

MEDICAL SCIENCES
CBRT FOR 327 POSTS OF MEDICAL OFFICER
20-10-2019 (AN)

1.

A 28 year old lady develops atypical chest pain and she is advised exercise stress test to assess for coronary artery disease. In such a case, the test will have:

- (a) High positive predictive value
- (b) Low negative predictive value
- (c) High false positive results
- (d) High false negative results

2.

Abnormality of which one of the following waves/segments of the ECG suggests an atrial enlargement?

- (a) P-wave
- (b) Q-wave
- (c) T-wave
- (d) ST segment

3.

Which one of the following does NOT cause ST segment elevation?

- (a) Hypokalemia
- (b) Pericarditis
- (c) Left ventricular aneurysm
- (d) Pulmonary embolism

4.

An elderly patient presents with exertional dyspnea. On examination, the patient has a slow-rising carotid pulse, heaving apex beat and an ejection systolic murmur. The most likely diagnosis is:

- (a) Senile degenerative aortic stenosis
- (b) Rheumatic heart disease with mitral stenosis
- (c) Hypertrophic obstructive cardiomyopathy
- (d) Myocardial infarction

5.

A plateau of inspiratory limb of flow-volume curve during spirometry is suggestive of:

- (a) Chronic obstructive pulmonary disease
- (b) Extrathoracic large-airway obstruction
- (c) Pulmonary fibrosis
- (d) Interstitial lung disease

6.

Which one of the following is NOT used/advised in the stepwise management of bronchial asthma?

- (a) Inhaled short-acting beta 2 agonist (SABA)
- (b) Inhaled corticosteroids (ICS)
- (c) Oral theophyllines
- (d) Oral leukotriene receptor agonists

7.

A patient presents with fever, cough and expectoration of 4 days duration. On examination the respiratory rate is 30/min and auscultation reveals bronchial breathing. Which one of the following may help in deciding regarding hospitalization of the patient?

- (a) APACHE-II score
- (b) CURB-65
- (c) GINA guidelines
- (d) BODE index

8.

Consider the following statements with regard to acute rheumatic fever:

1. It is an infectious illness characterized by fever, anorexia and joint pain.
2. It is an autoimmune condition.
3. Revised Duke's criteria are used for the diagnosis.
4. A patient presenting with chorea may be the only feature of this condition.

Which of the above statements are correct?

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

9.

Ulcerative colitis is characterized by all EXCEPT:

- (a) Recurrence after surgery
- (b) Mucus in stools
- (c) Gross blood in stools
- (d) Continuous disease spread

10.

The urinary D-xylose test is useful in assessment of disease of:

- (a) Stomach
- (b) Kidney
- (c) Small intestine
- (d) Large intestine

11.

A patient presents to the emergency with upper gastrointestinal hemorrhage. The differential diagnosis includes all EXCEPT:

- (a) Diverticular disease
- (b) Fundal varices
- (c) Mallory-Weiss tear
- (d) Cancer of esophagus

12.

Consider the following statements with regard to ulcerative colitis:

1. Inflammation invariably involves the rectum and spreads proximally.
2. The inflammatory process involves all the layers of the bowel wall.
3. Rectal bleeding and bloody diarrhea are the common symptoms.
4. The first attack is usually the most severe.

Which of the above statements are correct?

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

13.

A young adult male is brought to emergency following head trauma. On investigations, the serum Na^+ level is 128 mmol/L. What is the most likely cause?

- (a) Adrenocortical failure
- (b) Diabetes insipidus
- (c) SIADH
- (d) Dehydration

14.

All of the following are common causes of erectile dysfunction with intact libido EXCEPT:

- (a) Vascular insufficiency
- (b) Anxiety
- (c) Neuropathic
- (d) Hypogonadism

15.

Which among the following are poor prognostic indicators in glomerular disease?

1. Hypertension
2. Persistent proteinuria
3. Rapid rate of decline in renal function
4. Reduced serum creatinine levels at the time of presentation
5. Male sex

Select the correct answer using the code given below:

- (a) 1 and 4 only
- (b) 1, 3, 4 and 5
- (c) 1, 2, 3 and 5
- (d) 2, 4 and 5

16.

Clue cells on Gram staining microscopy of vaginal discharge are seen in:

- (a) Candidiasis
- (b) Trichomoniasis
- (c) Bacterial vaginosis
- (d) Streptococcal infection

17.

'Focal sensory seizures' is a positive phenomenon seen due to pathology in which lobe of cerebral cortex?

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

18.

Which of the following are appropriate in the work-up of patient with recurrent syncope?

1. MRI brain
2. EEG
3. ECG
4. Tilt-Table test

Select the correct answer using the code given below:

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

19.

A 65 year old male presents with slowness of movements, postural instability, rigidity and expressionless face. The most likely diagnosis is:

- (a) Alzheimer's disease
- (b) Multi infarct dementia
- (c) Myasthenia gravis
- (d) Parkinson's disease

20.

After a head trauma, a young patient was unable to close his left eye and had drooling of saliva from left angle of mouth. He is suffering from:

- (a) 7th cranial nerve injury
- (b) 3rd cranial nerve injury
- (c) 5th cranial injury
- (d) Combined 3rd and 7th cranial nerve injuries

21.

A patient with anaemia is found to have low MCV, low reticulocyte count, low MCH, target cells on blood smear, and a normal serum ferritin levels. The most suggestive diagnosis is:

- (a) Anemia of chronic disease
- (b) Sideroblastic anemia
- (c) Iron deficiency anemia
- (d) Beta-thalassemia trait

22.

Which one of the following is a suspected carcinogen for urinary bladder carcinoma?

- (a) Nickel
- (b) Phenacetin
- (c) Vinyl chloride
- (d) Asbestos

23.

Consider the following statements with regard to Hematological Physiology in pregnancy:

1. There is increased plasma volume which lowers the measured hemoglobin level
2. There is progressive neutropenia
3. Tissue stores of folic acid become depleted
4. Procoagulant factors increase approximately threefold, starting from the second trimester

Which of the above statements are correct?

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

24.

Which of the following clotting factors require Vitamin K dependent post-translational carboxylation in order to participate in the coagulation cascades?

- (a) Factors I, VII, IX, XII
- (b) Factors II, VIII, XI, XIII
- (c) Factors V, VII, X, XI
- (d) Factors II, VII, IX, X

25.

Which one of the following is NOT a part of MEN-4 syndrome?

- (a) Parathyroid adenoma
- (b) Pituitary adenoma
- (c) Testicular cancer
- (d) Medullary thyroid carcinoma

26.

Weight loss is a clinical feature in all EXCEPT:

- (a) Thyrotoxicosis
- (b) Pheochromocytoma
- (c) Acromegaly
- (d) Adrenal insufficiency

27.

A patient presents with '*bones, stones and abdominal groans*'. This adage classically describes which one of the following conditions?

- (a) Primary hypothyroidism
- (b) Primary hyperparathyroidism
- (c) Familial hypocalciuric hypercalcemia
- (d) Hypoparathyroidism

28.

Which one of the following laboratory test results is NOT confirmatory of Cushings' syndrome?

- (a) Failure to suppress serum cortisol with low dose of oral dexamethasone
- (b) Abnormally elevated late night serum cortisol
- (c) Abnormally elevated late night salivary cortisol
- (d) Reduced levels of 24 hour urine free cortisol

29.

The World Health Organization operationally defines Osteoporosis as 'T'-score of:

- (a) 0 to +1
- (b) -1 to 0
- (c) -2.5 to -1
- (d) < -2.5

30.

Which one of the following is NOT a laparoscopic bariatric surgery procedure?

- (a) Gastric banding
- (b) Heller's myotomy
- (c) Roux-en-y gastric bypass
- (d) Duodenal switch

31.

A 30 year old pregnant woman is diagnosed with a urinary tract infection. The antibiotic of choice is:

- (a) Ciprofloxacin
- (b) Cotrimoxazole
- (c) Ampicillin
- (d) Gentamycin

32.

Which of the following are characteristics of scrub typhus?

- 1. It is caused by a spirochete
- 2. It is transmitted by flea bites
- 3. Onset of symptoms is sudden with headache, fever and malaise
- 4. An eschar is a valuable clinical diagnostic finding in such illness

Select the correct answer using the code given below:

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

33.

Which of the following parameters are included in the scoring system to assess the pre-test probability of heparin-induced thrombocytopenia (HIT)?

1. Thrombocytopenia
2. Timing of fall in platelet count
3. Presence of new thrombosis
4. Likelihood of another cause for thrombocytopenia

Select the correct answer using the code given below:

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

34.

Which one of the following antibacterial agents targets DNA topoisomerase IV and DNA gyrase?

- (a) Tetracyclines
- (b) Quinolones
- (c) Beta-lactams
- (d) Sulfonamide-trimethoprim

35.

Which one of the following fourth generation cephalosporins can be given orally?

- (a) Cefotaxime
- (b) Ceftriaxone
- (c) Cefixime
- (d) Ceftazidime

36.

Prion disease affecting humans includes all EXCEPT:

- (a) Subacute Sclerosing Panencephalitis(SSPE)
- (b) Creutzfeldt-Jakob disease
- (c) Fatal familial insomnia
- (d) Kuru

37.

The resting basal metabolic rate in a patient with *Escherichia coli* septicemia:

- (a) falls by 30 % to 60 %
- (b) increases by 30 % to 60 %
- (c) remains unchanged
- (d) initially decreases, then increases

38.

Casal's necklace is seen in:

- (a) Scurvy
- (b) Pellagra
- (c) Beri-Beri
- (d) Rickets

39.

Which of the following are common causes of acute monoarthritis?

1. Septic arthritis
2. Viral arthritis
3. Reactive arthritis

Select the correct answer using the code given below:

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

40.

Which one of the following is NOT a radiological abnormality seen in rheumatoid arthritis?

- (a) Periarticular osteoporosis
- (b) Marginal joint erosions
- (c) Pseudofractures
- (d) Joint space narrowing

41.

The most prevalent psychiatric illness in the community is:

- (a) Anxiety disorders
- (b) Depression
- (c) Bipolar disorders
- (d) Schizophrenia

42.

Which one of the following anti-epileptic drugs has the lowest incidence of fetal malformations?

- (a) Phenytoin
- (b) Carbamazepine
- (c) Levetiracetam
- (d) Valproate

43.

The most important, strongest risk factor for dementia is:

- (a) Increasing age
- (b) Male gender
- (c) Smoking
- (d) Atherosclerosis

44.

Which one of the following most closely reflects core body temperature?

- (a) Oral cavity temperature
- (b) Rectal temperature
- (c) Lower esophageal temperature
- (d) Tympanic membrane temperature

45.

'J waves' on electrocardiogram are seen in:

- (a) Hyperthermia
- (b) Hypokalemia
- (c) Hypothermia
- (d) Hypercalcemia

46.

Methaemoglobinaemia is associated with which of the following?

1. Dapsone
2. Chloroquine
3. Aniline dyes

Select the correct answer using the code given below:

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

47.

Radical cure using a course of primaquine is a part of management of which of the following malaria infection?

1. *P. vivax*
2. *P. malariae*
3. *P. ovale*
4. *P. falciparum*

Select the correct answer using the code given below:

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

48.

Which of the following conditions are considered in the differential diagnosis of a patient presenting with elevated core body temperature?

1. Malaria
2. Malignant hyperpyrexia
3. Meningitis
4. Thyroid storm
5. Heat stroke

Select the correct answer using the code given below:

- (a) 2 and 5 only
- (b) 2, 3 and 4 only
- (c) 1, 3, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

49.

An 8 year old boy ingests twenty tablets of a drug prescribed for anemia. He develops shock, myocardial dysfunction and metabolic acidosis within a few hours. Which of the following should be used as an antidote?

- (a) Sodium bicarbonate
- (b) Deferoxamine
- (c) Methylene blue(1%) solution
- (d) N-acetylcysteine

50.

A 6 year old child with chronic kidney disease presents with oliguria, metabolic acidosis and symptomatic bradycardia. Which one of the following is the drug of choice?

- (a) Epinephrine
- (b) Adenosine
- (c) Lidocaine
- (d) Amiodarone

51.

A mother has active pulmonary tuberculosis and has received antituberculosis therapy for 1 month before delivery. The newborn is started on isoniazid prophylaxis. What is the next step in management?

- (a) Exclusive breast feeding and evaluation of the baby at 6 weeks
- (b) Isoniazid therapy for 6 months
- (c) Exclusive breast feeding and BCG vaccination at birth
- (d) BCG vaccine at 6 weeks of age

52.

A 23 year old female with history of vaginal discharge delivers a baby who develops copious purulent bilateral eye discharge 48 hours after birth. Gram staining of the discharge reveals Gram-positive diplococci. What is the treatment of choice?

- (a) Topical gentamicin drops
- (b) Injection ceftriaxone
- (c) Ciprofloxacin or polymyxin ointment
- (d) Oral erythromycin

53.

Which one of the following is a red flag sign in child development?

- (a) No visual fixation by 3 months
- (b) No vocalization by 4 months
- (c) Not walking alone by 12 months
- (d) No single words by 14 months

54.

Which one of the following poisonings is associated with bradycardia?

- (a) Clonidine
- (b) Aspirin
- (c) Cocaine
- (d) Tricyclic antidepressants

55.

What are the most common symptoms of kerosene oil poisoning?

- (a) Respiratory
- (b) Cardiovascular
- (c) Central nervous system
- (d) Endocrinal

56.

A 3 month old infant with brachycephaly, hypotonia and mongoloid eye slant presents with congestive heart failure. What is the most likely underlying cardiac lesion?

- (a) Pulmonary artery stenosis
- (b) Aortic stenosis
- (c) Endocardial cushion defect
- (d) Tetralogy of fallot

57.

A 10 year old child presents with chronic liver disease and portal hypertension. Which one of the following vaccines may be administered?

- (a) Hepatitis A vaccine
- (b) Typhoid vaccine
- (c) Influenza vaccine
- (d) Meningococcal vaccine

58.

What is the primary objective of 'Mission Indradhanush' ?

- (a) To fully immunize more than 90% of infants by 2020
- (b) To completely immunize all children of all under five years by 2020
- (c) To vaccinate all pregnant women at delivery by 2020
- (d) To fully immunize all newborns by 2030

59.

Beneficiaries of Rashtriya Bal Swasthya Karyakram (RBSK) include children aged:

- (a) 0-3 years
- (b) 0-5 years
- (c) 0-12 years
- (d) 0-18 years

60.

A two year old child presents with poor growth, anemia, easy bruising and hepatosplenomegaly.

Which one among the following is the most likely diagnosis?

- (a) Krabbe disease
- (b) Gaucher disease
- (c) Tay Sach disease
- (d) Phenylketonuria

61.

A 25 year old male patient presents to the emergency following road traffic accident with severe pain and swelling of right lower extremity. Local examination reveals tensely swelling lower extremity with absence of distal pulses. All of the following statements regarding this patient are correct EXCEPT:

- (a) Absence of distal pulsation is an indication for fasciotomy
- (b) Renal failure can occur due to myoglobinuria in this patient
- (c) Lower limb can be decompressed by an incision in the posterior compartment
- (d) Pain on passive movement of affected compartment muscles is an indication for fasciotomy

62.

A 'Thimble Bladder' with 'Golf Hole' ureteric orifices are seen in:

- (a) Schistosomiasis
- (b) Carcinoma of urinary bladder
- (c) Tuberculosis of urinary bladder
- (d) Detrusor hypertrophy

63.

Causes of Secondary lymphoedema are all EXCEPT:

- (a) Filariasis
- (b) Podoconiosis
- (c) Bacterial infection
- (d) Genetic factors

64.

A person presented with local gigantism of the leg and pulsation in the lower limb vein. The probable diagnosis is:

- (a) Soft tissue tumor
- (b) AV fistula
- (c) Varicose vein
- (d) Incompetent S-F junction

65.

Which one of the following statements is NOT correct in respect of cystic hygroma?

- (a) It is filled with clear lymph
- (b) It is situated in anterior triangle of neck
- (c) It is occasionally present since birth
- (d) It is lined by single layer of epithelium

66.

Which of the following statements regarding medullary carcinoma of thyroid are correct?

1. It has an origin from parafollicular C cells
2. Serum thyroglobulin is valuable tumor marker
3. Lymphatic spread is present in 50–60% of cases
4. It occurs as a part of MEN–2A syndrome

Select the correct answer using the code given below:

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

67.

Which of the following statements regarding Crohn's disease are correct?

1. Terminal ileum is the most common site for involvement in Crohn's disease
2. Crohn's disease involves the mucosa of the small intestine
3. Presence of skip lesions is a characteristic feature of Crohn's disease
4. Crohn's disease is often associated with perianal disease

Select 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

68.

Which one of the following statements about liver is correct?

- (a) 80 % of blood supply is from hepatic artery
- (b) Liver is divided into 10 segments
- (c) Liver develops from the foregut embryologically
- (d) Venous drainage is into superior mesenteric vein

69.

The most common site for Splenunculi is:

- (a) Mesocolon
- (b) Splenic vessels
- (c) Splenic hilum
- (d) Tail of pancreas

70.

Which one of the following statements about Mesenteric cysts is NOT correct?

- (a) It is more common in females
- (b) It is most common in the fourth decade of life
- (c) It is more common in the mesentery of the colon
- (d) One third of cases are seen in patients with less than 15 years

71.

Indications for CT scan in head injury within 1 hour include:

1. Glasgow Coma Scale < 13 at any point
2. Post traumatic seizure
3. Single episode of vomiting
4. Focal neurological deficit

Which of the statements given above are correct?

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

72.

Left vocal cord palsy is most common due to long intrathoracic course of the left recurrent laryngeal nerve which arches around the aorta. Any inflammatory or neoplastic condition to involve it is most likely to arise from:

- (a) Left lung hilum
- (b) Nasopharynx
- (c) Thyroid gland
- (d) Oesophagus

73.

Which of the following statements regarding femoral hernia are correct?

1. It is less common as compared to inguinal hernia
2. It appears below and lateral to the pubic tubercle
3. It is more common in men than women
4. Strangulation is present in 50 % cases of femoral hernia

Select the correct answer using the code given below:

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

74.

Common tumors that metastasize to the spine are all EXCEPT:

- (a) Breast
- (b) Lung
- (c) Testis/Germ cell
- (d) Thyroid

75.

The most common ocular malignancy of childhood is:

- (a) Oculoblastoma
- (b) Choroidal blastoma
- (c) Iridioblastoma
- (d) Retinoblastoma

76.

The maximum safe dose of lignocaine (with adrenaline) for local anesthesia is:

- (a) 3 mg/kg
- (b) 5 mg/kg
- (c) 7 mg/kg
- (d) 9 mg/kg

77.

All of the following symptoms in a 24 year old person having a head injury following a road traffic accident, point towards the fracture of skull bone EXCEPT:

- (a) CSF otorrhea
- (b) CSF rhinorrhea
- (c) Cranial nerve deficits
- (d) Diplopia

78.

Which one of the following CANNOT be included in the list of advantages of minimal access surgery?

- (a) Decrease in wound size
- (b) Decrease in wound pain
- (c) Increase bleeding
- (d) Decrease chances of hernia

79.

A 40 year male patient was operated for a benign tumor of the muscles of the right thigh. 4 hours later he developed severe excruciating pain in the right thigh, paraesthesia and pallor of the right leg. The probable diagnosis is:

- (a) Thromboembolism
- (b) Compartment syndrome
- (c) Wound infection
- (d) Fluid and electrolyte imbalance

80.

Consider the following statements regarding Hemorrhage.

1. Primary hemorrhage occurs immediately due to injury or surgery
2. Reactionary hemorrhage occurs after 24 hours of surgery
3. Reactionary hemorrhage is due to dislodgement of clot, normalization of blood pressure and slipping of ligature
4. Secondary hemorrhage occurs 7–14 days after surgery

Which of the statements given above are correct?

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

81.

Consider the following in respect of vaccination in pregnancy

1. Tetanus vaccination protects both the mother and the neonate
2. Live virus vaccination can be given in pregnancy
3. Two doses of tetanus toxoid should be given at 6 weeks interval
4. Previously immunized woman does not need booster dose of tetanus vaccine

Which of the statement(s) given above is/are correct?

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

82.

Oedema in pregnancy can be:

1. physiological oedema of pregnancy
2. always a sign of disease
3. due to cardiac failure
4. normal over the whole body

Select the correct answer using the code given below:

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

83.

Advantages of active management of third stage of labour are all EXCEPT:

- (a) Early separation of placenta
- (b) Reduction in maternal anemia
- (c) Control of maternal blood pressure
- (d) Prevention of postpartum haemorrhage

84.

The most common cause of postpartum haemorrhage is:

- (a) Uterine atony
- (b) Coagulopathy
- (c) Obstetric trauma
- (d) Retained placenta

85.

Which one of the following is NOT a pathological criterion for morbid adherent placenta?

- (a) Absence of decidua basalis
- (b) Presence of multiple infarctions
- (c) Absence of Nitabuch's fibrinoid layer
- (d) Varying degree of penetration of villi into muscle bundles

86.

Which one of the following is a systemic cause of abnormal uterine bleeding, according to FIGO classification?

- (a) Adenomyosis
- (b) Coagulopathy
- (c) Submucosal fibroid
- (d) Malignancy

87.

Which one of the following is NOT a characteristic of discharge in cases of Bacterial vaginosis?

- (a) Thick discharge
- (b) $\text{pH} \geq 5$
- (c) Positive Whiff test
- (d) Clue cells in wet mount microscopy

88.

Which one of the following is the most common route of infection in genital tuberculosis?

- (a) Lymphatic spread
- (b) Hematogenous spread
- (c) Ascending infection
- (d) Droplet infection

89.

All of the following are the risk factors for development of cervical cancer EXCEPT:

- (a) High risk HPV infection
- (b) Smoking
- (c) Age < 30 years
- (d) Multiple sexual partners

90.

Which one of the following methods is NOT used as a Triage screening test for cervical cancer?

- (a) Liquid based cytology
- (b) Endometrial aspiration biopsy
- (c) Colposcopy
- (d) Hybrid capture -2 for HPV DNA

91.

All are supports of uterus EXCEPT:

- (a) Uterosacral cardinal ligament
- (b) Levator ani muscle complex
- (c) Pelvic fascia
- (d) Ovarian ligament

92.

Which one of the following is NOT a determinant factor for choice of surgery in management of uterovaginal prolapse?

- (a) Degree of prolapse
- (b) Presence of decubitus ulcer
- (c) Prior surgery for prolapse
- (d) Parity

93.

Stallworthy's sign is seen in which one of the following clinical situations?

- (a) Anencephaly
- (b) Hydatidiform mole
- (c) Placenta previa
- (d) Multifetal gestation

94.

A 30 year old female G₃ P₂₊₀ has come with history of two months of amenorrhoea with irregular bleeding for 3 days and history of passage of clots and some fleshy mass. Probable clinical diagnosis is:

- (a) Missed abortion
- (b) Incomplete abortion
- (c) Inevitable abortion
- (d) Septic abortion

95.

Which one of the following abnormal Doppler changes is seen early in Intrauterine Growth Restriction (IUGR)?

- (a) Elevated S/D ratio in umbilical artery
- (b) Decreased S/D ratio in middle cerebral artery
- (c) Absent end-diastolic flow in the umbilical artery
- (d) Decreased S/D ratio in umbilical artery

96.

Which of the following statements regarding contraception are correct?

1. Barrier methods have high failure rate unless used correctly and consistently
2. Spermicide and microbicide are not used in combination
3. Male condoms can reduce the risk of STDs

Select the correct answer using the code given below:

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

97.

The replacement time for Cu-T 380A is:

- (a) 4 years
- (b) 3 years
- (c) 10 years
- (d) 5 years

98.

Mechanism of action of Combined Oral Contraceptives (COC) includes the following EXCEPT:

- (a) Inhibition of ovulation by suppression of FSH and LH
- (b) Making endometrium non-receptive for implantation
- (c) Making cervical mucus thick, viscid and scanty
- (d) Causing breakthrough bleeding

99.

Failure rate in Mini laparotomy operation is:

- (a) 0.2–0.6 %
- (b) 1–2 %
- (c) 0.1–0.3 %
- (d) 0.4–0.9 %

100.

The dose required for medical method of termination of pregnancy is:

- (a) Oral Mifepristone–200 mg
- (b) Oral Mifepristone –200 mg and vaginal Misoprostol 600 µg
- (c) Vaginal Misoprostol –800 µg
- (d) Oral Mifepristone–200 mg and vaginal Misoprostol 800 µg

101.

Live attenuated vaccine for influenza administered as a single dose intranasal spray is recommended for the use of which age group of people?

- (a) Infants less than 6 months of age
- (b) Elderly people more than 70 years of age
- (c) Individuals 2 years to 49 years
- (d) Elderly people more than 80 years of age

102.

The natural history of disease can be best studied by which type of epidemiological study?

- (a) Cross sectional study
- (b) Case control study
- (c) Cohort study
- (d) Experimental study

103.

Which one of the following statements about Sentinel Surveillance is most appropriate?

- (a) It is routine notification so that some cases can be identified
- (b) The data collected cannot be extrapolated to population
- (c) It identifies the missing cases and thereby supplements notified cases
- (d) It creates a reporting bias in the system

104.

Proportional mortality from tuberculosis is calculated by which one of the following rates?

- (a) Total number of deaths from tuberculosis per 1000 mid-year population
- (b) Total number of deaths due to tuberculosis per total number of cases of tuberculosis in that year
- (c) Total number of patients of tuberculosis alive per total number of patients diagnosed in that year
- (d) Total number of deaths from tuberculosis per total deaths from all causes in that year

105.

Which one of the following vaccines is recommended for prevention of diphtheria under Universal Immunization Programme (UIP) at present?

- (a) DTaP
- (b) dT
- (c) Pentavalent
- (d) DTPw

106.

All the houses in a community are numbered first. Then a number is selected between 1 and 10 randomly. Then every 10th number is selected from that point onwards. Which sampling method has been followed in the above example?

- (a) Non randomized sampling
- (b) Simple random sampling
- (c) Systematic random sampling
- (d) Stratified random sampling

107.

Vaccination schedule of Rotarix vaccine for prevention of diarrhea is described by which one of the following statements?

- (a) Two doses given 4 weeks apart between 2 - 4 months
- (b) Two doses given 4 weeks apart between 4– 6 months
- (c) Three doses given 4 weeks apart starting after 6 weeks
- (d) Three doses given 4 weeks apart starting after 12 weeks

108.

The food contaminated with *Clostridium botulinum* toxin can be made safe by which one of the following procedures?

- (a) Deep freezing the food to –20 °C for few minutes
- (b) Heating the food up to 100 °C for few minutes
- (c) Keeping the food at room temperature open to air for a day
- (d) Passing oxygen through the food for few minutes

109.

Orthotolidine (OT) test in water enables determination of:

- (a) free chlorine only
- (b) combined chlorine only
- (c) both free and combined chlorine
- (d) free fluorine

110.

Insulin resistance syndrome is NOT associated with which one of the following?

- (a) Hyperinsulinaemia
- (b) Low levels of triglycerides
- (c) Hypertension
- (d) Increased endothelial proliferation

111.

Which one of the following statements regarding anthracosis is NOT correct?

- (a) Simple pneumoconiosis may require about 12 years of work exposure for its development
- (b) Progressive massive fibrosis (PMF) frequently results in premature death
- (c) Risk of death among coal-miners is nearly five times that of the general population
- (d) Coal-miners's pneumoconiosis is a notifiable disease in Indian Mines Act of 1952

112.

The Rockefeller Foundation has helped India in the following projects EXCEPT:

- (a) Control of Hookworm disease
- (b) Establishment of All India Institute of Hygiene and Public Health at Kolkata
- (c) Establishment of National Institute of Health Administration and Education
- (d) Development of Medical College Libraries, Population Studies

113.

The recommended dose of Iron-folic acid (IFA) for an 8 year old child for prevention and control of anemia as per Iron Plus Initiative is:

- (a) 20 mg elemental iron and 100 µg folic acid for 100 days in a year
- (b) 30 mg elemental iron and 100 µg folic acid for 100 days in a year
- (c) 30 mg elemental iron and 250 µg folic acid for 100 days in a year
- (d) 20 mg elemental iron and 250 µg folic acid for 100 days in a year

114.

'Sisterhood method' is an approach used to measure:

- (a) Breast cancer burden
- (b) Cervix cancer burden
- (c) Maternal mortality
- (d) Infant mortality

115.

The daily supplementary nutrition that should be given to a pregnant/lactating mother under Integrated Child Development Services Scheme (ICDS) is:

- (a) 300 cal, 13–15 gm protein
- (b) 300 cal, 18–20 gm protein
- (c) 600 cal, 13–15 gm protein
- (d) 600 cal, 18–20 gm protein

116.

The period of surveillance or quarantine for a disease should be equal to:

- (a) Minimum incubation period of the disease
- (b) Maximum incubation period of the disease
- (c) Median incubation period of the disease
- (d) Does not depend on the incubation period

117.

Which mode of intervention is health education?

- (a) Health promotion
- (b) Specific protection
- (c) Early diagnosis and treatment
- (d) Disability limitation

118.

Polio epidemic is a:

- (a) Common source single exposure epidemic
- (b) Common source, continuous or repeated exposure
- (c) Propagated epidemic
- (d) Modern epidemic

119.

Doll and Hill study on smoking and lung cancer is a:

- (a) Case Control study
- (b) Prospective Cohort study
- (c) Retrospective Cohort study
- (d) A combination of Retrospective Cohort study and Prospective Cohort study

120.

Which one of the following diseases with fever and rash has an incubation period of 10-21 days?

- (a) Measles
- (b) Chicken pox
- (c) German measles
- (d) Dengue