

CMS – 2014 (Medical Science Paper II)

1. A 40 year old man presented with a flat 1x1cm. scaly, itchy black mole on the front of thigh. Examination did not reveal any inguinal lymphadenopathy. The best course of management would be:
 - (a) FNAC of lesion
 - (b) Incision biopsy
 - (c) Excision biopsy
 - (d) Wide excision with inguinal lymphadenectomy.

2. Indications of TURP for Benign Hyperplasia Prostate (BHP) include
 1. Urinary flow rate of less than 10cc/second
 2. Residual volume of urine >100cc
 3. Serum level of prostatic specific antigen >10nmol/L
 4. Trabeculated Urinary bladderSelect the correct answer using the code given below:
 - (a) 1, 2 and 3
 - (b) 2, 3 and 4
 - (c) 1, 2 and 4
 - (d) 1, 3 and 4

3. Ankyloglossia in a patient with carcinoma tongue is staged as
 - (a) T₁
 - (b) T₂
 - (c) T₃
 - (d) T₄

4. Which is the most commonly used chemotherapy regimen in the adjuvant treatment following modified radical mastectomy in the estrogen receptor negative 35 year old female with breast cancer?
 - (a) Cyclophosphamide + 5 – Fluro-uracil
 - (b) Cyclophosphamide + Methotrexate + 5–Fluoro-uracil
 - (c) Cyclophosphamide + Adriamycin + 5–Fluro-uracil
 - (d) Adriamycin + 5–Fluro-uracil

5. Consider the following statements:
The clinical features of tension pneumothorax include
1. tracheal shift to contralateral side
 2. absent breath sounds on the affected side
 3. low output circulatory failure
 4. peripheral cyanosis
- Which of the statements given above is/are correct?
- (a) 1, 2 and 3
 - (b) 1 and 3 only
 - (c) 2 and 4
 - (d) 1 and 4
6. The following procedures are recommended for palliation in a patient with obstructive jaundice due to unresectable carcinoma of head of pancreas **except**:
- (a) Choledochoduodenostomy with gastrojejunostomy
 - (b) Choledochoduodenostomy, gastrojejunostomy with pancreaticojejunostomy
 - (c) Hepaticojejunostomy with gastrojejunostomy
 - (d) Cholecystojejunostomy with jejunojejunostomy with gastrojejunostomy
7. Which of the following are contraindications to salvaging accidentally injured spleen during operation?
1. Labile blood pressure
 2. Presence of intraperitoneal infection
 3. Pre-existing splenic disease
 4. Age below 50 years
- Select the correct answer using the code given below:
- (a) 1, 2 and 3
 - (b) 1, 2 and 4
 - (c) 2, 3 and 4
 - (d) 1, 3 and 4
8. Match List I (Condition) with List II (Presentation) and select the correct answer using the code given below the lists

List I (Condition)

List II (Presentation)

- A. Caroli's disease
- B. Budd-Chiari Syndrome
- C. Polycystic Liver Disease
- D. Primary sclerosing cholangitis

1. Abdominal pain, Biliary sepsis
2. Hepatomegaly, Pain
3. Ascites
4. Abdominal Liver Function Test (LFT) or jaundice

Code:

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

9. Treatment of choice for annular pancreas is
- Resection
 - Duodenoduodenostomy
 - Gastrojejunostomy
 - Pyloromyotomy
10. In a patient of gastric outlet obstruction nutritional support is best delivered by:
- Enteral nutrition by Ryles tube
 - Gastrostomy
 - Jejunostomy
 - Parenteral nutrition
11. The following nerves are blocked for repairing inguinal hernia by local anaesthetic **except**:
- Ilio-inguinal
 - Ilio-hypogastric
 - Genito femoral
 - Femoral
12. Consider the following statements:
Venacaval opening of the diaphragm, situated at the level of T₈ transmits
- inferior vena cava
 - vagus nerve
 - branches of the right phrenic nerve
 - thoracic duct
- Which of the statements given above are correct?
- 1 and 2
 - 2 and 3
 - 1 and 3
 - 1 and 4
13. Traumatic haemothorax is best managed by:
- Intercostal tube drainage
 - Open drainage
 - Aspiration of blood from pleural cavity
 - Use of streptokinase
14. Which of the following statements about mesh skin grafts is **not** correct?
- They permit coverage of large areas.
 - They allow egress of fluid collections under the graft.
 - They contract to the same degree as a grafted sheet of skin.
 - They “take” satisfactorily on granulating bed.

15. An 8 year old girl sustained a fall on the outstretched right hand 6 hours ago and was treated with egg albumen bandages by a village bone setter. She presented with gross swelling of the right elbow and forearm. The first essential intervention in this case would be to
- order urgent radiographs of both elbows.
 - immerse the hand in warm water to increase the circulation.
 - elevate the right hand.
 - completely remove all encircling bandages.
16. Sprain of the ankle joint results from an injury to:
- Deltoid ligament
 - Spring Ligament
 - Posterior talofibular ligament
 - Anterior talofibular ligament
17. Which of the following are the most common forms of cardiac tumors seen in clinical practice ?
- Rhabdomyosarcoma
 - Angiosarcoma
 - Myxoma
 - Lymphoma
18. The following operative procedure can result in neurogenic voiding dysfunction **except**:
- Radical hysterectomy
 - Ureterolithotomy
 - Abdominoperineal resection
 - Retroperitoneal lymph node dissection
19. In diabetes mellitus the following findings are seen in ophthalmoscopy **except**:
- Dot haemorrhage
 - Flame shaped haemorrhage
 - Wet sponge haemorrhage
 - Microaneurysm
20. Consider the following structures in the femoral triangle:
1. Femoral canal
 2. Femoral Nerve
 3. Femoral artery
 4. Femoral vein
- What is the correct sequence of the above from medial to lateral ?
- 1, 2, 3, 4
 - 4, 3, 1, 2
 - 1, 4, 3, 2
 - 3, 4, 2, 1

21. A female patient aged 30 years with bilateral conductive deafness is wearing a hearing aid. What is the probable diagnosis?
- Presbycusis
 - Chronic suppurative otitis media
 - Meniere's disease
 - Otosclerosis

22. Match List I with List II and select the correct answer using the code given below the lists:

List I (Operative procedure)

List II (Complication)

A. Highly selective vagotomy

1. Metabolic bone disease

B. Vagotomy with
Gastrojejunostomy

2. Post Prandial gas bloat

C. Subtotal Gastrectomy

3. Lesser curve necrosis

D. Nissen's Fundoplication

4. Diarrhea

Code:

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

23. Which of the following pairs is not correctly matched?

- | | | |
|----------------------------|-------|---|
| (a) Krukenberg tumour | | Peritoneal seeding involving ovaries |
| (b) Blumer's shelf | | Secondary deposits in pelvic cul-de-sac |
| (c) Virchow's node | | Palpable node in left supraclavicular space |
| (d) Sister Joseph's nodule | | Solitary secondary deposit in the liver |

24. Optimum age for surgery for a child with cleft lip is:

- 4 weeks
- 4 - 6 weeks
- 3 - 6 months
- 6 - 18 months

25. An electrical contact burn is considered to be:

- Superficial partial thickness burn
- Full thickness burn
- Deep partial thickness burn
- Superficial scalding with blisters

26. In a fracture of shaft of longbone, the component which contributes **least** in fracture healing is:
- (a) Blood vessels
 - (b) Periosteum
 - (c) Matrix
 - (d) Endosteum
27. A 52 year old male patient comes with history of rectal bleeding, alteration in bowel habits and tenesmus. The ideal investigation would be:
- (a) Motion for occult blood
 - (b) Contrast enhance CT scan
 - (c) Colonoscopy
 - (d) Ultrasonogram
28. What is the treatment of choice in a patient with Crohn's case, where inflamed appendix was found on exploration?
- (a) Appendectomy
 - (b) Ileo-colic resection and anastomosis
 - (c) Closing the abdomen and starting medical treatment
 - (d) None of the above
29. In an unconscious patient with multiple injuries, what is the best and reliable modality for assessment of cervical spine injury?
- (a) Full AP and lateral radiographs of spine
 - (b) MRI scan
 - (c) While doing CT scan of brain take extra cuts at the cervical spine region
 - (d) Rely only on clinical examination
30. The following are features of hypovolemic shock **except**:
- (a) Oliguria
 - (b) Bradycardia
 - (c) Low Blood Pressure
 - (d) Acidosis
31. A 45 year old man sustains trauma in a road traffic accident and develops engorgement of neck veins, pallor, rapid pulse rate, and chest pain. What is the most likely diagnosis?
- (a) Pulmonary laceration
 - (b) Cardiac tamponade
 - (c) Haemothorax
 - (d) Rupture of spleen

32. Which one of the following statements is **not** correct regarding trichobezoar (hair balls)?
- (a) It is more common in females.
 - (b) It is associated usually with psychiatric illness.
 - (c) It is more common in young.
 - (d) It is usually associated with pyloric stenosis.
33. Consider the following conditions:
- 1. Otitis media
 - 2. Speech problems
 - 3. Dentition abnormalities
- Which of the above is/are associated with cleft palate?
- (a) 1 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3
34. On second day following femoral embolectomy, the leg is found to be tender, tense and dusky with feeble dorsalis pedis. The most appropriate management would be:
- (a) Doing re-embolectomy
 - (b) Fasciotomy
 - (c) Dye studies
 - (d) Anticoagulant therapy
35. An air fluid level with dilated oesophagus and “bird beak” appearance in a barium swallow is diagnostic of:
- (a) Achalasia cardia
 - (b) Carcinoma oesophagus
 - (c) Hiatus hernia
 - (d) Barrett’s oesophagus
36. A colonic carcinoma involving muscularis propria, with one or two nodes involved with a solitary metastasis in the liver, the TNM stage would be:
- (a) T₂ N₁ M₁
 - (b) T₁ N₂ M₁
 - (c) T₂ N₂ M₁
 - (d) T₁ N₁ M₁

37. After undergoing surgery, for carcinoma of colon, a patient developed single liver metastasis of 2 cm. What would be the next treatment?
- (a) Resection
 - (b) Chemo-radiation
 - (c) Acetic acid injection
 - (d) Radio frequency ablation
38. Which one of the following is given a score of two in Alvarado score?
- (a) Rebound tenderness
 - (b) Anorexia
 - (c) Pyrexia
 - (d) Leukocytosis
39. Which one of the following parts of intussusception is susceptible for ischaemia and perforation?
- (a) Intussuscepiens
 - (b) Intussusceptum
 - (c) Apex
 - (d) Neck
40. A 30 year old lady comes with history of bloody discharge from her right nipple while taking bath. On examination, there is a cystic swelling in the subareolar region. The clinical diagnosis would be:
- (a) Duct ectasia
 - (b) Intraductal papilloma
 - (c) Fibrocystic disease
 - (d) Intraductal carcinoma
41. Match List I (sign) with List II (description) and select the correct answer using the code given below the lists:
- | <i>List I (sign)</i> | <i>List II (description)</i> |
|-----------------------|--|
| A. Palmer's sign | 1. Bluish coloration of vagina in pregnancy |
| B. Braxton Hicks sign | 2. Rhythmic painless uterine contractions felt per abdomen in second trimester |
| C. Goodell's sign | 3. Softening of cervix in pregnancy |
| D. Chadwick sign | 4. Rhythmic uterine contractions felt in first trimester |

Code:

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

42. HELLP syndrome includes the following **except**:
- (a) Hemolysis
 - (b) Elevated liver enzymes
 - (c) Leucocytosis
 - (d) Low platelet count
43. Predisposing factors of puerperal sepsis are following **except**:
- (a) Multiparity
 - (b) Repeated internal examinations specially in the case of premature rupture of membrane
 - (c) Cases of manual removal of placenta
 - (d) Placenta previa
44. Consider the following:
- 1. Fetal pulmonary hypoplasia
 - 2. Fetal chromosomal anomalies
 - 3. Prostaglandin synthetase inhibitors
 - 4. Amniotic fluid index of 15 cm
- Which of the above are associated with oligohydramnios?
- (a) 1, 2 and 4
 - (b) 2, 3 and 4
 - (c) 1, 3 and 4
 - (d) 1, 2 and 3
45. Surgical treatment of choice for a 20 year old woman with nulliparous uterine prolapsed is:
- (a) Vaginal hysterectomy with pelvic floor repair
 - (b) Abdominal hysterectomy with pelvic floor repair
 - (c) Sling surgery
 - (d) Le Forte's repair
46. A 32 years old woman with two live children was brought to emergency with history of missed period for 15 days, spotting since 7 days and pain abdomen since 6 hours. Her pulse was 120 per minute, pallor ++, systolic B.P. 80 mm Hg. There was fullness and tenderness on per abdomen examination. Copper T thread was seen through external os on per speculum examination. On p/ v examination, cervical movements were tender, uterus was anteverted, bulky and soft. There was fullness in pouch of Douglas. Most likely, she is suffering from:
- (a) Pelvic inflammatory disease
 - (b) Missed abortion with infection
 - (c) Ruptured ectopic pregnancy
 - (d) Threatened abortion

47. A 20 year old primigravida is admitted with full term pregnancy and labour pains. At 4 A.M. she goes into active phase of labour with 4 cm cervical dilatation. Membranes rupture during p/v examination showing clear liquor. A repeat p/v after 4 hours of good uterine contractions reveals a cervical dilatation of 5 cm. What should be the next step in management?
- (a) Reassess after 4 hours
 - (b) Immediate caesarean section
 - (c) Oxytocin drip
 - (d) Reassess for occipitoposterior position and cephalopelvic disproportion
48. Immediately after third stage of labour in a case of full term delivery, the fundus of the uterus is:
- (a) At the level of xiphisternum
 - (b) At the level of umbilicus
 - (c) Below the level of umbilicus
 - (d) Just above the symphysis pubis
49. Which one of the following is **not** a complication of shoulder dystocia?
- (a) Laceration of the birth canal
 - (b) Postpartum haemorrhage
 - (c) Facial palsy
 - (d) Brachial plexus palsy
50. Which of the following methods for induction of labour should **not** be used in the patient with previous lower segment caesarean section?
- (a) Vaginal prostaglandin gel
 - (b) Oral prostaglandin tablet
 - (c) Stripping of the membrane
 - (d) Oxytocin drip
51. The causes for subinvolution of uterus are the following **except**:
- (a) Multiple pregnancy
 - (b) Pelvic infection
 - (c) Established breast feeding
 - (d) Retained placental fragments
52. Oxytocin is **not** responsible for:
- (a) Milk production
 - (b) Uterine involution
 - (c) After pains
 - (d) Milk ejection

53.

Treatment of choice in 28 year old nulli para one with third degree cervical descent is:

- (a) Vaginal hysterectomy with PFR
- (b) Abdominal cervicopexy
- (c) Fothergill's repair
- (d) Anterior and posterior colporrhaphy

54. A G₂ P₁ A₀ presents with full term pregnancy with transverse lie in the first stage of labour. On examination, cervix is 5 cm dilated, membranes are intact and foetal heart sounds are regular. The appropriate management would be:

- (a) Wait for spontaneous ovulation and expulsion
- (b) External cephalic version
- (c) Internal podalic version
- (d) Caesarean section

55. Absolute contraindication for the use of OCPs is:

- (a) Thromboembolism
- (b) Hypertension
- (c) Diabetes
- (d) Epilepsy

56. Cephalhematomas are most commonly found over:

- (a) Frontal bone
- (b) Temporal bone
- (c) Parietal bone
- (d) Occipital bone

57. Rokintansky – Kuster – Hauser syndrome is associated with:

- (a) Primary amenorrhoea with mullerian agenesis
- (b) Renal abnormalities
- (c) Normal hormone profile
- (d) All of the above

58. Neo-natal infection in a Hepatitis 'B' positive pregnant woman can be prevented by administering:

- (a) Hepatitis 'B' vaccine
- (b) Immunoglobulin
- (c) Vaccine and Immunoglobulin
- (d) Corticosteroids

59. The level of external cervical os in a second degree utero–vaginal prolapse is:

- (a) At the level of ischial spines
- (b) Between ischial spines and introitus
- (c) Introitus
- (d) 3 cm outside introitus

60. Which one of the following is **not** an epithelial tumour of the ovary?
- (a) Serous cystadenoma
 - (b) Brenner's tumour
 - (c) Clear cell tumour
 - (d) Endodermal sinus tumour
61. In which of the following is the term low and high grade squamous intraepithelial neoplasia used?
- (a) FIGO staging
 - (b) Papanicalou method
 - (c) Bethesda classification
 - (d) Shaw's classification.
62. Carcinoma of endometrium is associated with the following risk factors **except**:
- (a) Obesity
 - (b) Diabetes
 - (c) Hypertension
 - (d) Multiparity
63. Female sterilization is contraindicated in:
- (a) Heart disease
 - (b) Diabetes mellitus
 - (c) Hypertension
 - (d) None of the above
64. Laparoscopic sterilization is **not** recommended during the period of:
- (a) Immediate post partum
 - (b) Interval
 - (c) Post menstrual
 - (d) Post first trimester M.T.P
65. The highest incidence of ectopic pregnancy amongst contraceptive users is observed with:
- (a) Combined contraceptive pills
 - (b) Copper T intrauterine contraceptive device
 - (c) Progestasert intrauterine device
 - (d) Levonorgestrel intrauterine system
66. Which one of the following is the most suitable situation for prescribing progestin only pill?
- (a) Young patients
 - (b) Emergency contraception
 - (c) Lactating mother
 - (d) Woman with unexplained vaginal bleeding

67. During Pomeroy's method of female sterilization, which portion of tube is ligated?
- (a) Isthmus
 - (b) Ampullary
 - (c) Isthmo-ampullary
 - (d) Cornual
68. Which of the following is **not** true regarding 'no scalpel' vasectomy?
- (a) Special instruments are used to deliver the vas instead of cutting the skin.
 - (b) Scrotal skin is cut with LASER to expose the vas.
 - (c) The failure rate is same as that of conventional vasectomy.
 - (d) It is a very popular method in China.
69. A G₆ P₅ L₅ with 4 $\frac{1}{2}$ MA comes to you requesting a medical termination of pregnancy after sex determination. Then,
- (a) you will do the termination because continuation of pregnancy will affect the mental health of the patient and it is a clause in the M.T.P. Act.
 - (b) you will consult another medical practitioner because it is a mid-trimester pregnancy.
 - (c) you will do both (a) and (b) above.
 - (d) you will not do it, as it is against the law.
70. Which one of the following is the safest gas for creating pneumoperitoneum in operative laparoscopy?
- (a) Oxygen
 - (b) Carbon monoxide
 - (c) Carbon dioxide
 - (d) Nitrous oxide
71. Which one of the following causes the greatest risk of ectopic pregnancy?
- (a) Previous normal delivery
 - (b) Intrauterine contraceptive devices use
 - (c) Previous ectopic pregnancy
 - (d) Previous medical termination of pregnancy
72. Face to pubes delivery occurs in which of the foetal position?
- (a) Mentoanterior
 - (b) Mentoposterior
 - (c) Occipito-sacral
 - (d) Brow presentation
73. The peak level of human chorionic gonadotropin in normal pregnancy occurs between:
- (a) 10 to 12 days after pregnancy
 - (b) 30 to 40 days after pregnancy
 - (c) 60 to 70 days after pregnancy
 - (d) 100 to 120 days after pregnancy

74. The second most common site for endometriosis after ovary is the:
- (a) Outer surface of uterus
 - (b) Peritoneum of the pouch of Douglas
 - (c) Round ligaments
 - (d) Fallopian tubes
75. A patient who just delivered at home presents with a third degree perineal tear. You will do the repair:
- (a) immediately
 - (b) after 24 hours.
 - (c) after 6 weeks
 - (d) after 3 months
76. The gestational sac is first visible on transvaginal USG by:
- (a) 30 days
 - (b) 35 days
 - (c) 42 days
 - (d) 49 days
77. A 30 years old housewife reports with 6 months amenorrhea. Her serum LH and FSH are high with low estradiol levels. What is the most likely cause of amenorrhea in this context?
- (a) Pituitary tumour
 - (b) Polycystic ovarian disease
 - (c) Exercise induced
 - (d) Premature menopause
78. Branches of anterior division of internal iliac artery include the following **except**:
- (a) Uterine artery
 - (b) Inferior vesical
 - (c) Inferior gluteal
 - (d) Superior gluteal
79. The pearl index of contraceptive failure is expressed as a rate per
- (a) 1 woman-year
 - (b) 10 women-years
 - (c) 100 women-years
 - (d) 1000 women-years

80. Match List I with List II and select the correct answer using the code given below the lists:

List I (Condition)

- A. Hand prolapse
- B. Placental delivery
- C. Extended arms of breech at delivery
- D. Deep transverse arrest

List II (Procedure)

- 1. Lovset technique
- 2. Decapitation
- 3. Brandt Andrew's procedure
- 4. Vacuum extraction

Code:

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

81. The example of de-professionalization of medicine is widely seen in India in the form of:

- (a) Rural internship by doctors
- (b) Providing Primary Health Care
- (c) Irrational use of antibiotics by doctors
- (d) Medical malpractice by doctors

82. Consider the following:

- 1. Literacy rate
- 2. Life expectancy at birth
- 3. Life expectancy at the age of one year
- 4. Infant mortality

Which of the above are the components of Physical Quality of Life Index (P.Q.L.I.)?

- (a) 1 and 2
- (b) 1, 3 and 4
- (c) 2 and 4
- (d) 1 and 4 only

83. Which one of the following is included in Indian Public Health Standards for a Primary Health Centre?

- (a) Manual removal of placenta
- (b) Blood storage facility
- (c) Surgery for hydrocele
- (d) Safe abortion services

84. Which one of the following substances induces no dependence?
- (a) Barbiturates
 - (b) Cannabis
 - (c) Heroin
 - (d) LSD
85. The pattern of disease in a community described in terms of the important factors which influence its occurrence is known as:
- (a) Experimental epidemiology.
 - (b) Confounding
 - (c) Iceberg phenomenon
 - (d) Community diagnosis
86. The term “disease control” describes the ongoing operations aimed at reducing all of the following, **except**:
- (a) The incidence of disease
 - (b) The financial burden to the community
 - (c) Virulence of the disease agent
 - (d) Prevention of complications
87. The relationship between birth rate and maternal hemoglobin is best studied by:
- (a) Standard error of difference between two means.
 - (b) Standard error of difference between two proportions.
 - (c) Correlation and regression.
 - (d) Sensitivity and specificity.
88. Beta oxalyl amino alanine (BOAA) is found in:
- (a) *Argemone mexicana*
 - (b) *Lathyrus sativus*
 - (c) *Aspergillus flavus*
 - (d) *Crotolaria medicagenia*
89. Due to which of the following does seasonal trend of a disease occur?
1. Vector variation
 2. Environmental factors
 3. Change in herd community
- Select the correct answer using the code given below:
- (a) 1 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3

90. Excessive nitrates in drinking water can produce:
- Hypochromic microcytic anemia.
 - Methaenoglobinaemia.
 - Polycythemia vera.
 - Hemophilia.
91. Calcium content of milk is lowest in the milk of:
- Human
 - Goat
 - Cow
 - Buffalo
92. What is the time limit for registration of a birth?
- 7 days
 - 14 days
 - 21 days
 - 3 days
93. The following statements are correct for healthful school environment **except**:
- In the classroom, desks should be of minus type.
 - Per capita space for each student should be 6 sq. feet.
 - Combined window and door area should be 25% of the floor space.
 - One urinal should be provided for 60 students.
94. The following are the indicators for assessing the sensitivity of surveillance of polio **except**:
- A minimum of one case of AFP per 100,000 children under 15 years of age detected per year
 - A minimum of one case of AFP per 100,000 children under 5 years of age detected per year
 - At least 80% of the reporting sites should report each month even in the absence of cases
 - Percentage of AFP cases with 2 stools taken within 2 weeks after paralysis onset $\geq$ 80%
95. Tuberculosis in HIV positive individuals is characterized by which of the following?
1. More frequent negative sputum smears.
 2. More false-negative tuberculin test results.
 3. More extra-pulmonary tuberculosis.
 4. More cavitating lesions in lungs as shown by chest X-ray.
- Select the correct answer using the code given below:
- 1 and 2 only
 - 3 and 4 only
 - 1, 2 and 3 only
 - 1, 2, 3 and 4

96. Consider the following features of cholera:

1. Onset with purging.
2. No nausea or retching.
3. No tenesmus.
4. Leukocytosis.

Which of the above features of cholera differentiate it from food poisoning?

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 2 and 4
- (d) 1, 2, 3 and 4

97. What is the most important test to assess the prevalence of tuberculosis infection in a community?

- (a) Mass miniature radiography
- (b) Tuberculin test
- (c) Sputum examination of AFB
- (d) Clinical examination

98. With which one of the following respiratory lesions is smoking **not** associated?

- (a) Chronic bronchitis
- (b) Emphysema
- (c) Sarcoidosis
- (d) Lung carcinoma

99. In a normal curve, the area between one standard deviation on either side of the mean will include:

- (a) Less than 50% of the values
- (b) Approximately 68% of the values
- (c) 70 – 85% of the values
- (d) 95% of the values

100. Match List I with List II and select the correct answer using the code given below the lists:

List I (Health education methods)

- A. Symposium
- B. Panel discussion
- C. Work-shop.
- D. Role-play.

List II (Characteristics)

1. Situation is dramatized
2. Arriving at a plan of action to solve the problem
3. Series of speeches on a selected subject
4. Discussion among the speakers

Code:

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

101.

Which of the following insecticides is **not** used as a larvicide?

- (a) Abate
- (b) Paris green
- (c) Fenthion
- (d) Dichlorvos

102. An outbreak of Viral Hepatitis was reported from a town between June and August of a particular year. 60% of cases occurred in July. Exposure of the community to infection is from:

- (a) A single source for a short period.
- (b) A common single source for prolonged periods
- (c) Multiple sources for a short period
- (d) Multiple sources over prolonged periods

103. A rapid mass screening method that can be used by a paramedical worker for detecting malnutrition in pre-school (age: 1 to 5 years) children is:

- (a) Weight for age
- (b) Height for age
- (c) Mid-arm circumference
- (d) Weight for height

104. Among the following which one is the most important determinant of infant mortality?

- (a) Birth weight
- (b) Age of the mother
- (c) Order of birth
- (d) Interval between births

105. Which one of the following indicators is **not** included in Millennium Development Goals?

- (a) Maternal mortality ratio
- (b) Under five mortality rate
- (c) Malaria death rate per 100,000 children (0 – 4 years of age)
- (d) T.B. death rate per 100,000 children (0 – 4 years of age)

106. Severity of a disease is measured by:

- (a) Relative risk
- (b) Attributable risk
- (c) Incidence rate
- (d) Case fatality rate

107. 'Spot map' in epidemiological studies refer to variation in the distribution of a disease at:

- (a) International level
- (b) National level
- (c) Rural – urban level
- (d) Local level

108. Which of the following is an example of 'live attenuated vaccine'?

- (a) D.P.T.
- (b) B.C.G.
- (c) Hepatitis 'B'
- (d) Typhoid (TAB)

109. Specificity of a test is =

- (a) $(\text{True positives} \times 100) / (\text{True positives} + \text{False negatives}) \%$
- (b) $(\text{True negatives} \times 100) / (\text{True negatives} + \text{False positives}) \%$
- (c) $(\text{True negatives} \times 100) / (\text{True positives} + \text{True negatives}) \%$
- (d) $(\text{True positives} \times 100) / (\text{True negatives} + \text{False positives}) \%$

110. With reference to historical cohort study, which of the following statements is **not** correct?

- (a) Outcomes have occurred before the start of the investigation.
- (b) Experience of cohort is assessed from existing records.
- (c) Duration of study is shorter as compared to current cohort study.
- (d) Control subjects are selected from the current population without exposure.

111. Which of the following are the features of Rubella?

- 1. Rashes appear within 24 hours of onset of symptoms
- 2. Incubation period is 2 – 3 weeks
- 3. False membrane is formed in throat
- 4. Post auricular lymph nodes enlarge

Select the correct answer using the code given below:

- (a) 1, 2 and 4
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) 2 and 4 only

112. Iodine can be used for the disinfection of which of the following?

- 1. Water
- 2. Faeces
- 3. Urine
- 4. Skin

Select the correct answer using the code given below:

- (a) 1 only
- (b) 1 and 4 only
- (c) 1, 3 and 4
- (d) 1, 2 and 3

113. Consider the following:

1. Standard deviation
2. Range
3. Mode
4. Median

Among the above, which is/are the measure/measures of dispersion?

- (a) 1, 2, 3 and 4
- (b) 1 only
- (c) 1 and 2 only
- (d) 3 and 4 only

114. Which of the following diseases has man as an incidental host with 'Pig → Mosquito → Pig' as the basic cycle of transmission?

- (a) Japanese encephalitis
- (b) Chikungunya
- (c) Handigodu syndrome
- (d) Kyasanur forest disease

115. A screening programme for school children was undertaken with the following results:

1. 30% boys and 60% girls were found to be anemic
2. 50% children had history of passing worms in stool
3. 10% children had poor vision
4. 5% children had enlarged tonsils

In this context, which of the following is **not** an appropriate follow up activity?

- (a) Providing iron supplementation to all children
- (b) Administering mass deworming medication to all children
- (c) Referring those children with enlarged tonsils for surgery
- (d) Prescribing corrective spectacles to children with poor vision

116. Sullivan's index is an indicator of:

- (a) Mortality
- (b) Morbidity
- (c) Disability
- (d) Health care delivery

117. Which one of the following mosquitoes is responsible for transmitting Japanese encephalitis?

- (a) *Culex tritaeniorhynchus*
- (b) *Anopheles stephensi*
- (c) *Aedes aegypti*
- (d) *Mansonia*

118. The primary route of administration of measles vaccination is:
- (a) Subcutaneous
 - (b) Intradermal
 - (c) Intravenous
 - (d) Intranasal
119. Which of the following statements is **not** true regarding HIV infection?
- (a) HIV does not transmit through fomites.
 - (b) Every HIV infected person would require antiretroviral treatment during lifetime.
 - (c) All HIV positive mothers transmit infection to their newborn children.
 - (d) Infected blood transfusion leads to 100% transmission among recipients.
120. Which one of the following statements is correct regarding diabetes epidemiology?
- (a) Its prevalence is not affected by age.
 - (b) Females are 2.5 times more at risk.
 - (c) Maternal diabetes increases the risk of subsequent diabetes.
 - (d) Central obesity is not linked with diabetes.