demonstration of reversible obstruction

80. A 28 years old female, has diarrhea, mild cough with slightly productive sputum, high grade fever, confusion with bilateral wide spread pulmonary infiltrates on X-ray chest, the diagnosis is:

- a) Haemophilus influenza
- b) Mycoplasma pneumonia
- c) Streptococcal pneumonia

d) Legionnaire's disease

81. All are true about Congenital Hereditary Endothelial Dystrophy (CHED) **EXCEPT:**

- a) Bilateral, edematous cloudy corneas
- b) Increased corneal thickness
- c) Occurs in an otherwise healthy term infant
- d) Increased horizontal corneal diameter

82. Majority cases of Eczema herpeticum is caused by :

- a) Coxsackie A 16 virus
- b) Vaccinia virus
- c) Hepatitis virus
- d) Herpes simplex virus

83. Epidermolytic hyperkeratosis on histopathology of skin is seen in:

- a) Ichthyosis Vulgaris
- b) Lamellar Ichthyosis
- c) Bullous Ichthyosiform erythroderma
- d) Non Bullous Ichthyosiform erythroderma

84. HbS polymerizes because:

- a) The structure shifts to bury valine in the interior of the protein
- b) The C-terminal end of the chain has been modified
- c) A positive charge has been introduced on the surface to attract negative charges
- d) The hydrophobic group on the surface is attracted to other hydrophobic groups.

85. Malignant cancer cells have all of the following properties **EXCEPT:**

- a) Unregulated cell division
- b) Inhibition of angiogenesis
- c) Resistance to apoptosis
- d) Cellular immortality

86. Which of the following heart disease is the most dangerous during pregnancy:

- a) Aortic stenosis
- b) Mitral regurgitation
- c) Pulmonary stenosis
- d) Mitral valve prolapse

87. Torsion of ovarian cyst during pregnancy is commonly seen in:

- a) Dermoid cyst
- b) Serous cyst adenoma
- c) Mucinous cyst adenoma
- d) Theca lutein cyst

88. Helicobacter pylori colonization is implicated in all of the following **EXCEPT:**

- a) Gastro-oesophageal reflux
- b) Duodenal ulcer disease
- c) Peptic ulcer disease
- d) Gastric Mucosa Associated Lymphoid Tissue lymphoma

89. Which of the following anti-mycobacterial drugs require dose reduction in a patient with an estimated glomerular filtration rate of 25ml/min?

- a) Isoniazid
- b) Ethambutol
- c) Streptomycin
- d) Rifampicin

90. Which one of the following is true about primary oocyte:

- a) All primary oocyte are formed in prenatal life
- b) All primary oocyte are formed at puberty
- c) All primary oocyte are formed after menarche
- d) Primary oocyte are formed continuously from puberty until menopause

91. An 18 months old boy was brought to the casualty with bouts of cough and respiratory distress, which started during sleep at night. There was history of nasal discharge and low grade fever for 3 days duration. On auscultation, there was stridor both during inspiration and expiration. The treatment of choice would be:

- a) Tracheostomy
- b) Intra venous Hydrocortisone
- c) Salbutamol Nebulization
- d) Epinephrine Nebulization + Budesonide Nebulization

92. Atropine as Pre-Anaesthetic medication has all effects **EXCEPT:**

- a) Decreases secretion
- b) Bronchoconstriction
- c) Prevent Hypotension
- d) Prevent Bradycardia

93. In Guedels stages of Anaesthesia, light reflex is lost in which stage:
- a) Stage III-Plane 2
 - b) Stage III-Plane 3
 - c) Stage III-Plane 4
 - d) Stage IV
94. Acute hyperkalemia is associated with one of the following change in electrocardiography:
- a) Small T waves
 - b) QRS widening
 - c) QRS shortening
 - d) Decreased PR interval
95. The deep tendon reflex requires all of the following structures to be functional **EXCEPT:**
- a) Alpha motor neurons
 - b) Gamma motor neurons
 - c) Spindle afferent neurons
 - d) Pyramidal neurons
96. Which of the following is cut in medio-lateral episiotomy:
- a) Transverse perineal muscle
 - b) Transverse perineal and bulbospongiosus
 - c) Transverse perineal, bulbospongiosus and levator ani
 - d) Transverse perineal, bulbospongiosus, levator ani and external anal sphincter
97. Carcinoma cervix stage III B is treated by:
- a) Chemo Radiation
 - b) Surgery
 - c) Chemotherapy
 - d) Palliative Radiotherapy
98. Contraction of the ciliary muscles:
- a) Relaxes the lens ligaments and increases the anterior curvature of lens
 - b) Contracts the lens ligaments and increases the anterior curvature of lens
 - c) Relaxes the lens ligaments and decreases the anterior curvature of lens
 - d) Contracts the lens ligaments and decreases the anterior curvature of lens
99. All are vasoconstrictor peptides **EXCEPT:**
- a) Endothelin
 - b) Neuropeptide Y
 - c) Urotensin

- d) Neurotensin
100. Leber's hereditary optic neuropathy, which leads to sudden blindness in early adulthood is due to:
- a) Mutation of nuclear DNA
 - b) Mutation of mitochondrial DNA
 - c) Excision repair defect in nuclear DNA
 - d) None of the above
101. K-Complexes are seen in:
- a) Stage 1 NREM sleep
 - b) Stage 2 NREM sleep
 - c) Stage 3 & 4 NREM sleep
 - d) REM sleep
102. Legg-Calve-Perthes disease is commonly seen in age group of:
- a) 1-5 years
 - b) 5-10 years
 - c) 10-15 years
 - d) 15-20 years
103. Sequestered lobe of lung is commonly supplied by:
- a) Pulmonary artery
 - b) Inter costal artery
 - c) Descending aorta
 - d) Bronchial artery
104. World breast feeding week is celebrated:
- a) From 1st to 7th of August
 - b) From 1st to 7th of September
 - c) From 15th to 22nd of August
 - d) From 15th to 22nd of September
105. A clinical use of recombinant DNA technology is to have rapidly replicating bacteria to produce large amounts of specific proteins (e.g., hormones). Expression of a eukaryotic gene in prokaryotes involves:
- a) A Shine-Delgarno (SD) sequence in mRNA
 - b) Absence of introns
 - c) Regulatory elements upstream of the gene
 - d) All of the above

106. The primary effect of the consumption of excess protein beyond the body's immediate needs will be:
- a) Excretion of the excess as protein in the urine
 - b) An increase in the "storage pool" of protein
 - c) An increased synthesis of muscle protein
 - d) An increase in the amount of adipose tissue
107. All are risk factors of early onset sepsis **EXCEPT:**
- a) Choriocamnionitis
 - b) PROM of 2 hours
 - c) Prematurity
 - d) Very low birth weight infant
108. In Monteggia fracture dislocation is:
- a) Fracture of olecranon
 - b) Fracture of radius and ulna
 - c) Distal radioulnar joint dislocation
 - d) Dislocation of radial head with fracture of proximal ulna
109. Obsessive-Compulsive Disorder is characterized by possible abnormalities of which of the following brain structures?
- a) Orbital frontal cortex
 - b) Caudate nucleus
 - c) Globus pallidus
 - d) All of the above
110. The commonest complication of Herpes zoster is:
- a) Scar sarcoid
 - b) Encephalitis
 - c) Guillian Barre Syndrome
 - d) Post herpetic neuralgia
111. The procedure rarely done in the management of Recurrent corneal erosion is:
- a) Phototherapeutic Keratectomy
 - b) Lamellar Keratoplasty
 - c) Anterior stromal puncture
 - d) Superficial Keratectomy

112. Preservative used for alcohol estimation in blood is:
- a) 10% Formalin
 - b) Saturated solution of sodium chloride
 - c) Sodium Fluoride
 - d) Heparin
113. Tiagabine is a:
- a) Inhibitor of GABA aminotransferase
 - b) Act directly on GABA receptors
 - c) Inhibitor of GABA uptake
 - d) Decrease the release of glutamate
114. The drug which is a thrombopoietic growth factor is:
- a) Sargramostim
 - b) Darbepoetin alfa
 - c) Filgrastim
 - d) Oprelvekin
115. In different organisms sucrose can be cleaved either by hydrolysis or by phosphorolysis. Calculate the ATP yield per mole of sucrose metabolized by anaerobic glycolysis starting with (i) hydrolytic cleavage and (ii) phosphorolytic cleavage.
- a) (i) 4 (ii) 5
 - b) (i) 4 (ii) 3
 - c) (i) 4 (ii) 4
 - d) None of the above
116. Entry of glucose into skeletal muscle is increased in exercise by:
- a) Increase secretion of insulin
 - b) Increase transport by insulin dependent GLUT transporters
 - c) Increase transport by insulin independent GLUT transporters
 - d) Increase transport by glucagons dependent GLUT transporters
117. While exposing kidney from behind, all of the following nerves are liable to injury **EXCEPT:**
- a) Lateral cutaneous nerve of thigh
 - b) Ilioinguinal Nerve
 - c) Subcostal Nerve
 - d) Iliohypogastric Nerve

118. All the following hepatitis viruses have a carrier state **EXCEPT:**
- a) Hepatitis A Virus (HAV)
 - b) Hepatitis B Virus (HBV)
 - c) Hepatitis C Virus (HCV)
 - d) Hepatitis D Virus (HDV)
119. Farmer's lung occurs due to
- a) Sugarcane dust
 - b) Cotton fibre dust
 - c) Mouldy Hay/Grain dust
 - d) Asbestos fibre
120. The Primary Health centre in rural areas covers a population of
- a) 30000
 - b) 40000
 - c) 50000
 - d) 15000
121. Peroxisome Biogenesis Disorders (PBDs) are of
- a) Autosomal dominant in nature
 - b) Autosomal recessive in nature
 - c) X-linked recessive in nature
 - d) X-linked dominant in nature
122. Characteristic feature of viral pneumonia is:
- a) Interstitial mononuclear infiltration
 - b) Fibrotic septa
 - c) Intra alveolar proteinaceous exudate
 - d) Hyaline membrane alveolar lining
123. Emphysema pathologically involves beyond:
- a) Bronchi
 - b) Terminal Bronchiole
 - c) Respiratory Bronchiole
 - d) Alveolar Sac

124. Analysis of a serum sample provided the following conventional values for urea 40mg/dl and creatinine 1.3mg/dl. The corresponding SI (Système International Unit) are:
- a) 6.6 m mol/L and 120 μ mol/L
 - b) 3.3 m mol/L and 60 μ mol/L
 - c) 13.2 m mol/L and 240 μ mol/L
 - d) None of the above
125. Diphtheria toxin:
- a) Acts catalytically
 - b) Releases incomplete polypeptide chains from the ribosome
 - c) Activates translocase
 - d) Prevents release factor from recognizing termination signals
126. In which of the following neurological conditions is MRI examination preferred over CT examination?
- a) Low back pain with focal neurological signs
 - b) Acute head trauma
 - c) Subarachnoid haemorrhage
 - d) Acute parenchymal haemorrhage
127. The Platelet Derived Growth Factor (PDGF) is the Oncogene product of:
- a) sis oncogene
 - b) ras oncogene
 - c) raf oncogene
 - d) flg oncogene
128. Which of the following tests is **NOT** necessary before initiating anticholinesterase and glucocorticoid therapy in a patient diagnosed with myasthenia gravis
- a) MRI of mediastinum
 - b) Purified Protein Derivative skin test
 - c) Lumbar puncture
 - d) Thyroid function tests
129. The strong winged mosquito is:
- a) Anopheles
 - b) Culex
 - c) Aedes
 - d) Mansonia

130. Several studies show that 85% of cases of lung cancer are due to cigarette smoking. It is a measure of:
- a) Relative risk
 - b) Population-attributable risk
 - c) Attributable risk
 - d) Absolute risk
131. Apamine is a peptide toxin present in:
- a) Viper
 - b) Spider
 - c) Honey bee
 - d) Mushroom
132. V-8 protease from *Staphylococcus aureus* cleaves the peptide bond where N terminal side amino acid present can be:
- a) Asp, Glu
 - b) Lys, Arg
 - c) Tyr, Trp
 - d) No specificity
133. Percentage and dose of thiopentone sodium used for induction of Anaesthesia are:
- a) 2.5% and 10 milligrams/kg respectively
 - b) 1.5% and 2.5 milligrams/kg respectively
 - c) 2.5% and 2.5 milligrams/kg respectively
 - d) 2.5% and 5 milligrams/kg respectively
134. Composition of EMLA (Eutectic Mixture of Local Anaesthetics) is:
- a) Prilocaine plus lidocaine
 - b) Prilocaine plus procaine
 - c) Procaine plus lidocaine
 - d) Procaine plus tetracaine
135. The most common type of lung cancer in Women and Non smokers is:
- a) Adenocarcinoma
 - b) Squamous cell carcinoma
 - c) Bronchioloalveolar carcinoma
 - d) Large cell carcinoma

136. Bilirubin production per Kg/day in a normal new born is:
- a) 1-3 mg
 - b) 3-6 mg
 - c) 6-10 mg
 - d) 10-15 mg
137. Human Transmissible Spongiform Encephalopathies (TSEs) are infectious disease caused by
- a) RNA Virus
 - b) DNA Virus
 - c) Prion proteins
 - d) None of the above
138. The “retribution model” is primarily suggested for treatment of:
- a) Somatoform disorders
 - b) Social phobia
 - c) Generalized Anxiety Disorder
 - d) Body Dysmorphic Disorder
139. IgG:
- a) Is found primarily in mucosal secretions
 - b) Has highest molecular weight of all immunoglobulins
 - c) Contains carbohydrate covalently attached to the H chain
 - d) Plays an important role in allergic responses
140. Which of the following chemotherapeutic agents works by impairing *de novo* purine synthesis?
- a) Acyclovir
 - b) 5-fluorouracil
 - c) Methotrexate
 - d) Hydroxyurea
141. Short chain fatty acids are produced and absorbed in the:
- a) Duodenum
 - b) Ileum
 - c) Colon
 - d) Stomach

142. A non enzymatic cleave of protein using cynogen bromide specifically cleaves the peptide bond at the carboxyl side of:
- a) Cysteine
 - b) Leucine
 - c) Methionine
 - d) Tyrosine
143. The drug that inhibits the transport of acetylcholine from the cytoplasm in to the vesicles by a vesicle –associated transporter is:
- a) Reserpine
 - b) Vesamicol
 - c) Cholecystokinin
 - d) Galanin
144. A 15 years old girl presented with a midline cystic swelling in the neck of 3 years duration. The swelling was 2 x 3 cms in size and moved on deglutition. Ultrasound scan showed solid and fluid components in the cyst and a normal thyroid gland. FNAC from the cyst showed benign thyroid tissue and clear fluid.
The treatment would be:
- a) Sistrunk's Operation
 - b) Excision of the cyst
 - c) Aspiration of the cyst
 - d) Excision of the cyst and arch of hyoid bone
145. All are true about Anterior Ischemic Optic Neuropathy (AION) EXCEPT::
- a) Most cases are of arteritic type – Arteritic AION
 - b) Rapid onset of painless visual loss usually unilateral
 - c) Most common visual field defect is – altitudinal visual field defect
 - d) Affected eye shows Relative Afferent Pupillary Defect (RAPD)
146. The FAVIC type of Tinea capitis is caused by:
- a) T. verrucosum
 - b) T. schonleini
 - c) T. mentagrophytes
 - d) T. rubrum

147. Regarding schizophrenia and its treatment, the following statements are correct **EXCEPT:**

- a) Clozapine is the gold standard drug for treatment-resistant schizophrenia
- b) Second generation antipsychotics are agonists of 5HT_{2A} and 5HT_{2C} receptors apart from being D₂ antagonists
- c) Schizophrenia patients have higher prevalence of neurological soft signs when compared to healthy subjects
- d) Disorganized schizophrenia is otherwise referred to as hebephrenic schizophrenia

148. In Henoch Schonlein Purpura, the following are true **EXCEPT:**

- a) Vasculitis of medium size vessels
- b) Palpable purpura over lower limbs
- c) Skin biopsy shows leukocytoclastic vasculitis
- d) Testicular torsion is one of the complication

149. Excess dietary protein can cause a rapid excretion of:

- a) Calcium
- b) Copper
- c) Iodine
- d) Iron

150. A human population has a higher than usual percentage of individuals with a genetic disease. The most likely explanation is:

- a) Natural selection
- b) Gene flow
- c) Genetic drift
- d) All of the above

151. Neoadjuvant chemotherapeutic drug of choice in oesophageal carcinoma is:

- a) Methotrexate
- b) Doxorubicin
- c) Cisplatin
- d) Cyclophosphamide

152. Dumping syndrome occurs least with

- a) Selective vagotomy
- b) Truncal vagotomy
- c) Partial gastrectomy
- d) Highly selective vagotomy

153. One of the following is **NOT** a feature of Becker's muscular dystrophy :
- a) Cardiac involvement
 - b) X-linked inheritance
 - c) Raised Serum Creatinine Kinase levels
 - d) Genetic defect is myosin gene
154. The most common feature of pyogenic liver abscess is:
- a) Fever
 - b) Pain abdomen
 - c) Hepatomegaly
 - d) Jaundice
155. Indications for choledochotomy include all **EXCEPT:**
- a) History of common bile duct stones
 - b) History of jaundice or cholangitis
 - c) Cholecystitis
 - d) Abnormal liver function tests
156. Which one of the following is **NOT** Ranson's prognostic criterion in acute Pancreatitis
- a) Age > 45 years
 - b) White blood cells > 16000/mm³
 - c) Blood glucose > 10 mmol/L
 - d) LDH > 700units/L
157. Which of the following is not true about target couple?
- a) They are part of eligible couples
 - b) Couples of reproductive age group
 - c) Eligible couples who have not had children yet
 - d) Couples practicing barrier methods
158. Most cases of Ghon's complex progress to:
- a) Cavitation
 - b) Fibrosis and Calcification
 - c) Tuberculous pneumonia
 - d) Miliary tuberculosis

159. The following statements concerning the internal capsule are correct **EXCEPT:**
- a) It is continuous below with the tectum of the mid Brain
 - b) It has an anterior limb and a posterior limb which are in a straight line
 - c) The Genu and the anterior part of the posterior limb contain the cortico bulbar and cortico spinal fibres
 - d) It is related medially to the lentiform nucleus
160. When the neck of the femur is fractured psoas major acts as/to :
- a) Maintain the vertebral column up right
 - b) Lateral rotators of the femur
 - c) Medial rotators of the femur
 - d) Flexion of the hip joint
161. Hepatic lesion diagnosed with high accuracy using nuclear imaging is:
- a) Hepatocellular carcinoma
 - b) Hepatic adenoma
 - c) Focal nodular hyperplasia
 - d) Cholangiocarcinoma
162. Delorme's procedure is used for:
- a) Solitary rectal ulcer
 - b) Rectal bilharziasis
 - c) Proctalgia fugax
 - d) Rectal prolapse
163. Which of the following micronutrient supplementation is recommended during an episode of acute diarrheal illness?
- a) Iron
 - b) Selenium
 - c) Zinc
 - d) Magnesium
164. Chromium containing low molecular protein chromodulin
- a) Suppresses the effect of insulin
 - b) Competes with calmodulin
 - c) Potentiates the effect of insulin
 - d) None of the above

165. Non fluent aphasia is associate with lesions in:
- a) Wernicke's area
 - b) Broca's area
 - c) Areas 40,41,42
 - d) Angular Gyrus
166. A man aged 29 years has an abscess with a strain of beta lactamase positive *Staphylococcus aureus*. This means that the organism is resistant to:
- a) Erythromycin, Clarithromycin and Azithromycin
 - b) Penicillin G, Ampicillin and Piperacillin
 - c) Cefazolin, Ceftriaxone and Cefepime
 - d) Vancomycin, Linezolid and Minocycline
167. A middle aged man from North East India presented with bilateral neck swellings of 1 ½ months duration. He had 2 episodes of epistaxis last month. Nasopharyngoscopy showed a mass behind the eustachian tube opening.
- The most likely diagnosis would be:
- a) Nasopharyngeal Angiofibroma
 - b) Nasopharyngeal Bursitis
 - c) Nasopharyngeal Carcinoma
 - d) Nasopharyngeal minor salivary gland tumour
168. Narcolepsy is characterized by all EXCEPT:
- a) Excessive day-time sleeping
 - b) Irresistible non-refreshing sleep episodes
 - c) Sleep Paralysis
 - d) Cataplexy
169. Eye-Movement Desensitization and Reprocessing (EMDR) is employed in the treatment of:
- a) Anorexia Nervosa
 - b) Oculogyric crisis
 - c) Post-traumatic Stress Disorder
 - d) Voyeurism
170. Which of the following is not suggestive of rheumatic arthritis:
- a) Large joints are involved
 - b) Ankylosis of the joint is a frequent complication
 - c) Pain is exquisitely sensitive to aspirin
 - d) Migratory polyarthritis is usual

171. All are features of phenylketonuria **EXCEPT:**
- a) Mental retardation
 - b) Microcephaly
 - c) Hyperpigmentation
 - d) Mousy odour
172. All the following are DNA oncogenic viruses, **EXCEPT:**
- a) Human T-lymphotrophic Virus 1 (HTLV-1 virus)
 - b) Papilloma virus
 - c) Epstein Barr Virus (EB Virus)
 - d) Kaposi Sarcoma Herpes Virus (KSHV)
173. A 45 year old coal mine worker presents with cutaneous nodules, joint pains and occasional cough with dyspnea. His chest radiograph shows multiple small (1-4 cm) nodules in unilateral lung fields, some of the nodules show cavitations and specks of calcification. Most likely, these features are diagnostic of:
- a) Sjogren syndrome
 - b) Caplan's syndrome
 - c) Silicosis
 - d) Wegner's granulomatosis
174. Causes of transient incontinence in old age are all of the following **EXCEPT:**
- a) Acute confusional state
 - b) Detrusor over activity
 - c) Urinary tract infection
 - d) Medication
175. The best acceptable operation for a rectal carcinoma at 5 cm from anal verge is:
- a) Anterior resection
 - b) Abdominal perineal resection
 - c) Posterior resection
 - d) Local resection
176. The haemorrhage from ectopic gastric mucosa of Meckels diverticulum is best diagnosed by:
- a) Barium meal follow through
 - b) Barium enema
 - c) Ultrasonography
 - d) Technetium ^{99m} scanning

177. Toxic effect of carbon tetrachloride is due to conversion of CCl_4 to the highly reactive toxic free radical CCl_3 in the:
- a) Mitochondria
 - b) Smooth endoplasmic reticulum
 - c) Lysosome
 - d) Nucleus
178. Specific granules of neutrophil contain all **EXCEPT:**
- a) Lysozyme
 - b) Collagenase
 - c) Elastase
 - d) Alkaline phosphatase
179. Cataract is produced as an adverse effect by:
- a) Pilocarpine
 - b) Physostigmine
 - c) Timolol
 - d) Dipivefrin
180. The management of acute nicotine poisoning include all **EXCEPT:**
- a) Give an alkali
 - b) Gastric lavage
 - c) Activated charcoal
 - d) Induce vomiting