Combined Medical Services Examination, 2024

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

T.B.C.: KCSP-B-SGOP

Test Booklet Series

TEST BOOKLET

Serial No. 059985





(Surgery, Gynaecology & Obstetrics, Preventive & Social Medicine)

Time Allowed: Two Hours

Maximum Marks: 250

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 A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet. Any omission/discrepancy will render the Answer 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 **120** items (questions). Each item comprises four responses (answers). You will select the response which you want to mark on the Answer 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 Sheet provided. See directions in the Answer Sheet.
- 6. All items carry equal marks.
- 7. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions sent to you with your Admission Certificate.
- 8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator only the Answer Sheet. You are permitted to take away with you the Test Booklet.
- 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 A CANDIDATE IN THE OBJECTIVE TYPE QUESTION 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, **one-third** of the marks assigned to that question will be deducted as 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 to 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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- 1. Which of the following are risk factors for wound infection?
 - 1. Malnutrition
 - 2. Poor perfusion
 - 3. Antibodies
 - 4. Foreign body material

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- 2. Which types of cancer are associated with exposure to ionizing radiation?
 - 1. Leukaemia
 - 2. Lung cancer
 - 3. Breast cancer
 - 4. Lymphoma

Select the correct answer using the code given below.

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

- **3.** Which of the following are correct regarding Li-Fraumeni syndrome?
 - It has autosomal dominant inheritance and is associated with P53 gene.
 - 2. It has autosomal recessive inheritance and is associated with P53 gene.
 - 3. It is associated with an increased risk of sarcomas and leukaemia.
 - It is associated with an increased risk of brain tumours and osteosarcomas.

- (a) 2, 3 and 4
- (b) 1, 3 and 4
- (c) 1 and 4 only
- (d) 1 and 3 only
- 4. A 48-year-old smoker presents to the OPD with complaints of cramping pain in both the calves on walking to about 100-150 metres. The pain is relieved on taking rest for about 2-3 minutes and the patient is able to walk for some more distance again before the pain appears. This presentation is suggestive of
 - (a) muscular fatigue
 - (b) osteoarthritis of the knee
 - (c) intermittent claudication
 - (d) neurogenic claudication

- 5. A midline neck swelling just below the hyoid bone and managed by Sistrunk's operation leads to postoperative need for thyroxine replacement. The most likely diagnosis is
 - (a) lateral aberrant thyroid
 - (b) thyroglossal cyst
 - (c) solitary thyroid nodule
 - (d) thyroglossal cyst with only functioning thyroid tissue
- 6. A 40-year-old smoker presents with soreness of tongue since last 2 months. On examination, it is found that the oral hygiene is poor and there is a white plaque over the lateral border of the tongue. What is the next step in the management of this patient?
 - (a) Oral vitamin C supplementation
 - (b) Oral antifungal treatment
 - (c) Edge biopsy of the lesion
 - (d) Local topical cauterization
- 7. Consider the following causes of visual loss:
 - 1. Obstruction of the central retinal artery
 - 2. Vitreous and retinal haemorrhage
 - 3. Cataract
 - 4. Retinal detachment

Which of the above causes are associated with acute visual loss in a patient?

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

- 8. A 60-year-old lady presents with a recent onset increase in a long standing swelling on the front of the neck. The swelling, which was small, had been present since last 30 years, but has now increased to more than twice the size in the last 2 months. On examination, the swelling is firm to hard in consistency and moves with deglutition. What is the most likely cause of this clinical presentation?
 - (a) Cystic degeneration
 - (b) Haemorrhage
 - (c) Malignant transformation
 - (d) Myxomatous transformation
- 9. Which of the following chromosomal abnormalities are associated with brain tumours?
 - 1. Neurofibromatosis type 1
 - 2. Neurofibromatosis type 2
 - 3. Peutz-Jeghers syndrome
 - 4. Hereditary nonpolyposis colorectal cancer

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- 10. Which one of the following is correct regarding "witch's milk"?
 - (a) It is seen in full-term infants.
 - (b) It is seen only in preterm infants.
 - (c) It is caused by stimulation of foetal breast by progesterone.
 - (d) It is caused by stimulation of foetal breast by calcitonin.

- 11. Which of the following statements are correct regarding Barrett's oesophagus?
 - 1. It is a metaplastic change.
 - 2. It is a risk factor for development of adenocarcinoma.
 - Ingestion of NSAIDs is the aetiological factor for its development.
 - 4. Endoscopic mucosal resection is an effective treatment.

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 2 and 4
- (d) 1, 3 and 4
- **12.** Which among the following are complications of liver trauma?
 - 1. Liver abscess
 - 2. Biliary fistula
 - 3. Portal thrombosis
 - 4. Liver failure

Select the correct answer using the code given below.

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

- **13.** Which of the following are local complications of acute pancreatitis?
 - 1. Pseudocyst
 - 2. Pleural effusion
 - 3. Ileus
 - 4. Acute fluid collection

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
- 14. Which of the following are risk factors for the development of pancreatic cancer?
 - 1. Cigarette smoking
 - 2. Diabetes mellitus
 - 3. Caucasian ethnicity
 - 4. Male gender

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 2 and 4
- (d) 1, 3 and 4
- 15. Which of the following are metabolic causes of splenic enlargement?
 - (a) Rickets and Still's disease
 - (b) Amyloid and Gaucher's disease
 - (c) Porphyria and Felty's syndrome
 - (d) Myelofibrosis and Weil's disease

- **16.** Which one of the following statements is correct about mesenteric cysts?
 - (a) It occurs most commonly in children less than 18 years of age.
 - (b) It is more common in males as compared to females.
 - (c) It presents most commonly as a painless abdominal swelling.
 - (d) Percutaneous aspiration with injection of sclerosant is the preferred treatment option.
- 17. Which of the following are features of umbilical hernia in adults?
 - 1. Patients are commonly overweight with a thinned and attenuated midline raphe.
 - 2. Most patients complain of pain due to tissue tension.
 - 3. Men are affected more commonly than women.
 - 4. Hernia repair can be done by the technique described by Mayo.

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- **18.** What is the most common cause of perforation of the oesophagus?
 - (a) Barotrauma
 - (b) Mediastinitis
 - (c) latrogenic infection
 - (d) Malignancy

- 19. Which of the following are stages of damage control surgery?
 - 1. Patient's selection
 - 2. Control of haemorrhage
 - 3. Resuscitation in ICU
 - 4. Preventive surgery

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
 - (d) 2, 3 and 4
- **20.** Which of the following statements are correct regarding renal cell carcinoma?
 - 1. It arises from the epithelium of the proximal convoluted tubule.
 - 2. It has a female preponderance.
 - 3. Major subtypes are clear cell, papillary and chromophobe.
 - 4. Surgery is the mainstay of treatment for organ-confined disease.

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

- 21. Which of the following are features of autosomal dominant polycystic kidney disease?
 - 1. Cyst may also occur in liver, pancreas and arachnoid membrane.
 - 2. Most commonly manifests between 20-30 years of age.
 - 3. Clinical manifestations are renal and extrarenal.
 - 4. Men tend to progress to renal failure more rapidly than women.

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- 22. Extracorporal Shock Wave Lithotripsy (ESWL) is most commonly used for the treatment of
 - (a) gallbladder stones
 - (b) urinary tract stones
 - (c) salivary gland stones
 - (d) abdominal stony-hard tumour

- 23. Consider the following clinical features:
 - 1. Raised ICP
 - 2. Seizures
 - 3. Focal deficit
 - 4. Headache

Which of the above clinical features are related to most brain tumours?

- (a) 1, 2, 3 and 4
- (b) 1 and 2 only
- (c) 1, 2 and 3 only
- (d) 2, 3 and 4 only
- 24. The most common type of brain tumours associated with neurofibromatosis type 1 brain tumour syndrome is
 - (a) astrocytoma
 - (b) acoustic neuroma
 - (c) meningioma
 - (d) medulloblastoma
- 25. Which of the following are correct for herniation via foramen of Morgagni?
 - 1. It occurs posteriorly in chest.
 - 2. Transverse colon is the commonest content.
 - 3. Defect is between sternal and costal attachments.
 - 4. It is a type of congenital hernia.

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

- **26.** A 40-year-old lady complains progressive deformities of her hands and fingers associated with stiffness which is present in both the hands and improves as the day progresses. On there is examination, symmetrical involvement of hands and fingers of both the upper limbs with flexion and ulnar deviation at the metacarpophalangeal joints. What is the most likely diagnosis in this lady?
 - (a) Osteoarthritis
 - (b) Ankylosing spondylitis
 - (c) Rheumatoid arthritis
 - (d) Tenosynovitis
- 27. A 52-year-old female complains of increasing pain in the right shoulder. She is also finding it increasingly difficult to do overhead abduction of the affected joint. She had been diagnosed as a diabetic 20 years back and is on treatment since then. What is the most likely cause of her clinical condition?
 - (a) Rotator cuff tear
 - (b) Frozen shoulder
 - (c) Bacterial arthritis
 - (d) Osteoarthritis

- 28. A 20-year-old girl presents to the OPD with complaints of a progressively increasing swelling on the dorsum of the left wrist. The swelling is cystic and nontender on examination and becomes more prominent on plantar flexion of the wrist. The swelling is 2 cm × 1 cm in size. What is the likely diagnosis in this case?
 - (a) Ganglion cyst
 - (b) Sebaceous cyst
 - (c) Dermoid cyst
 - (d) Epidermoid cyst
- 29. Upper motor neuron lesions are characterized by which of the following?
 - 1. Increased tone spasticity
 - 2. Hyperreflexia
 - 3. Absent plantar response
 - 4. Motor weakness

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- 30. A 56-year-old female has been diagnosed with gallstones and is undergoing a preanaesthesia checkup. She has been a diabetic since last 15 years, but sugar levels are within the limits. Which category of physical status does she fit into?
 - (a) ASA 4
 - (b) ASA 3
 - (c) ASA 2
 - (d) ASA 1

- 31. A 30-year-old road traffic accident victim is being taken up for emergency laparotomy for haemoperitoneum and suspected multiorgan trauma. Which one of the following will be an indication for performing damage control surgery?
 - (a) Blood pressure < 100 mm Hg
 - (b) Acidosis with pH < 7.32
 - (c) Hypothermia < 36 °C
 - (d) Coagulopathy

32. Consider the following:

- 1. Pain relief
- 2. Prevention of infection
- 3. Anaesthesia
- 4. Restoration of anatomy

Which of the features given above are benefits of fracture treatment?

- (a) 1, 3 and 4
- (b) 1, 2 and 3
- (c) 1, 2 and 4
- (d) 2, 3 and 4
- 33. A 30-year-old motorbike rider is brought to the emergency with history of a road traffic accident and altered consciousness. On secondary survey, the doctor notices presence of a bruise over the left mastoid process. The finding indicates
 - (a) fracture of mastoid process
 - (b) injury to the external auditory meatus
 - (c) fracture of the skull base
 - (d) soft tissue injury to the neck

34. Hangman's fracture is

- (a) traumatic spondylolisthesis of atlas vertebra (C₁)
- (b) traumatic spondylolisthesis of axis vertebra (C₂)
- (c) traumatic spondylolisthesis of thoracic vertebra (T₁)
- (d) traumatic spondylolisthesis of lumbar vertebra (L₁)
- 35. Which of the following are correct in respect of Systemic Inflammatory Response Syndrome (SIRS)?
 - 1. It is caused by the release of lipopolysaccharide endotoxin from dying *E. coli* bacteria.
 - 2. It is same as bacteraemia.
 - 3. It results in Multiple Organ Dysfunction Syndrome (MODS).
 - 4. White cell counts of more than 12×10^9 /litre are present.

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

- 36. A surgeon is about to start a laparoscopic procedure on a patient. The floor nurse asks the surgeon about the identity of the patient, site of the procedure to be performed and any anticipated critical events during the surgery. These questions are a part of the
 - (a) universal precautions checklist
 - (b) nurses safety checklist
 - (c) MCI patient safety checklist
 - (d) WHO surgical safety checklist
- **37.** Which of the following are correct for managing hypertrophic scars?
 - 1. Silicone gel sheeting
 - 2. Intralesional steroid injections
 - 3. Vitamin A gel applications
 - 4. Laser treatment

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- **38.** Which of the following are approximate daily requirements of the common electrolytes in an adult?
 - 1. Sodium 50-90 mM/day
 - 2. Calcium 1 mM/day
 - 3. Potassium 50 mM/day
 - 4. Magnesium 1 mM/day

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- 39. Distributive shock is described by which of the following patterns of cardiovascular responses?
 - 1. Vasodilation
 - 2. Reduced peripheral vascular resistance
 - 3. Inadequate 'afterload'
 - 4. Low cardiac output

- (a) 1, 2 and 4
- (b) 1, 3 and 4
- (c) 2, 3 and 4
- (d) 1, 2 and 3
- 40. The best measure of organ perfusion and the best monitor of adequacy of shock therapy is
 - (a) central venous pressure
 - (b) pulmonary wedge pressure
 - (c) urine output
 - (d) restoring blood pressure/pulse vital parameters

- **41.** Which one of the following statements is correct regarding foetal physiology?
 - (a) Haematopoiesis is demonstrated first in the yolk sac by 14th day.
 - (b) Meconium appears at 16 weeks.
 - (c) Breathing movements are identified at 26 weeks.
 - (d) Foetal pancreas secretes insulin as early as 20 weeks.
- **42.** Which of the following are advantages of state of haemodilution during pregnancy?
 - Optimum gaseous exchange between maternal and foetal circulation due to decreased blood viscosity
 - 2. Protection against adverse effect of supine and erect posture
 - 3. Protection against adverse effect of blood loss during delivery

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- **43.** Consider the following statements regarding oligohydramnios:
 - It is defined on USG when maximum vertical pocket of liquor is less than 5 cm.
 - 2. It is defined on USG when AFI is less than 5 cm.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **44.** Which of the following are correct about endocrine changes in normal pregnancy?
 - 1. Increase in levels of maternal serum iodine
 - 2. Increase in serum levels of Corticotropin-Releasing Hormone (CRH)
 - 3. Increase in serum levels of aldosterone
 - 4. Increase in serum levels of ACTH Select the answer using the code given below.
 - (a) 1, 2 and 3
 - (b) 1, 2 and 4
 - (c) 1, 3 and 4
 - (d) 2, 3 and 4
- **45.** Which of the following features are correct regarding onset of true labour?
 - 1. Regular uterine contractions
 - 2. Progressive cervical dilation and effacement
 - 3. Presence of show
 - 4. Labour and delivery are synonymous

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

- **46.** According to the WHO Intrapartum Care Guidelines, 2018, the active phase of labour starts from what dilation of cervix?
 - (a) 3 cm
 - (b) 4 cm
 - (c) 5 cm
 - (d) 6 cm
- **47.** The diameter of engagement of foetal skull in marked deflexion is
 - (a) occipitofrontal diameter
 - (b) suboccipitofrontal diameter
 - (c) mentovertical diameter
 - (d) suboccipitobregmatic diameter
- **48.** Onset of labour is initiated by which of the following?
 - 1. Uterine distension
 - Increased CRH and ACTH from foetal hypothalamic-pituitaryadrenal axis
 - 3. Increased level of progesterone immediately before labour
 - 4. Increased synthesis of myometrial receptors for oxytocin due to effect of oestrogen

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

- 49. A 30-year-old female P₂L₂ had a forceps delivery 2 days back. There was injury to head of baby resulting in collection of blood in soft tissue between pericranium and flat bone of skull, limited by suture line. What is the probable diagnosis?
 - (a) Caput succedaneum
 - (b) Intraventricular haemorrhage
 - (c) Cephalohaematoma
 - (d) Subgaleal haemorrhage
- **50.** Which of the following are correct regarding pathological findings of placenta accreta?
 - 1. Absence of decidua basalis
 - 2. Absence of Nitabuch's fibrinoid layer
 - Loss of normal hypoechoic retroplacental myometrial zone in ultrasonography

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

- **51.** Which of the following statements are correct regarding peripartum cardiomyopathy?
 - It is usually seen in multiparous women.
 - 2. Echocardiography shows ejection fraction less than 45%.
 - 3. ACE inhibitors are contraindicated.
 - 4. History of prior heart disease is mostly present.

- (a) 1 and 2 only
- (b) 1, 2 and 3
- (c) 3 and 4 only
- (d) 1, 3 and 4
- 52. Mrs. A, who is 9 months pregnant, presents to the labour room with complaints of severe pain in abdomen and vaginal bleeding for 30 minutes. She is 2nd gravida (producing second child) and delivered her first child 2 years back by caesarean delivery. On examination, she has scar tenderness, vaginal bleeding and haematuria. On CTG, she has an abnormal FHR tracing. What is her likely clinical diagnosis?
 - (a) Urinary tract infection
 - (b) Scar rupture/dehiscence during labour
 - (c) Labour pain
 - (d) Rupture of urinary bladder

- 53. A 28-year-old female G₂P₁L₁ with history of previous caesarean presents to the gynaecology emergency in labour. On examination, she is hypotensive, foetal heart sounds are absent and foetal parts are easily palpable. What is her diagnosis?
 - (a) Oligohydramnios
 - (b) Abruptio placentae
 - (c) Uterine rupture
 - (d) Hydatidiform mole
- 54. A 24-year-old primigravida comes to ANC clinic at 8 months amenorrhoea. Her BP is found to be 160/100 mm Hg. Lab findings reveal thrombocytopenia, increased SGOT/SGPT and LDH. What is her diagnosis?
 - (a) Obstetric cholestasis
 - (b) Hepatitis B
 - (c) HELLP syndrome
 - (d) Eclampsia
- 55. A patient, who is 2 months pregnant, reports to a hospital with complaints of increased vaginal bleeding and pain in lower abdomen. Internal examination reveals dilated internal os of cervix and products of conception are felt through it. What is her likely clinical diagnosis?
 - (a) Threatened abortion
 - (b) Inevitable abortion
 - (c) Septic abortion
 - (d) Incomplete abortion

- **56.** Which one of the following is a common pathology associated with ureteric injury while performing surgical procedure of abdominal hysterectomy?
 - (a) Pelvic endometriosis
 - (b) Adenomyosis
 - (c) Hydrosalpinx
 - (d) Ovarian teratoma
- **57.** Which of the following are correct regarding pathology of stress urinary incontinence?
 - 1. Hypermobility of urethra
 - Ascend of bladder neck and proximal urethra above pelvic diaphragm
 - 3. Lowered urethral pressure
 - 4. Increased detrusor activity

- (a) 1 and 2
- (b) 1 and 3
- (c) 2 and 4
- (d) 3 and 4
- **58.** Which of the following operative procedures is/are conformity for the diagnosis of bicornuate uterus?
 - (a) Dilation with curettages
 - (b) Hysteroscopy
 - (c) Hysteroscopy and laparoscopy
 - (d) Hysterectomy

- **59.** Which of the following are correct regarding pelvic cellular tissue?
 - 1. It supports the pelvic organs.
 - 2. It forms protective sheath for blood vessels and terminal part of ureter.
 - 3. It prevents infection to be spread out of pelvis.
 - 4. Marked hypertrophy of pelvic cellular tissue occurs in pregnancy.

Select the answer using the code given below.

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- **60.** Which of the following are correct regarding androgen insensitivity syndrome?
 - 1. Inherited as X-linked recessive disorder
 - 2. Karyotype is 46 XXY
 - 3. It is also called testicular feminization
 - 4. Confirmation of diagnosis by gonadal biopsy

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

- 61. Which of the following are useful investigations for diagnosis of unresponsive endometrium as a cause of primary amenorrhoea?
 - 1. Karyotype
 - 2. Progesterone challenge test
 - 3. Hormonal studies
 - 4. Hysterosalpingography

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- **62.** A 16-year-old girl with primary the amenorrhoea presents to gynaecology OPD for evaluation. She secondary sexual has normal characters. Her karyotype is 46,XX and ultrasound reveals normal ovaries and tubes but absent uterus. What is her clinical diagnosis?
 - (a) Androgen insensitivity syndrome
 - (b) Turner syndrome
 - (c) Mayer-Rokitansky-Küster-Hauser syndrome
 - (d) Primary ovarian failure

- 63. A 25-year-old female comes to the gynaecology OPD for evaluation of secondary amenorrhoea. She gives history of previous dilatation and curettage, and her FSH levels are 8 IU/L. The probable cause of amenorrhoea is
 - (a) Sheehan syndrome
 - (b) Asherman syndrome
 - (c) premature ovarian failure
 - (d) incomplete abortion
- 64. Which of the following criteria are required to be fulfilled for hospitalization in a case of pelvic inflammatory disease?
 - 1. Coexisting pregnancy
 - 2. Mild fever and pain responding well to antibiotics
 - 3. Suspected tubo-ovarian abscess
 - 4. Coexistent HIV infection

- (a) 1, 3 and 4
- (b) 1, 2 and 3
- (c) 1, 2 and 4
- (d) 2, 3 and 4
- 65. A young female presented with complaints of lower abdominal pain, vaginal discharge, history of IUD use for last 3-4 years. On examination, the patient had fever, adnexal/cervical motion tenderness and increased ESR and C-reactive protein. What is the probable clinical diagnosis?
 - (a) Ectopic pregnancy
 - (b) Acute appendicitis
 - (c) Diverticulitis
 - (d) Acute PID

- **66.** Which of the following are risk factors for Pelvic Inflammatory Disease (PID)?
 - 1. Use of contraceptive pills
 - 2. IUD use
 - 3. Genetic predisposition
 - 4. Sexually active teenagers

- (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 are symptoms of genital tuberculosis?
 - 1. Postmenopausal bleeding
 - 2. Infertility
 - 3. Chronic pelvic pain
 - 4. Oligomenorrhoea

Select the correct answer using the code given below.

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

- **68.** Which one of the following is correct regarding choriocarcinoma?
 - (a) Vaginal bleeding is the commonest presenting symptom
 - (b) About 20-30% of patients with molar pregnancies develop chorio-carcinoma
 - (c) Primary site of involvement is fallopian tube
 - (d) Highly resistant tumour to chemotherapy
- **69.** Which of the following are favourable factors in prognosis of ovarian malignancy?
 - 1. Older age group
 - 2. Well-differentiated tumour
 - 3. Smaller tumour volume
 - 4. Absence of ascites

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- **70.** Which one of the following drugs is most effective in the treatment of gestational trophoblastic neoplasia?
 - (a) Cisplatin
 - (b) Methotrexate
 - (c) Gemcitabine
 - (d) None of the above

- 71. A 48-year-old female underwent total hysterectomy with bilateral salpingo-oophorectomy. The surgical specimen revealed solid ovarian tumour and histology revealed thecoma-fibroma. Which one of the following is the most appropriate statement regarding this condition?
 - (a) 20% of such tumours are bilateral.
 - (b) Endometrial hyperplasia is often associated.
 - (c) It is always associated with gross ascites.
 - (d) It is derived from germ cells.
- **72.** In POPQ classification for uterovaginal prolapse, the only measurement done after reducing the prolapse is
 - (a) genital hiatus
 - (b) point C
 - (c) point D
 - (d) total vaginal length
- **73.** Which of the following are essential steps of Fothergill's operation?
 - 1. Laparoscopic or vaginal ligation
 - 2. Amputation of cervix
 - 3. Plication of Mackenrodt's ligaments in front of cervix
 - 4. Ant colporrhaphy

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

- **74.** Which of the following are indications of cold knife conization?
 - Inconsistent finding colposcopy, cytology and directed biopsy
 - 2. Persistent CIN-1 lesion in women willing for future fertility
 - 3. Carcinoma in situ
 - 4. Unsatisfactory colposcopic finding entire margin of lesion is not visible

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- **75.** Which of the following are factors for poor outcome following tuboplasty?
 - 1. Dense pelvic adhesions
 - 2. Length of reconstructed tube less than 8 cm
 - 3. Bilateral hydrosalpinx
 - 4. Reversal after 5 years of sterilization procedure

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

- **76.** Ulipristal acetate (progesterone receptor modulator) should **not** be prescribed as emergency contraceptive in women with
 - (a) glaucoma
 - (b) liver dysfunction
 - (c) kidney failure
 - (d) coagulopathy
- 77. Injectable medroxyprogesterone IP
 150 mg/mL contraceptive injection is
 available in Family Health Programme
 of the Government of India under the
 name
 - (a) Saheli
 - (b) Sayana Press
 - (c) Antara
 - (d) Sahiba
- 78. Which of the following are major complications of oral pills?
 - 1. Cholestasis jaundice
 - 2. Chloasma and acne
 - 3. Venous thromboembolism
 - 4. Breast cancer

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

- 79. Which of the following conditions are indications of removal of intrauterine device?
 - 1. Persistent irregular uterine bleeding
 - 2. Perforation of uterus
 - 3. Pyelonephritis
 - 4. Pregnancy with device in situ

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- 80. A 25-year-old newly married female on liver enzyme inducers is requesting contraceptive advice in family planning clinic. Which of the following would be the most reliable method of contraception for her?
 - (a) Combined oral contraceptive pill
 - (b) Male condom
 - (c) Diaphragm
 - (d) Depo-Provera injection

- **81.** As per the Open Vial Policy, partially used multidose vials of which of the following vaccines can be used over more than one immunization session?
 - 1. BCG vaccine
 - 2. DPT vaccine
 - 3. Hepatitis B vaccine
 - 4. Measles vaccine

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) 1, 3 and 4
- 82. The statement, "Health is a dynamic equilibrium between man and environment and disease a maladjustment of the human organism to environment" explains which one of the following concepts of health?
 - (a) Biomedical
 - (b) Ecological
 - (c) Psychosocial
 - (d) Holistic

83. The following table shows three broad components under which the objectives of the National Health Policy, 2017 can be grouped, along with an example of goal/objective under that component:

Pair No.	Broad components	Goal/Objective examples
1	Health status and programme impact	Increase life expectancy at birth from 67.5 to 70 years by 2025
2	Health systems performance	More than 90% of the newborn are fully immunized by one year of age by 2025
3	Health systems strengthening	Increase State sector health spending to more than 8% of their budget by 2020

How many of the pairs given above are correctly matched?

- (a) None of the pairs
- (b) Only one of the pairs
- (c) Only two of the pairs
- (d) All of the three pairs

- **84.** Consider the following management methods/techniques:
 - 1. System analysis
 - 2. Organizational design
 - 3. Personnel management
 - 4. Information systems

Which of the above methods/techniques are based on behavioural sciences?

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- **85.** In the following table, the end results of planning are qualified by brief characteristics:

Pair No.	End results of planning	Brief characteristics
1	Goal	Always constrained by time
2	Objective	Precise—either achieved or not achieved
3	Target	Permits the concept of degree of achievement

How many of the pairs given above are correctly matched?

- (a) None of the pairs
- (b) Only one of the pairs
- (c) Only two of the pairs
- (d) All of the pairs

- **86.** Consider the following steps of a planning cycle:
 - 1. Assigning priorities among the problems
 - 2. Evaluation
 - 3. Selecting best programme
 - 4. Operating the programme

Which among the following is the correct sequence of steps?

- (a) $3 \rightarrow 4 \rightarrow 1 \rightarrow 2$
- (b) $1 \rightarrow 2 \rightarrow 3 \rightarrow 4$
- (c) $1 \rightarrow 3 \rightarrow 4 \rightarrow 2$
- (d) $2 \rightarrow 3 \rightarrow 4 \rightarrow 1$
- **87.** Which of the following statements are correct for incidence rate?
 - 1. It is useful for taking action to control a disease.
 - 2. Rising incidence rates may indicate ineffectiveness of the current control programmes.
 - Fluctuation in incidence rate may indicate a change in aetiology of disease.

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

88. Consider the following definition:

"A high level of infection beginning early in life and affecting most of the child population, leading to a state of equilibrium such that the adult population shows evidence of the disease much less commonly than the children."

Which one of the following terms bestfits this definition?

- (a) Holoendemic
- (b) Hyperendemic
- (c) Hypoendemic
- (d) Pandemic
- **89.** Consider the following statements regarding dengue virus:
 - 1. It has four distinct serotypes.
 - 2. Infection with any one serotype confers lifelong immunity for that virus serotype.
 - 3. Secondary infection with dengue serotype 2 leads to severe form of dengue.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- **90.** Consider the following statements regarding dengue:
 - 1. The mosquito becomes infective after an extrinsic incubation period of 8-10 days.
 - 2. Once it becomes infective, the mosquito remains infective for life.
 - 3. The genital tract of the mosquito does not get infected.

Which of the statements given above are correct?

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

- 91. A researcher has obtained the country-level data on the average Body Mass Index (BMI) and the average sugar intake for 100 countries. Which among the following will be best suited to present the relationship between BMI and sugar intake in the 100 countries?
 - (a) Bar chart
 - (b) Pie diagram
 - (c) Frequency polygon
 - (d) Scatter diagram
- 92. Frontline health workers are employed to record the births and deaths in countries which have made slow progress in the development of a comprehensive vital registration system. This approach is known as
 - (a) registration of vital events
 - (b) lay reporting
 - (c) sample registration system
 - (d) census
- **93.** While calculating the 'total dependency ratio', which one of the following is used in the denominator?
 - (a) Midyear population
 - (b) Population 0 to 65 years
 - (c) Population 15 to 64 years
 - (d) Population 14 to 70 years

- 94. As per the United Nations definition of a vital events registration system, 'vital events' include which of the following?
 - 1. Foetal deaths
 - 2. School admissions
 - 3. Legal separations
 - 4. College graduations

- (a) 1 and 2
- (b) 1 and 3
- (c) 2 and 3
- (d) 2 and 4
- **95.** Consider the following statements about Kyasanur Forest Disease (KFD):
 - 1. It is transmitted by ticks.
 - It was originally called 'pig disease' because of the association with dead pigs.
 - 3. It was first recognized in Karnataka State.

How many of the statements given above are correct?

- (a) None of the statements
- (b) Only one of the statements
- (c) Only two of the statements
- (d) All the three statements

- 96. In countries with low levels of measles transmission, what should be the appropriate age for starting immunization with measles-containing vaccine (MCV)?
 - (a) 6 months
 - (b) 9 months
 - (c) 12 months
 - (d) 15-18 months
- **97.** Monkeypox, a viral zoonotic disease, is caused by
 - (a) a single-stranded RNA virus
 - (b) a double-stranded RNA virus
 - (c) a single-stranded DNA virus
 - (d) a double-stranded DNA virus
- 98. Raju, a 6-year-old boy, was returning home from school. At the gate, he was scratched by a dog and there was some bleeding from the wound. Which option should be followed for the post-exposure prophylaxis?
 - (a) Wash the wound and administer a shot of tetanus toxoid
 - (b) Wash the wound and vaccinate with ARV only
 - (c) Wash the wound, vaccinate with ARV and administer immuno-globulin
 - (d) Wash and apply antiseptic to the wound

- **99.** The method of combined disposal of refuse and night soil is known as
 - (a) dumping
 - (b) controlled tipping
 - (c) incineration
 - (d) composting
- **100.** Consider the following statements about working of septic tanks:
 - 1. They are recommended for large communities, rather than small communities.
 - There should be no air space between the level of liquid in the tank and the undersurface of the cover.
 - 3. Liquid effluent from the outlet pipe is free from all pathogens.

How many of the statements given above are correct?

- (a) None of the statements
- (b) Only one of the statements
- (c) Only two of the statements
- (d) All the three statements

- **101.** Of the following amino acids, which is categorized as a nonessential amino acid?
 - (a) Leucine
 - (b) Threonine
 - (c) Tryptophan
 - (d) Proline
- 102. Consider the following milks:
 - 1. Buffalo milk
 - 2. Cow milk
 - 3. Goat milk
 - 4. Human milk

What is the correct order (from highest to lowest) with regard to fat content per 100 gm in the milk?

- (a) $1 \rightarrow 3 \rightarrow 4 \rightarrow 2$
- (b) $4 \rightarrow 2 \rightarrow 3 \rightarrow 1$
- (c) $2 \rightarrow 1 \rightarrow 4 \rightarrow 3$
- (d) $1 \rightarrow 3 \rightarrow 2 \rightarrow 4$
- **103.** Which of the following are unsaturated fatty acids?
 - 1. Lauric acid
 - 2. Linoleic acid
 - 3. Oleic acid
 - 4. Palmitic acid

Select the correct answer using the code given below.

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

- 104. In India, the most widely prevalent stage of iron deficiency is
 - (a) decreased iron stores without any other detectable abnormalities
 - (b) fall in percentage saturation of transferrin
 - (c) overt iron deficiency with impaired haemoglobin synthesis
 - (d) decrease in the concentration of circulating haemoglobin
- 105. Consider the following statements:

Statement I:

Waist circumference and waist to hip ratio are more powerful predictors of subsequent risk of type 2 diabetes than Body Mass Index (BMI).

Statement II:

Central obesity is an important determinant of insulin resistance, the undergoing abnormality in most cases of type 2 diabetes.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement I and Statement II are correct and Statement II is the correct explanation of Statement I
- (b) Both Statement I and Statement II are correct but Statement II is not the correct explanation of Statement I
- (c) Statement I is correct but Statement II is incorrect
- (d) Statement I is incorrect but Statement II is correct

106. Consider the following statement:

"The people should seek to preserve their traditional eating patterns and lifestyles associated with low levels of Coronary Heart Disease (CHD)."

Which level of prevention is implied in this statement?

- (a) Primordial
- (b) High risk
- (c) Primary
- (d) Secondary
- 107. Raju is 30 years of age. He has been working in the ceramic and pottery industry for the last 10 years. Which one of the following conditions should he be screened for?
 - (a) Silicosis
 - (b) Anthracosis
 - (c) Byssinosis
 - (d) Asbestosis
- 108. An industrial worker was brought to a medical facility due to health problems. On his workup including laboratory tests, a finding of basophilic stippling of Red Blood Cells (RBC) was observed. Which among the following is he/she likely to be having?
 - (a) Asbestosis
 - (b) Farmer's lung
 - (c) Lead poisoning
 - (d) Brucellosis

109. Consider the following pairs of genetic diseases that show Mendelian inheritance. Each of the following pairs represents a genetic disease and it has been matched with a type of inheritance:

1	Cystic fibrosis	Autosomal recessive
2	Huntington's chorea	Autosomal dominant
3	Marfan's syndrome	Recessive sex-linked

How many of the pairs given above are correctly matched?

- (a) None of the pairs
- (b) Only one of the pairs
- (c) Only two of the pairs
- (d) All the three pairs

110. Consider the following statements:

Statement I:

Signs of thalassemia major usually develop after 6 months of age.

Statement II:

This is the time when haemoglobin synthesis switches from haemoglobin F to haemoglobin A.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement I and Statement II are correct and Statement II is the correct explanation of Statement I
- (b) Both Statement I and Statement II are correct but Statement II is not the correct explanation of Statement I
- (c) Statement I is correct but Statement II is incorrect
- (d) Statement I is incorrect but Statement II is correct

- 111. Which of the following publications is/are brought out by the World Health Organization?
 - 1. CD Alert
 - 2. Morbidity and Mortality Weekly Report
 - 3. Weekly Epidemiological Record

- (a) 2 only
- (b) 1 and 2
- (c) 2 and 3
- (d) 3 only
- **112.** As per the basic model of a nuclear family life cycle, consider the following phases:
 - 1. Contraction
 - 2. Dissolution
 - 3. Extension
 - 4. Formation

Which one of the following best represents the correct sequence of phases in a normal nuclear family?

- (a) $1 \rightarrow 2 \rightarrow 3 \rightarrow 4$
- (b) $4 \rightarrow 3 \rightarrow 1 \rightarrow 2$
- (c) $1 \rightarrow 4 \rightarrow 3 \rightarrow 2$
- (d) $4 \rightarrow 1 \rightarrow 2 \rightarrow 3$
- 113. Which among the following are characteristics of health education, rather than propaganda?
 - Knowledge actively acquired, rather than instilled
 - 2. Appeals to emotion, rather than reason
 - 3. Behaviour centred, rather than information centred
 - 4. Arouses and stimulates primitive desires, rather than disciplines them

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

- 114. Consider the following statements regarding LNG-20 (Mirena):
 - 1. It is a T-shaped IUD filled with natural hormone progesterone.
 - 2. It is associated with a low pregnancy rate (2 per 1000 women).
 - 3. It is associated with a large number of ectopic pregnancies.
 - 4. It is associated with lower menstrual blood loss as compared to copper IUDs.

Which of the statements given above is/are correct?

- (a) 2 only
- (b) 2 and 4 only
- (c) 1, 3 and 4
- (d) 2, 3 and 4
- 115. The most common cause of maternal mortality in India is
 - (a) obstetric haemorrhage
 - (b) obstructed labour
 - (c) unsafe abortion
 - (d) toxaemia of pregnancy

- Programme, Indoor Residual Spray (IRS) is the primary method of vector control in rural setting. Which one of the following is the 'insecticide of choice'?
 - (a) DDT
 - (b) Malathion
 - (c) Synthetic pyrethroid
 - (d) Temephos
- 117. Consider the following statements with regard to selection of Accredited Social Health Activist (ASHA) under NRHM:
 - 1. ASHA must be a woman preferably in the age group of 18 to 25 years.
 - 2. ASHA must have had formal education up to at least class ten.
 - ASHA must be a resident of the village.
 - 4. ASHA may be a married, widowed or divorced woman.

Which of the statements given above are correct with regard to process of selection of ASHA?

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

- 118. Consider the following statements regarding the Central Drugs Standard Control Organization (CDSCO) in India:
 - 1. The CDSCO is headed by the Drugs Controller General (India) at the Centre.
 - 2. The CDSCO is a part of the Directorate of Director General of Health Services.
 - 3. The CDSCO is under the Ministry of Chemicals and Fertilizers, Government of India.
 - 4. The CDSCO has a network of several port offices for monitoring the import and export of drugs.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 1 and 3
- (c) 1, 2 and 4
- (d) 2 and 4 only
- 119. The National AIDS Control Organization provides prepacked colour-coded STI/RTI kits as a free supply to its designated STI/RTI clinics. Consider the following pairs:

Pair No.	Colour codes	STI/RTI conditions
1	Red	Urethral discharge
2	Green	Vaginitis
3	White	Inguinal bubo

How many of the pairs given above are correctly matched?

- (a) None of the pairs
- (b) Only one pair
- (c) Only two pairs
- (d) All the three pairs
- 120. The table below shows the results of ELISA test for HIV infection:

	True infection status	
	Infected	Noninfected
Positive	4900	950
Negative	100	94050
Total	5000	95000

Consider the following statements:

- 1. The sensitivity is 98%.
- 2. The specificity is 99%.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

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