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Booklet Serial No.

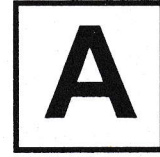
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Test Booklet Series

TEST BOOKLET - 2022

MEDICAL OFFICER

(01)



Time Allowed: Two Hours

Maximum Marks: 100

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES **NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **DO NOT** write anything else on the Test Booklet.
4. This Test booklet contains **100** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Response sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer/Response Sheet provided. See directions in the Response Sheet.
6. All items carry equal marks.
7. Before you proceed to mark in the Answer/Response sheet, the response to various items in the Test Booklet you have to fill in some particulars in the Answer/Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer/Response Sheet**. You are permitted to take away with you the Test Booklet and Candidate's Copy of the Response Sheet.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.25)** of the marks assigned to that question will be deducted a penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no **penalty** for that question.

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01(A)/2022

[P.T.O.]

1. Aaron sign is
 - A) Pain or pressure in epigastrium or anterior chest with persistent firm pressure applied to McBurney point
 - B) Sharp pain created by compressing appendix between abdominal wall and iliacus
 - C) Transient abdominal wall rebound tenderness
 - D) Loss of abdominal tenderness when abdominal wall muscles contracted

2. Sporadic desmoid tumors are most commonly associated with somatic mutations of the

A) APC gene	B) CTNNB1 gene
C) BRCA 1 gene	D) Ret protooncogene

3. A 1-year-old infant is brought to the emergency room with episodes of incessant crying and greenish vomiting off and on from 1 day. The child sleeps in between these episodes. On examination, the child is dehydrated with slightly distended abdomen and a palpable lump in right upper quadrant of abdomen. There are no features of peritonitis. An ultrasound scan of abdomen revealed concentric rings within the lump. The **MOST APPROPRIATE** next step should be:

A) CECT scan of the abdomen	B) Exploratory laparotomy
C) Air enema	D) Passage of flatus tube

4. The fine needle aspiration cytology (FNAC) of a thyroid swelling is reported as 'Thy '1', this suggests the result to be:

A) Follicular pathology	B) Benign lesion
C) Malignant lesion	D) Non-diagnostic

5. After subtotal thyroidectomy on a 48 years old female, the patient develops hoarseness of voice, no dyspnoea or stridor. On indirect laryngoscopy, right side vocal cord is hyperabducted. Which Nerve palsy is suspected?
 - A) Right recurrent laryngeal nerve palsy
 - B) Left recurrent laryngeal nerve palsy
 - C) Bilateral recurrent laryngeal nerve palsy
 - D) Right superior laryngeal nerve palsy

6. A 39-year-old man with a history of mild, long-standing ulcerative colitis controlled with sulfasalazine recently underwent routine colonoscopy that showed a lesion in the sigmoid colon. Pathologic evaluation reveals high-grade dysplasia. Which of the following is the best management option?
- A) Sigmoid colectomy, provided that the rectum is minimally involved
 - B) Proctocolectomy with ileal pouch – anal anastomosis (IPAA)
 - C) Total abdominal colectomy with ileorectal anastomosis (IRA)
 - D) Total proctocolectomy with Brooke ileostomy
7. In order to decrease the chances of wound dehiscence and incisional hernia following closure of abdominal incisions, the recommended ratio of length of the wound to that of the suture material should be:
- A) 1:1
 - B) 1:2
 - C) 1:3
 - D) 1:4
8. A 45-year-old lady presents to you with troublesome serous nipple discharge from multiple ducts. There is no underlying malignancy. The best treatment for her would be:
- A) Simple mastectomy
 - B) Cone excision of major ducts
 - C) Microdochectomy
 - D) Low dose radiotherapy
9. A patient with a history of fire in house, rescued by the fire team and brought to hospital with 30 % burns with face and nose involved. Oral examination shows deposition of soot but no breathing difficulty at present. Patient was fully conscious and was admitted to ICU and was monitored and given IV fluids and adequate treatment started. After 30 hours of admission patient started developing shortness of breath with fall in saturation, no noisy breathing present, patient couldn't maintain on oxygen mask, patient was put on non invasive ventilation. The most likely diagnosis is?
- A) Laryngeal edema
 - B) Chemical pneumonitis
 - C) Aspiration pneumonia
 - D) Bacterial pneumonia
10. Which of the following is not an absolute contra-indication to living kidney donation?
- A) BMI >40
 - B) Diabetes
 - C) Active malignant disease
 - D) ABO incompatibility

11. A 55 year female presents with history of high grade fever, dysuria and oliguria since 5 days. Clinical examination shows altered mental status, respiratory rate of 28 breaths/min, blood pressure of 90/50 mm Hg and oxygen saturation of 90% at room air. All of the following are recommended to be done in the first one hour, except:
- Take blood cultures and administer broad spectrum antibiotics
 - Measure lactate level and full blood count
 - Insert a central venous catheter to measure central venous pressure
 - Rapid administration of 30 mL/kg of crystalloid for hypotension
12. A 30-year-old female patient, known hypothyroid on thyroxine replacement therapy, presents with history of fever with cough and expectoration for 5 days and decreased sensorium since 2 days. On examination patient was unconscious, had cold extremities, her temperature was 34° C, PR was 56 bpm, RR was 24/mm, BP was 90/70 mm Hg and random blood glucose was 56 mg/dL. All of the following statements regarding the management of this patient are true, EXCEPT:
- Empirical broad-spectrum antibiotics should be started until cultures are available
 - Intravenous loading dose of levothyroxine followed by daily maintenance dose of levothyroxine should be given
 - Cautious intravenous fluids may be given for hypotension.
 - Corticosteroids may be used only if blood pressure does not improve following treatment with levothyroxine and IV fluids
13. Identify the true statements regarding Laboratory findings in a case of meningitis:
- Blood culture should be obtained before starting antibiotics
 - CSF should be obtained before starting antibiotics
 - Positivity of GeneXpert or AFB staining are needed before starting anti-tubercular drugs
 - CSF cytology with 1 mL of CSF is positive in more than 95% of CSF on a single examination of centrifuged CSF
- A and B are true
 - A, B and C are true
 - B and C are true
 - A, B, C and D are true
14. A 20-year-old college student with no comorbidities presents to the emergency in a disoriented state. Patient is well-built, attends gym regularly and completed a marathon the previous day. Clinically he is unresponsive and appears dehydrated. Investigations reveal a serum urea of 84 mg%, creatinine of 3.2 mg% and a hematocrit of 44%. Urinalysis shows a specific gravity of 1.020 with dipstick (positivity for blood. There are no active sediments. Serum creatinine kinase levels are 10,500 IU/L. The clinical diagnosis is
- Myoglobinuria
 - Acute glomerulonephritis
 - Acute interstitial nephritis
 - Atypical hemolytic syndrome

-

19. On autopsy of a young female who died due to the complications of systemic lupus erythematosus, multiple medium-sized vegetations were on both sides of the mitral and tricuspid valve. These vegetations form likely due to:
- Turbulent blood flow through an incompetent mitral valve
 - Presence of an anticardiolipin antibody
 - Cachexia produced by a hypercoagulable state
 - Bacterial colonization of an abnormal valve
20. Which of the following is incorrect regarding CURB-65 score?
- Confusion and blood urea >7 mmol/L
 - Respiratory rate ≥ 30 /min
 - Systolic blood pressure ≤ 100 mm Hg or diastolic blood pressure ≤ 50 mm Hg
 - Age ≥ 65 years
21. A 25-year-old primigravida with mitral stenosis is seen at 28 weeks. She is NYHA Class 3. She has not been on any medication for her condition in the past. On examination, she is pale, pulse – 96/min, Blood pressure – 100/60 mm Hg. Echocardiography – ejection fraction is 30% with severe MS. All of the following are to be done EXCEPT:
- Admit her in the ward
 - Cardiology opinion
 - Evaluate for anaemia
 - Immediate delivery
22. A patient at term on abdominal examination reveals head 3/5th palpable and 2 uterine contractions in 10 minutes, lasting for 30-35 seconds. On two P/V examination four hours apart with intact membranes, cervix dilates from 4 cm to 5 cm. Which of the following statements is true for this case?
- The head was engaged at the time of presentation
 - Her cervicographical progress is satisfactory
 - Her cervicographical status suggests intervention
 - She needs immediate LSCS
23. Which of the following are first line treatment options for a patient with atonic PPH:
- Bimanual uterine massage
 - Immediate operative intervention
 - Oxytocin infusion
 - Uterine tamponade
- Options are:
- | | |
|----------|----------|
| A) 1 & 2 | B) 1 & 3 |
| C) 2 & 3 | D) 2 & 4 |

24. At 40-year of age for a P₂L₂ with bilateral chocolate cysts and severe symptoms, which is the preferred combination of treatment?

1. Total hysterectomy with bilateral salpingoophorectomy
2. Oral contraceptive pills
3. Fulguration of endometriotic deposits
4. Progesterone therapy

Options are:

- | | |
|----------|----------|
| A) 1 & 2 | B) 2 & 3 |
| C) 3 & 4 | D) 1 & 3 |

25. A 21 years old pregnant woman presented at 11 weeks with history of severe pain in lower abdomen one week back that responded to analgesics. Her ultrasound reveals an ovarian cyst of 6×7cm size. What is the correct advice to her?

- A) Reassurance
- B) Immediate surgical removal of the mass
- C) Surgical Removal of the mass after delivery
- D) Surgical removal at 14-16 weeks gestation.

26. Match the following fetal skull diameters:

COLUMN-A

- a. Occipitofrontal
- b. Occipitomenal
- c. Bitemporal
- d. Biparietal

COLUMN-B

1. 9.5cm
2. 8.0 cm
3. 11.5cm
4. 12.5cm

- | | |
|-----------------------|-----------------------|
| A) a-3, b-4, c-2, d-1 | B) a-1, b-2, c-4, d-3 |
| C) a-2, b-3, c-1, d-4 | D) a-4, b-1, c-3, d-2 |

27. A 24-year-old woman presents at 27 weeks of gestation with lower abdominal pain. She has palpable tightening every ten Minutes. Which of the following group of drugs should be prescribed for first line tocolysis?

- | | |
|----------------------|-------------------------------|
| A) β blockers | B) Calcium channel blockers |
| C) Magnesium sulfate | D) Oxytocin receptor agonists |

28. The most appropriate management for G₃A₂ at 22 weeks of gestation with previous both 2nd trimester abortions and an ultrasound report of cervical length of 20 mm and funneling of cervix is:

- A) Administer dinoprostone and bed rest
- B) Administer misoprostol and bed rest
- C) Apply Fothergill stitch
- D) Apply McDonald stitch

29. A 25-year-old woman who previously used the combined oral contraceptive pill (COCP) has just delivered and has requested contraceptive advice prior to discharge from hospital. She is fit and well. She has decided not to breast feed. At what point in the postpartum period could she restart the COCP?

- A) 3 weeks
- B) 6 weeks
- C) 12 weeks
- D) 24 weeks

30. Which of the following is INCORRECT match for the clinical finding and the underlying childhood vasculitis:

COLUMN - A

COLUMN - B

- | | |
|-----------------------|---------------------------|
| a. Kawasaki disease | 1. Hypertension |
| b. Livedo reticularis | 2. Edema of hand and feet |
| c. IgA vasculitis | 3. Polyarteritis nodosa |
| d. Takayasu arteritis | 4. Non-palpable purpura |
| A) a-2, b-3, c-4, d-1 | B) a-2, b-4, c-3, d-1 |
| C) a-1, b-2, c-3, d-4 | D) a-4, b-3, c-2, d-1 |

31. The clinical features of the multisystem inflammatory syndrome in children temporally related to COVID-19 infection has most close resemblance to:

- A) Kawasaki disease
- B) Polyarteritis nodosa
- C) ANCA associated vasculitis
- D) IgA vasculitis

32. A 6-year-old girl presents to the OPD with increased frequency of urination, anemia and short stature. Investigations revealed: Hb – 7 g%, BI. Urea – 22 mg/dL, S. Creatinine – 0.4 mg/dL, K⁺ - 2.8 mEq/L. Which of the following is the most likely diagnosis?

- A) Chronic renal failure
- B) Renal tubular acidosis
- C) Hypothyroidism
- D) Celiac disease

33. Which of the following is NOT a criterion for confirmation of diagnosis of Diabetic Ketoacidosis?

- A) Blood glucose > 250 mg/dL
- B) Blood pH < 7.3
- C) Serum bicarbonate < 15 mEq/L
- D) Blood beta hydroxy butyrate (BOHB) > 3 mmol/L

34. Management of a 2-year-old child weighing 11 kg with acute watery diarrhoea, who is irritable, thirsty and a reduced skin turgor should be:
- ORS: 110 ml over 4 hours
 - ORS: 825 ml over 4 hours
 - Intravenous fluid: Ringer lactate 110 ml over 2 hr
 - Intravenous fluid: Isolyte-P, 825 ml over 4 hours
35. All of the following are used for management of hyperkalemia EXCEPT:
- Salbutamol
 - Calcium gluconate
 - Insulin
 - Ipratropium
36. A 3-year-old boy with normally developed motor milestones, had history of delayed speech and difficulty in communication and concentration. The child is not making friends. The most probable diagnosis is:
- Autism
 - Attention Deficit Hyperactivity Disorder (ADHD)
 - Mental retardation
 - Specific learning disability
37. What is the clearance of a substance in mL/min, when its concentration in plasma is 10 mg/dL, its concentration in urine is 100 mg/dL and urine flow is 2 mL/min?
- 2
 - 5
 - 10
 - 20
38. A 12 month old boy presented with failure to thrive, abdominal distention, diarrhoea, irritability after 6 months of age. The parents report these symptoms since the introduction of regular family diet. The most likely diagnosis is:
- Giardiasis
 - Celiac disease
 - Pancreatitis
 - Cystic fibrosis

39. Consider the pairs given below :

Intra-uterine Contraceptive Devices	Pregnancy rate (%)
i. TCu - 200	1. 1.3 - 1.6
ii. TCu-380A	2. 0.5 - 0.8
iii. Progesterone IUD	3. 0.2
iv. Levonorgestrel IUD	4. 3

Which of the following correctly matches above pairs

- i-1, ii-4, iii-2, iv-3
- i-4, ii-1, iii-3, iv-2
- i-1, ii-4, iii-3, iv-2
- i-4, ii-2, iii-1, iv-3

40. Arrange the following vaccines from most sensitive to heat to least sensitive to heat:
1. Oral Polio Vaccine
 2. Measles Vaccine (freeze dried)
 3. Inactivated Polio Vaccine
 4. Japanese Encephalitis Vaccine
- A) 1, 2, 3, 4 B) 1, 3, 2, 4
C) 1, 4, 2, 3 D) 4, 1, 2, 3
41. A screening test showed that 15 persons with the disease were detected and 5 persons with the disease were not detected. Even without having the disease, 8 persons tested positive. The predictive value of a positive test is:
- A) 65% B) 75%
C) 86.6% D) 92.3%
42. In integrated disease surveillance project in India, which of the following type of diagnosis is done by Medical Officer at the PHC?
- A) Syndromic B) Presumptive
C) Confirmed D) Laboratory
43. All of the following are true regarding a Randomized Control Trial (RCT) EXCEPT:
- A) Double blinding is done to remove investigator bias
B) Dropouts results are excluded from the study
C) Randomization is the heart of a control trial
D) 1st step in RCT is drawing up a protocol
44. Quantitative assessment of Protein Quality is done by all, except
- A) Digestibility coefficient B) Biological value
C) Net protein utilization D) Nitrogen content
45. Which of the following statements are true for Gettler's test :
1. Done in cases of Sea water and Fresh Water Drowning
 2. Based on concentration difference of Chloride in two chambers of heart
 3. Concentration difference of more than 10% confirms the drowning
 4. In fresh water drowning chloride level increase in left side of the heart
- A) 1 and 2 B) 2 and 3
C) 3 and 4 D) All of the above

- (12)

52. Following are the signs of intrauterine death of foetus, EXCEPT :
- A) Robert's Sign
 - B) Deuel's halo sign
 - C) Hegar's Sign
 - D) Spalding's sign
53. Urine is considered as '*Toxicologist Gold*' because of which of its following features :
- 1. Drugs present in higher concentration
 - 2. Large volume easy to collect
 - 3. Non-invasive
 - 4. No pain or discomfort while collection
- A) 1, 2, 3 & 4
 - B) 1, 2 and 3
 - C) 1 and 2
 - D) None of the above
54. A 55 year old man presents with a 10 day history of confusion. His friend mentioned that he drinks 375 ml of rum per day. Which of the following strongly suggest diagnosis of Korsakoff's psychosis.
- A) Delusional beliefs
 - B) Retrograde amnesia
 - C) Auditory Hallucinations
 - D) Confabulations of events
55. The following statements are true regarding the coronary arteries EXCEPT that:
- A) Posterior interventricular artery always arises from right coronary artery
 - B) The right coronary artery supplies both SA and AV nodes
 - C) The circumflex branch desends in the anterior interventricular groove
 - D) They can be classified as functional end arteries
56. A 30 years old female patient came to emergency with abdominal pain around the umbilicus which spread towards right lower side of abdomen with nausea and vomiting. She complained of constipation, bloating and fever. The symptoms point towards one of the following conditions:
- A) Intestinal obstruction
 - B) Ovarian cysts
 - C) Acute appendicitis
 - D) Renal calculus

57. The nerve that supplies the muscles derived from the second pharyngeal arch is:
- A) Mandibular
 - B) Facial
 - C) Glossopharyngeal
 - D) Vagus
58. The abnormal formation and rotation of ventral pancreatic bud results in annular pancreas which condition can arise due to this malformation:
- A) Diabetes
 - B) Pancreatic duct obstruction
 - C) Pancreatic cancer
 - D) Duodenal atresia
59. When the anteroposterior diameter of the pelvic inlet is significantly lesser than the transverse diameter then the pelvis is classified as :
- A) Android
 - B) Gynecoid
 - C) Anthropoid
 - D) Platypelloid
60. The cardiac muscle is histologically characterized by the following:
- A) Single muscle cell
 - B) Nucleus peripheral
 - C) Intercalated discs
 - D) Fusiform cells
61. All the following types of cell junctions are found at the intercalated discs EXCEPT :
- A) Fascia adherens
 - B) Hemidesmosome
 - C) Desmosome
 - D) Macula adherens
62. Lymphatic vessels are absent in:
- A) Liver
 - B) Brain
 - C) Lungs
 - D) Uterus
63. In a person who is breathing heavily on account of vigorous aerobic exercise, which of the following is CORRECT?
- A) PaCO_2 increases
 - B) PaCO_2 decreases
 - C) PaO_2 increases
 - D) PaO_2 decreases

64. Arrange the following ion channels present in skeletal muscle in order which they are activated during the process of excitation contraction coupling:
1. Acetylcholine gated ion channel
 2. Voltage gated calcium channel
 3. Voltage gated sodium channel
 4. Ryanodine receptor
- A) 2, 1, 3, 4 B) 1, 2, 3, 4
C) 1, 3, 2, 4 D) 3, 2, 1, 4
65. Arrange the following events of cardiac cycle in order of occurrence after the occurrence of 'p' wave
1. First heart sound
 2. 'a' wave of atrial pressure
 3. Rapid filling phase of ventricle
 4. 'T' wave of ECG
- A) 2, 3, 1, 4 B) 2, 1, 4, 3
C) 1, 2, 3, 4 D) 1, 2, 4, 3
66. In quiet respiration, energy is utilized maximally to perform
- A) Viscous resistance B) Elastic resistance
C) Airway resistance D) Inertial resistance
67. When used for purpose of resuscitation, which of the following crystalloid is most likely to cause metabolic acidosis?
- A) Normal Saline B) Ringer Lactate
C) Plasmalyte D) Ringer Acetate
68. Consider the following conditions
1. Dehydration
 2. Alkalosis
 3. Slow flow conditions
 4. Hypoxia
- In patients with sickle cell anemia, the tendency to 'Sickle' increases with
- A) 1, 2 and 4 B) 1, 3 and 4
C) 1, 2, 3, and 4 D) 3 and 4
69. Protein present in a urine sample of a patient precipitated on heating to 45°C and then re-dissolved on boiling. The patient is likely to be suffering from:
- A) Multiple myeloma B) Nephrotic syndrome
C) Acute myeloid leukemia D) Acute renal failure

70. Which of the following anticoagulants **should be** mixed with another anticoagulant to nullify cellular swelling caused by it?

- A) Ammonium oxalate
- B) EDTA
- C) Sodium citrate
- D) Sodium fluoride

71. A patient suffering from obstructive jaundice due to carcinoma of head of pancreas is likely to present with the deficiency of which of the following vitamins?

- A) Thiamine
- B) Vitamin C
- C) Folic acid
- D) Vitamin K

72. Match the following hormones given in column-I with their intracellular messenger in column-II and choose the correct answer below.

Column-I

Column-II

- | | |
|-----------------------|--------------------------|
| a. Insulin | 1. Cyclic GMP |
| b. Oxytocin | 2. Cyclic AMP |
| c. Calcitonin | 3. Tyrosine Kinase |
| d. Atrial natriuretic | 4. Phosphatidylinositols |
| A) a-1, b-2, c-3, d-4 | B) a-2, b-1, c-4, d-3 |
| C) a-3, b-4, c-2, d-1 | D) a-4, b-3, c-1, d-2 |

73. Following statements are true regarding the recombinant DNA technology EXCEPT:

- A) DNA ligase is used to cleave the chimeric DNA molecules
- B) Restriction enzyme is used to cleave DNA chains at specific location
- C) A cDNA library comprises complementary DNA copies of the population of mRNA in a tissue
- D) Molecular cloning allows for the production of a large number of identical DNA molecules, which can then be further characterized

74. Western Blotting is used for detection of:

- A) DNA
- B) RNA
- C) Proteins
- D) Urine casts

75. A Serological test for hepatitis B on a 30 year old female shows the following profile

- HBsAg negative
- Anti-HBc negative
- Anti-HBs Positive

What is the correct interpretation of this result?

- A) Immune due to hepatitis B vaccination
- B) Susceptible to Hepatitis B
- C) Acutely Infected
- D) Chronically infected

76. All statements of the following are False. EXCEPT:-

- A) Cowdry type A intranuclear inclusions can be seen on histopathology of herpes virus encephalitis.
- B) PCR lacks sensitivity and specificity for diagnosis of herpes encephalitis.
- C) West Nile virus is restricted to African subcontinent.
- D) Enteroviral encephalitis is most common from January to March.

77. A Tzanck smear of a scraping obtained from a vesicle on the skin demonstrates multinucleated giant cells. Multinucleated giant cells are associated with which of the following virus?

- A) Herpes simplex type -2 virus
- B) Coxsackievirus
- C) Molluscum contagiosum
- D) Variola major

78. A 50 year old female has few sharply defined annular asymmetric macules or plaques with a tendency towards central clearing, elevated borders. On immunological testing her Lepromin test was positive (+++). What is the patient's disease type of leprosy based on these clinical presentation and laboratory tests?

- A) TT, polar tuberculoid
- B) BB, mid-borderline
- C) BL, borderline lepromatous
- D) LL, polar lepromatous

79. Koch's postulates were published for the time with the following bacteria:

- A) *Clostridium tetani*
- B) *Bacillus anthracis*
- C) *Corynebacterium diphtheriae*
- D) *Salmonella typhimurium*

80. Lymph nodes have two main regions : the

- A) Cortex & medulla
- B) Lymph and cortex
- C) Reticulum and cortex
- D) Reticulum & medulla

81. Select the correct pair of true/false statements

- I. MESNA can aggravate cyclophosphamide induced haemorrhagic cystitis
 - II. Carboplatin produces more ototoxicity than cisplatin
 - III. Glucarpidase is a potential agent for methotrexate induced toxicities
 - IV. Irinotecan may cause acetylcholinesterase inhibition
- A) I-F II-T III-T IV-F B) I-F II-F III-T IV-T
C) I-T II-F III-F IV-T D) I-T II-F III-T IV-F

82. An antibiotic with exclusive renal elimination is administered in the dose of 1000 mg IV once a day. In a patient with creatinine clearance half of the normal, the antibiotic is administered IV in a dose of:

- A) 500 mg once a day
- B) 1500 mg on alternate days
- C) 500 mg 8 hourly
- D) 250 mg 12 hourly

83. A 28-year-old female was recently diagnosed with schizophrenia and started on typical antipsychotics. She developed features of spasm of face, neck and tongue muscle within 5 days of start of treatment. She was administered, diphenhydramine 25 mg IM. Which of the following is proposed mechanism behind her symptoms?

- A) Post-synaptic DA receptor upregulation
- B) Dopamine antagonism
- C) Dopamine receptor super sensitivity
- D) Anti-cholinergic action

- 84.** Abrupt withdrawal of corticosteroid (after prolonged therapy) causing acute adrenal crisis is a
- A) Type A ADR B) Type B ADR
C) Type D ADR D) Type E ADR
- 85.** Which of the following is NOT a rational Fixed Drug Combination (FDC)?
- A) Lignocaine + Adrenaline
B) Furosemide + Spironolactone
C) Levodopa + Carbidopa
D) Diclofenac + Omeprazole
- 86.** A 40-year-old male was diagnosed with pulmonary tuberculosis and was started on ATT. Match the following drugs with their adverse effect
- | COLUMN-A | COLUMN-B |
|------------------------|------------------------|
| i. Rifampicin | a. Optic neuritis |
| ii. Ethambutol | b. Peripheral neuritis |
| iii. Isoniazid | c. Flu-like symptoms |
| iv. Pyrazinamide | d. Hyperuricemia |
| A) i-a ii-c iii-b iv-d | B) i-c ii-a iii-b iv-d |
| C) i-b ii-d iii-a iv-c | D) i-b ii-a iii-d iv-c |
- 87.** Which of the following cancer is associated with highest incidence of distant metastasis among the well differentiated thyroid carcinomas.
- A) Papillary Carcinoma
B) Hurthle Cell Carcinoma
C) Medullary Carcinoma
D) Diffuse Sclerosing variant of papillary carcinoma.
- 88.** Treatment of choice for early onset post traumatic facial palsy is
- A) Facial Nerve decompression
B) High dose steroids
C) Facial sling operation
D) Observation for at least two weeks
- 89.** Which of the following is not associated with CHARGE syndrome.
- A) Coloboma B) Ear abnormalities
C) Choanal atresia D) Renal anomalies

90. Epidermal Growth factor receptor (EGFR) overexpression is an important feature of head and neck cancers. Which drug, used in advanced tumors acts by EGFR inhibition?
A) Cisplatin
B) Cetuximab
C) Pembrolizumab
D) Paclitaxel
91. An investigation for laryngeal examination that involves "controlled high-speed flashes of light timed to the frequency of the patient's voice" is called:
A) Narrow Band Imaging
B) Contact endoscopy
C) Stroboscopy
D) Thermoglottography
92. A 45 year old female presents to clinician with chronic nasal obstruction. She is unable to sleep and has been on medications for long. The mucosa of turbinates is pale and edematous. The clinician diagnosed her as 'rhinitic medicamentosa.' The patient admits to use of some nasal solutions for long time. What is most likely drug used by patient?
A) Intranasal Azelastine
B) Intranasal Fluticasone Propionate
C) Intranasal Mometasone
D) Intranasal Xylometazoline
93. A 60 year old patient with bullous keratopathy is complaining of pain, watering and redness with ruptured bullae. All are palliative procedures which can be done except:
A) Collagen Cross Linking
B) Photo therapeutic Keratectomy
C) Amniotic membrane transplantation
D) Anterior lamellar keratoplasty
94. All are lens induced glaucoma except:
A) Phacomorphic glaucoma
B) Phacolytic glaucoma
C) Pseudoexfoliation glaucoma
D) Pigmentary glaucoma

95. A 55 year old male patient wants to remove spectacles for distance and near both. What is the best option for him?
- A) Laser in situ keratomileusis
 - B) Phakic Intraocular Lens
 - C) Presbyopic lens Exchange
 - D) Small incision lenticule extraction
96. MRI is superior to CT scan in diagnosis of endometrial cancer in all Except
- A) It is less time consuming compared to CT scanning.
 - B) In staging of endometrial cancer.
 - C) In showing endocervical stromal invasion.
 - D) In detecting myometrial involvement.
97. Which one of following statements is NOT correct for chronic pancreatitis on imaging?
- A) Bulky size of pancreas
 - B) Ductal dilatation and intraductal calculi on Ultrasound and CT scan.
 - C) MRCP helps in defining the pancreatic ductal anatomy.
 - D) Parenchymal calcification on Ultrasound and CT scanning.
98. A radiograph of the left knee of a 35-year-old man reveals a 3-cm expansile lytic lesion sited eccentrically in the epiphysis of proximal tibia. It has a well-defined non-sclerotic margin. What is the most likely diagnosis?
- A) Aneurysmal bone cyst
 - B) Chondroblastoma
 - C) Giant cell tumour
 - D) Osteogenic sarcom

99. A 15-year-old male child, presented with swelling over the right shoulder since 6 months. Plain radiograph of right shoulder showed expansile lytic destructive lesion arising from metaphysis of proximal humerus. Lesion has thin horizontally oriented septations without any matrix mineralization and periosteal reaction. Possible diagnosis is:

- A) Aneurysmal bone cyst
- B) Giant cell tumor
- C) Telangiectatic Osteogenic sarcoma
- D) Ewing's Sarcoma

100. A middle aged male patient presented to the emergency department with history of hematemesis, his vital parameters were pulse rate 120 per mm, blood pressure 100/60mm of Hg, Spo2 100%. Upper gastrointestinal endoscopy failed to identify the source of bleed. What is next best approach to identify the source of bleed?

- A) Tc-99m Nuclear scan
- B) CT angiography
- C) Digital subtraction angiography
- D) Surgical exploration