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.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO
1. The ratio for Type-I to Type-III collagen during maturation of collagen in remodelling phase is:
   (a) 1:1
   (b) 2:1
   (c) 3:1
   (d) 4:1

2. Which one of the following statements regarding Gas Gangrene Infection is correct?
   (a) It is caused by *C. perfringens*, a gram negative aerobic non-spore-forming bacilli.
   (b) It is caused by *C. perfringens*, a gram positive anaerobic spore-forming bacilli.
   (c) It is caused by *C. tetani*, a gram positive anaerobic spore-forming bacilli.
   (d) It is caused by *C. tetani*, a gram negative anaerobic non-spore-forming bacilli.

3. The term “Gompertzian curve” is related to which one of the following?
   (a) Tumour
   (b) Gallstone
   (c) Intestinal obstruction
   (d) Hernia

4. A 5-year-old male child comes with a left sided scrotal swelling which has no cough impulse and does not reduce on compression or lying down but the parents give a definite history that swelling is absent in the morning and comes by in the evening. The best treatment is:
   (a) To leave it alone (masterly inactivity)
   (b) Herniotomy
   (c) Eversion of sac
   (d) Hernioplasty

5. A 25-year-old gentleman complains of dragging pain in the scrotum. The examination reveals the scrotum full of bag of worms which disappear on lying down. The usual first line option for relief is:
   (a) Percutaneous embolization of gonadal veins
   (b) Radio frequency ablation of testicular veins
   (c) Laparoscopic excision of affected testes
   (d) Excision of pampiniform plexus

6. A malnourished 60-year-old man underwent emergency surgery for Strangulated Sigmoid Volvulus. After resection of the sigmoid colon, a colostomy was fashioned. The postoperative period was stormy and he developed a painful calf swelling in right lower limb. The most probable diagnosis is:
   (a) Hypoproteinaemia
   (b) Oedema of renal failure
   (c) Myocardial failure due to fluid overload
   (d) Deep vein thrombosis

7. Consider the following in respect of Salmon patch:
   1. It is a hemangioma.
   2. Its usual site is nape of neck.
   3. It is common in children.
   4. It needs surgical excision.

Which of the statements given above are correct?
   (a) 1, 2 and 3
   (b) 1, 2 and 4
   (c) 1, 3 and 4
   (d) 2, 3 and 4
8. Which of the following are components of “Klippel-Trenaunay syndrome”?
   1. Cutaneous Naevus
   2. Subcutaneous Lipomas
   3. Varicose veins
   4. Soft tissue hypertrophy
   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

9. “Mickey Mouse Sign” during B-mode duplex ultrasound imaging comprises:
   (a) Popliteal artery, Popliteal vein and Saphenous nerve
   (b) Anterior tibial artery, Dorsalis pedis artery and Extensor hallucis tendon
   (c) Common femoral vein, Common femoral artery and Great Saphenous vein
   (d) Brachial artery, Basilica vein and Biceps tendon

10. Which of the following statements regarding Thyroglossal duct are correct?
    1. It is situated in midline of neck.
    2. It moves upwards on swallowing but not on tongue protrusion.
    3. It is treated with Sistrunk operation.
    4. It may be the only functioning thyroid tissue in the body.
    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

11. A 60-year-old tobacco chewer and heavy bidi smoker comes with diminished mouth opening and occasional spitting of blood mixed with saliva. Oral examination revealed a white buccal mucosa with a bright red velvety plaque. The most likely diagnosis is:
   (a) Speckled leucoplaikia
   (b) Leukoplaikia
   (c) Erythroplakia
   (d) Oral candidiasis

12. “Collar-stud” abscess is seen in:
    (a) Tuberculosis
    (b) Lymphomatous degeneration
    (c) Streptococcal infection
    (d) Pseudomonas infection

13. The best cosmetic result following breast reconstruction is achieved with:
    (a) Latissimus dorsi flap
    (b) Silicone gel implant with reconstruction
    (c) Transverse rectus abdominis myocutaneous flap
    (d) Acellular dermal matrix flap

14. Which of the following are correct regarding Trichobezoar?
    1. It is a hair ball in the stomach.
    2. It is common in psychiatric patients.
    3. Common complications are bleeding, perforation or obstruction.
    4. Treated with long course of proton pump inhibitors.
    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

15. The inferior rectal artery is a branch of:
    (a) Internal iliac artery
    (b) Inferior mesenteric artery
    (c) Internal pudendal artery
    (d) Median sacral artery
16. Zollinger Ellison syndrome is characterized by which of the following?
1. Fulminating gastric ulcers
2. Recurrent ulceration despite treatment
3. Non-beta islet cell tumour of pancreas
4. Recurrent episodes of dysentery
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

17. Which of the following statements with regard to Meckel's Diverticulum are correct?
1. It represents a persistent remnant of the Vitello intestinal duct.
2. It is a pseudo diverticulum of gastrointestinal tract.
3. It is most commonly found on antimesenteric border of ileum.
4. Heterotopic mucosa is present in 20% patients.
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

18. Which of the following statements with regard to Colorectal Carcinoma are correct?
1. Left-sided Colorectal Carcinoma presents with bleeding per rectum.
2. Right-sided Colorectal Carcinoma presents with iron deficiency anaemia.
3. Right-sided Colorectal Carcinoma is more common as compared to the left-sided Colorectal Carcinoma.
4. Colonoscopy is the investigation of choice for suspected Colorectal Carcinoma.
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

19. While managing oesophageal perforations, which of the following factors favour non-operative management?
1. Perforation by a flexible endoscope
2. Perforation into mediastinum
3. Perforation with a small septic load
4. Perforation of the abdominal oesophagus
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 with regard to Familial Adenomatous Polyposis?
1. It is associated with mutation of APC gene located on the short arm of chromosome 5.
2. It is inherited as an autosomal recessive condition.
3. It is associated with 100% lifetime risk for development of Colorectal carcinoma.
4. Congenital hypertrophy of retinal pigment epithelium is present in half of the cases of familial adenomatous polyposis.
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
21. Which one of the following statements regarding Inflammatory Bowel Disease is correct?
   (a) Rectum is always involved in Crohn's disease.
   (b) Fistula formation is common in Ulcerative Colitis.
   (c) Stricture formation is common in Ulcerative Colitis.
   (d) Perianal disease is common in Crohn's disease.

22. A Sengstaken-Blakemore tube is used for the management of:
   (a) Corrosive poisoning
   (b) Variceal bleeding
   (c) Asphyxia
   (d) Tension pneumothorax

23. The most common benign tumour of the liver is:
   (a) Adenoma
   (b) Haemangioma
   (c) Focal nodular hyperplasia
   (d) Angiomyolipoma

24. The best position to palpate the minimal enlargement of spleen is:
   (a) Supine with lower limbs extended
   (b) Palpation of left subcostal area in right lateral decubitus position
   (c) Bimanual palpation in supine position
   (d) Palpation of left subcostal area in knee-elbow position

25. A young 28-year-old male was operated for duodenal ulcer perforation peritonitis. After having recovered well for five days, he developed high fever with chills and symptoms of toxemia. He developed right shoulder tip pain and intractable hiccoughs. The most likely diagnosis is:
   (a) Surgical site infection
   (b) Postoperative peritonitis
   (c) Subphrenic abscess
   (d) Right lobe liver abscess

26. In seat belt syndrome the most common site of bleeding is from:
   (a) Bowel
   (b) Mesentery
   (c) Liver
   (d) Spleen

27. Which one of the following is a cause of exudative ascites?
   (a) Congestive cardiac failure
   (b) Portal vein thrombosis
   (c) Peritoneal malignancy
   (d) Nephrotic syndrome

28. Which one of the following statements is correct regarding eFAST in trauma?
   (a) It is a technique to assess free fluid in the abdominal cavity only.
   (b) It is a technique to assess free fluid in abdominal cavity, thoracic cavity and pericardium.
   (c) It is a technique to assess free fluid in pelvic cavity.
   (d) It is a technique to assess free fluid in pleural cavity.

29. A 47-year-old man comes to Surgery OPD with history of recurrent episodes of UTI. He gives history of the urine being frothy and occasionally having bubbles. The probable diagnosis is:
   (a) Anaerobic bacterial infection
   (b) Colovesical fistula
   (c) Tubercular cystitis
   (d) Urethrocystic fistula

30. Which of the following are seen in Normal pressure hydrocephalus?
   1. Hearing loss
   2. Gait disturbance
   3. Incontinence
   4. Cognitive decline
   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) 3 and 4 only
31. Which of the following are the functions of larynx?
   1. Fixation of the chest
   2. Aids in swallowing of food
   3. Phonation
   4. Respiration
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

32. Which of the following are included in the classical clinical presentation of pericardial tamponade?
   1. Tachycardia
   2. Muffled heart sounds
   3. Decreased arterial pressure
   4. Collapsed neck veins
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

33. Masaoka staging is used for staging:
   (a) Germ cell tumours
   (b) Thymoma
   (c) Lymphoma
   (d) Neurogenic tumours

34. Consider the following clinical features:
   1. Low back pain
   2. Saddle anaesthesia
   3. Motor weakness in the lower extremities
   4. Variable rectal and urinary symptoms
Which of the above features may be present in a patient with Cauda Equina syndrome?
   (a) 3 and 4 only
   (b) 1 and 2 only
   (c) 1, 2 and 3 only
   (d) 1, 2, 3 and 4

35. Which one of the following drugs is a long acting local anaesthetic agent?
   (a) Lignocaine
   (b) Bupivacaine
   (c) Prilocaine
   (d) Ropivacaine

36. A patient with head injury with a Glasgow Coma Scale of 10 is classified as:
   (a) Minor injury
   (b) Mild injury
   (c) Moderate injury
   (d) Severe injury

37. Gas Gangrene resulting in crepitus in tissues and a sweet smelling brown exudate is caused due to infection by:
   (a) Anaerobic bacteroides spp.
   (b) Clostridium perfringens
   (c) Gas-forming Klebsiella spp.
   (d) Synergistic bacteria
38. Which of the following are the common complications associated with enteral nutrition in postoperative patients?
   1. Tube malposition, displacement
   2. Diarrhoea, constipation
   3. Predisposition to systemic sepsis
   4. Electrolytic imbalance

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. Which of the following are correct regarding Blood substitutes?
   1. They are biomimetic.
   2. They are extensively used in war injuries.
   3. They are made of perfluorocarbon emulsions.
   4. They are haemoglobin-based.

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

40. Ischaemia-Reperfusion syndrome is characterized by:
   (a) Hypoxia and activation of inflammation
   (b) Thrombo-embolic angiopathy
   (c) Acute mesenteric thrombosis
   (d) Build up of bicarbonate and Na⁺ ions

41. The daily requirement of iron during second half of pregnancy is:
   (a) 2 mg per day
   (b) 6 mg per day
   (c) 10 mg per day
   (d) 20 mg per day

42. Carbohydrate metabolism in normal pregnancy shows:
   (a) Fasting hypoglycaemia
   (b) Postprandial hypoglycaemia
   (c) Increased sensitivity of insulin receptors in mother
   (d) Decreased plasma glucagon levels

43. A typical case of Iron Deficiency Anaemia (IDA) in pregnancy will show which of the following?
   1. Hb less than 10gm%
   2. PCV less than 30%
   3. MCHC more than 30%
   4. Microcytic hypochromic picture on peripheral blood smear (PBS)

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

44. Which of the following are the clinical features of molar pregnancy?
   1. History of amenorrhea and vaginal bleeding
   2. Patient has excessive vomiting
   3. History of expulsion of grape-like vesicles

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
45. Which of the following vaccines can be given to a pregnant woman?
1. COVID vaccine
2. Measles, Mumps, Rubella vaccine
3. Hepatitis B vaccine
4. Rabies vaccine
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

46. Which of the following are the characteristics of true labour pains?
1. Intensity and duration of contractions increase progressively
2. Progressive effacement and dilatation of the cervix
3. Formation of the ‘bag of forewaters’
4. Pain is confined to lower abdomen and groin
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

47. Which are the parts of active management of third stage of labour?
1. Injection oxytocin 10 units IM within 1 minute of delivery of baby
2. Injection oxytocin 10 units IM at the birth of first twin in twin pregnancy
3. Controlled cord traction
4. Delayed cord clamping as per indications
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

48. Which of the following are correct regarding acute mastitis?
1. It usually occurs in first 2 – 4 weeks postpartum.
2. Microscopic examination of breast milk shows leukocyte count more than $10^6$/mL and bacterial count more than $10^3$/mL.
3. Common organisms are bacteroids, E. coli and Klebsiella.
4. The source of infection is infant’s nose and throat.
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

49. As per the classification of Obstetric Anal Sphincter Injury (RCOG-2007), tear of greater than 50% of External Anal Sphincter is of degree:
(a) 3c
(b) 2c
(c) 3b
(d) 3a

50. What are the causes of lactation failure after delivery?
1. Infrequent suckling
2. Depression or anxiety state in the puerperium
3. Prolactin inhibition
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
51. Secondary arrest of dilatation during the process of labour may be due to which of the following factors?
1. Poor uterine contractions
2. Cessation of cervical dilatation despite strong uterine contractions
3. Disproportion and malpresentation
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

52. First stage of labour starts from:
(a) Full dilatation of cervix to the expulsion of the fetus from the birth canal
(b) Maternal bearing down efforts and ends with the delivery of the baby
(c) The onset of true labour pains and ends with the full dilatation of cervix
(d) The formation of bag of waters

53. Vesicovaginal fistula is classified as complicated if it has which of the following features?
1. Size – more than 3 cm
2. Bladder involvement – Supratrigonal
3. Location – Midvaginal
4. Presence of prior radiation
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

54. Which of the following set of muscles collectively form the muscle ‘levator ani’ that forms the pelvic floor?
1. Ischiococcygeus
2. Pubococcygeus
3. Sacrococcygeus
4. Iliococcygeus
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

55. Blood supply to the uterus comes from which of the following arteries?
1. Ovarian artery
2. Vaginal artery
3. Uterine artery
4. Inferior vesical artery
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

56. Which one of the following is a prerequisite for endometrial ablation?
(a) Uterus is 12 – 14 weeks size
(b) Woman wants to preserve her reproductive function
(c) Fibroids > 3 cm in size
(d) Woman who prefers to preserve her uterus

57. Which of the following day of menstrual cycle is best for endometrial sampling to diagnose ovulation?
(a) 8th – 10th day
(b) 12th – 14th day
(c) 16th – 20th day
(d) 21st – 23rd day
58. A 27-year-old female married for 3 years regularly cohabiting with husband presents to Gynaecology OPD with complaints of inability to conceive for 2 years. During clinical evaluation hysterosalpingography was done which revealed irregular outline of uterine cavity and rigid fallopian tubes with nodulations. Most likely cause for this condition is:
   (a) Genital Herpes
   (b) Syphilis
   (c) Genital Tuberculosis
   (d) Gonorrhoea

61. ‘Schiller-Duval body’ is a characteristic histological feature of which one of the following cancers?
   (a) Dysgerminoma
   (b) Endodermal sinus tumour
   (c) Non-gestational ovarian choriocarcinoma
   (d) Sex cord stromal tumours

62. Which one of the following is the distinguishing feature to differentiate Gartner’s cyst from Cystocele?
   (a) Marked cough impulse in Gartner’s cyst
   (b) Margins are ill-defined in Gartner’s cyst
   (c) There is no impulse on coughing in cystocele
   (d) Gartner’s cyst is not reducible

63. Surgical treatment by ‘ventrosuspension of uterus’ is used for what condition?
   (a) Pelvic organ prolapse
   (b) Retroversion of uterus
   (c) Rupture of uterus
   (d) Vault prolapse

64. A 29-year-old female with 3 months amenorrhea presents to gynaecology OPD with complaints of something coming out of her vagina. On clinical evaluation she was found to have single live pregnancy with second degree uterine prolapse. Which one of the following is the best management plan for her?
   (a) Reassurance
   (b) Cervical amputation
   (c) Cerclage operation
   (d) Pessary treatment

60. Prophylactic oophorectomy is recommended in high risk women with which of the following?
   1. Carrying BRCA1 or BRCA2 genes
   2. Family history of breast, colon, ovarian cancer
   3. Patients having tubo-ovarian abscess
   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
65. During delivery of HIV infected women, which of the following are recommended?

1. Zidovudine (ZDV) is given at the onset of labour.
2. Elective caesarean delivery reduces the risk of vertical transmission.
3. Amniotomy and oxytocin augmentation should be done.
4. Antiretroviral therapy should be given to all neonates.

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

66. Which of the following can be a complication in the baby due to post maturity of pregnancy?

1. Meconium aspiration
2. Hypoglycemia
3. Intra ventricular haemorrhage
4. Polycythemia

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

67. Intrahepatic cholestasis of pregnancy presents with which of the following features?

1. Pruritus after 28 weeks gestation, especially in palms and soles
2. Serum bilirubin levels > 5 mg%
3. Raised levels of serum bile acids
4. Features subside within two weeks postpartum

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 of the following are blood values of Iron Deficiency Anaemia?

1. Serum iron is less than 30 µgm/100 mL
2. Total iron binding capacity is less than 400 µgm/dL
3. Percentage saturation is 10% or less
4. Serum ferritin is below 30 µgm/L

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

69. Clinical features of an infant with Fetal growth retardation at birth include which of the following?

1. Physical features give ‘an old man look’.
2. Baby is alert, reflexes are normal.
3. There is presence of weight deficit.
4. Thick fat accumulates around shoulders of baby.

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

70. Which of the following are correct regarding ‘Chhaya’ contraceptive?

1. It has potent anti-estrogenic and weak estrogenic property.
2. Failure rate is 1 – 4 per HWY (Hundred Women Years) of use.
3. It inhibits ovulation.
4. It creates asynchrony between zygote and endometrium.

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
71. Which of the following are examples of LARC (Long Acting Reversible Contraceptives)?
   1. Copper-T 380A
   2. Implants
   3. LNG-IUS
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

72. How many times in a year does withdrawal bleeding occur in extended continuous regimens of combined oral contraceptive pills?
(a) 3
(b) 4
(c) 5
(d) 6

73. Bilateral total salpingectomy is recommended surgical procedure to reduce the risk of:
   (a) Epithelial ovarian cancer
   (b) Uterine cancer
   (c) Fallopian tube cancer
   (d) Peritoneal cancer

74. Tongue bite occurs in eclampsia at:
   (a) Tonic stage
   (b) Clonic stage
   (c) Coma stage
   (d) Postictal stage

75. Indication for removal of IUDs include which of the following?
   1. Perforation of uterus
   2. Pregnancy with device in situ
   3. One year after menopause
   4. Persistent migraine
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

76. Which of the following are the absolute contraindications for the use of combined oral contraceptive pills?
   1. Severe hypertension
   2. Pregnancy
   3. Diabetes with retinopathy
   4. Gall bladder disease
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

77. A 27-year-old recently married female comes to family planning clinic requesting for long term reversible contraception. Which one of the following is the best suited option for her?
   (a) Combined oral contraceptives
   (b) Diaphragm
   (c) Nexplanon
   (d) Chhaya

78. Which one of the following is an indication for cold knife conisation?
   (a) Treatment of Nabothian follicle on ectocervix
   (b) Inconsistent findings of colposcopy, cytology and directed biopsy
   (c) Negative endocervical curettage
   (d) Squamous cell carcinoma cervix stage IIA

79. Which of the following statements are correct regarding female sterilization?
   1. It can be done 24 – 48 hours following delivery.
   2. Ideal time for interval ligation is luteal phase preceding menstruation.
   3. It can be combined with medical termination of pregnancy.
   4. It is a preventive measure against serous ovarian cancer.
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

80. The most popular technique of tubal ligation is:
   (a) Madlener Operation
   (b) Pomeroy Technique
   (c) Uchida method
   (d) Cornual resection
81. Which one of the following is defined as “the average number of children a woman would have if she were to pass through her reproductive years, bearing children at the same rates as the women now in each age group”?
(a) Age-Specific Fertility Rate (ASFR)
(b) General Fertility Rate (GFR)
(c) Net Reproduction Rate (NRR)
(d) Total Fertility Rate (TFR)

82. Which among the following is correct about yellow fever vaccination requirement for international travellers?
1. Term of validity of the certificate is changed from 10 years to the duration of the life of the vaccinated person, some years ago.
2. Lifetime validity of the certificate applies automatically to all existing and new certificates.
3. Validity of the certificate begins 4 days after vaccination.
4. In India, booster dose of yellow fever vaccine is required for those whose certificate is prior to the year 2016.
Select the correct answer using the code given below:
(a) 1 and 2
(b) 1 and 3
(c) 2 and 3
(d) 2 and 4

83. Regarding active immunization against Typhoid fever, consider the following statements:
1. The typhoid polysaccharide vaccine is injectable and can be given subcutaneously or intramuscularly.
2. The typhoid polysaccharide vaccine is required to be given in two doses and administered on 0 and 7th day.
3. The typhoid oral Ty21a vaccine requires to be given in three doses on 0, 3rd and 7th days.
4. Protective immunity with typhoid vaccines is achieved immediately after the vaccine is received.
Which of the statements given above is/are correct?
(a) 1 only
(b) 1, 3 and 4
(c) 1 and 2 only
(d) 2 only

84. Which of the following statements are correct regarding Mantoux test for tuberculosis?
1. It entails injecting 1 TU (Tuberculin Unit) of PPD (Purified Protein Derivative) in 0·1 mL intradermally.
2. The injection should be given with the needle bevel facing downward.
3. When placed correctly, the injection should produce a pale wheal of the skin, 1 – 2 mm in diameter.
4. The injection should be given with a tuberculin syringe.
Select the correct answer using the code given below:
(a) 1 and 2
(b) 1 and 4
(c) 2 and 3
(d) 2 and 4
85. Which one among the following types of ventilation, best fits the following description – “A system of ventilation in which fresh air is blown into the room by centrifugal fans so as to create a positive pressure, and displace the vitiated air”.
(a) Exhaust ventilation
(b) Balanced ventilation
(c) Natural ventilation
(d) Plenum ventilation

86. The ‘Nalgonda Technique’ developed by the National Environmental Engineering Research Institute (NEERI) was developed primarily for the removal of which one of the following from water?
(a) Asbestos
(b) Fluoride
(c) Chlorine
(d) Iron

87. Smoking is considered to be a modifiable risk factor for Coronary Heart Disease. Consider the following statements with regard to possible mechanisms on which it acts as a risk factor:
1. Nicotine stimulation of adrenergic drive raises the blood pressure and myocardial oxygen demand.
2. It increases carbon monoxide and induces atherogenesis.
3. It leads to fall in protective high density lipoproteins.
4. It reduces the apolipoprotein-B plasma levels.
Which of the statements given above are correct?
(a) 1 and 2 only
(b) 1 and 3 only
(c) 1, 2 and 3
(d) 2, 3 and 4

88. The expected outcome of Government of India’s initiative ‘SUMAN’ is:
(a) Zero preventable maternal and newborn deaths
(b) Limit preventable maternal and newborn deaths to between 0.5 – 1%
(c) Limit preventable maternal and newborn deaths to between 1 – 2%
(d) Limit preventable maternal and newborn deaths to between 2 – 5%

89. Water contamination with high content of which chemical can lead to methaemoglobinemia?
(a) Cyanide
(b) Nitrate
(c) Fluoride
(d) Sulphide

90. With reference to human body’s requirement for proteins, they are essential because they are:
1. a key supply source for energy.
2. required for maintenance of osmotic pressure within the intravascular compartment.
3. critical for upkeep of cell mediated immune response.
4. vital for the synthesis of certain hormones.
Which of the statements given above are correct?
(a) 1, 3 and 4
(b) 1, 2 and 4
(c) 2, 3 and 4
(d) 1, 2 and 3
91. Which food proteins among the following are considered to be the best and are used in nutritional studies as ‘reference protein’?
(a) Milk proteins
(b) Egg proteins
(c) Wheat proteins
(d) Legume proteins

92. Consider the following statements with reference to ‘trans fatty acids’:
1. They are geometrical isomers of cis-unsaturated fatty acids.
2. Though atherogenic, being unsaturated they are less so than saturated fatty acids.
3. It takes years for trans fatty acids to be flushed from the body.
4. They lower both LDL cholesterol and HDL cholesterol in the body.
Which of the statements given above are correct?
(a) 1 and 2 only
(b) 2 and 3 only
(c) 3 and 4 only
(d) 1 and 4 only

93. Consider the following disorders:
1. Delayed motor milestones
2. Extrapyramidal spasticity
3. Nyctalopia
4. Hearing defects
Which of the above disorders occur as part of the spectrum of iodine deficiency disorders?
(a) 1, 2 and 3
(b) 1, 3 and 4
(c) 2, 3 and 4
(d) 1, 2 and 4

94. With reference to occupational cancers, consider the following statements:
1. Skin cancer is a common occupational hazard in workers employed in nickel and chromium work.
2. Cancer bladder is an occupational hazard in workers employed in dye-stuffs and dyeing industry.
3. Leukaemia can occur on long exposure to benzol.
4. Lung cancer is typically found in workers employed in electric cable industries.
Which of the statements given above are correct?
(a) 1 and 2 only
(b) 2 and 3 only
(c) 3 and 4 only
(d) 1 and 4 only

95. If, on amniocentesis, the alpha fetoprotein is found to be elevated in the amniotic fluid, which defect/disorder is the foetus likely to harbour?
(a) Cardiac septal defects
(b) Neural tube defects
(c) Duchenne muscular dystrophy
(d) Galactosaemia

96. Which of the following are domains (or types) of learning?
1. Affective learning
2. Cognitive learning
3. Physiological learning
4. Psychomotor learning
Select the correct answer using the code given below:
(a) 1, 3 and 4
(b) 2, 3 and 4
(c) 1, 2 and 3
(d) 1, 2 and 4
97. Which of the following are beneficiaries of services provided under the Integrated Child Development Scheme (ICDS)?

1. Adolescent boys
2. Adolescent girls
3. Pregnant women
4. Children less than 6 years of age

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

98. Which of the following correctly represent the three critical determinants of a healthy facility being declared as a First Referral Unit (FRU)?

1. Availability of emergency obstetric surgical interventions
2. Availability of immunization services
3. Blood storage facility
4. Newborn care

Select the correct answer using the code given below:

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

99. What is the correct increasing order of minimum age at which the following vaccines are administered to a child, as part of the National Immunization Schedule (NIS) after birth of child?

1. BCG vaccine
2. Japanese Encephalitis (JE) vaccine
3. Rotavirus vaccine
4. Tetanus and adult diphtheria (Td) vaccine

Select the correct answer using the code given below:

(a) 1 → 2 → 3 → 4
(b) 1 → 3 → 2 → 4
(c) 2 → 3 → 4 → 1
(d) 3 → 1 → 4 → 2

100. Under the National Leprosy Eradication Programme, ASHAs have been entrusted to carry out which of the following activities?

1. ASHAs are to search for suspected cases of leprosy in their villages and take them to the PHCs for diagnosis and treatment.
2. ASHAs arrange an amount of ₹ 5,000 as an incentive to each leprosy affected person in their village for undergoing reconstructive surgery.
3. ASHAs ensure that each leprosy affected person in their village receives micro-cellular rubber footwear for protection of insensitive feet.
4. ASHAs follow up all confirmed cases of leprosy in their village to ensure their treatment completion.

Select the correct answer using the code given below:

(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 4 only
(d) 3 and 4 only
101. The cost of implementation of ‘Ayushman Bharat Pradhan Mantri Jan Arogya Yojana’ is borne by:
(a) Central Government only
(b) State Government only
(c) Both Central Government and State Government
(d) Private institutions only as a part of their Corporate Social Responsibility

102. All of the following are dashboard indicators used for monitoring of India Newborn Action Plan (INAP). Which one of them is an ‘impact level indicator’?
(a) Caesarean section rate
(b) Neonatal mortality rate
(c) Exclusive breastfeeding rate
(d) Percentage of preterm births

103. Which of the following are health education models?
1. Medical model
2. Motivation model
3. Persuasion model
4. Social intervention model
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

104. Who among the following has two general phases – first, simple pneumoconiosis and a second phase characterized by progressive massive fibrosis (PMF)?
(a) Anthracosis
(b) Bagassosis
(c) Byssinosis
(d) Siderosis

105. Consider the following statements about correlation between two variables:
1. The correlation is done between an independent variable X and a dependent variable Y.
2. The coefficient of correlation can range from –1 to ∞.
3. If coefficient of correlation (r) is equal to 1, it indicates there is no association between X and Y.
4. Correlation does not necessarily prove causation.
Which of the statements given above is/are correct?
(a) 1 only
(b) 4 only
(c) 1, 2 and 3
(d) 1 and 4 only

106. With regard to lead poisoning, consider the following statements:
1. Coproporphyrin in urine is a useful screening test.
2. Hand washing before eating is an important measure of personal hygiene.
3. The use of d-penicillamine has been reported to be effective in management.
How many of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) All three
(d) None
107. A water body was inspected to look for the presence of mosquito eggs. It was observed that there were boat-shaped eggs, laid singly, not in clusters. The eggs also had lateral floats. Which one of the following diseases is most likely to be spread by the mosquito whose eggs were found?
(a) Chikungunya fever
(b) Dengue fever
(c) Japanese encephalitis
(d) Malaria

108. In the National Health Policy 2017, a target of 90 : 90 : 90 has been set for HIV/AIDS. Which among the following are targets for which a 90% level has been set as part of 90 : 90 : 90 for HIV/AIDS?
1. Proportion of couples who have safe sex
2. Proportion of people living with HIV who know their HIV status
3. Proportion of adolescents who have access to contraceptives
4. Proportion of people receiving antiretroviral therapy who have viral suppression
Select the correct answer using the code given below:
(a) 1 and 4
(b) 1 and 3
(c) 2 and 3
(d) 2 and 4

109. The Sample Registration System (SRS), an important source of health information consists of continuous enumeration of births and deaths by an enumerator and an independent survey every six months by an investigator-supervisor. Which one of the following terms best describes this system?
(a) Dual-record system
(b) Triple-record system
(c) Double blinding
(d) Double data entry

110. Cross-over type of study designs are those in which each patient serves as his/her own control. In which of the following conditions is a cross-over study **not** suitable?
1. If the drug of interest cures the disease
2. If the drug is effective during all stages of the disease
3. If the disease changes radically during the period of time required for the study
Select the correct answer using the code given below:
(a) 1 only
(b) 2 only
(c) 2 and 3
(d) 1 and 3
111. In which one of the following diseases are the source of infection and reservoir of infection the same?
   (a) Hookworm infection
   (b) Cholera
   (c) Tetanus
   (d) Typhoid

112. Which of the following statements are correct regarding Chikungunya fever?

1. It is usually transmitted by Culex mosquito.
2. A safe and effective vaccine is available for commercial use.
3. Incubation period is 4 – 7 days.
4. One of the prominent symptoms is arthropathy.

Select the correct answer using the code given below:
   (a) 1 and 2 only
   (b) 1 and 4 only
   (c) 2 and 3 only
   (d) 3 and 4 only

113. In which one of the following vector-borne diseases, the transmission chain is 'Man-Snail-Man'?
   (a) Fish tapeworm
   (b) Malaria
   (c) Onchocerciasis
   (d) Schistosomiasis

114. Which of the following mosquito-borne diseases are transmitted chiefly by Aedes mosquito?

1. Dengue
2. West Nile fever
3. Yellow fever
4. Zika fever

Select the correct answer using the code given below:
   (a) 1 and 3 only
   (b) 1, 2 and 3
   (c) 1, 3 and 4
   (d) 2 and 4 only

115. Which one among the following is best defined as the interval of time between receipt of infection by a host and maximal infectivity of that host?
   (a) Generation time
   (b) Latent period
   (c) Incubation period
   (d) Serial interval

116. Consider the following vaccines:

1. BCG Vaccine
2. Hepatitis B Vaccine
3. Inactivated Polio Vaccine (IPV)
4. Oral Polio Vaccine (OPV)

What is the correct order of the above vaccines as per their sensitivity to heat (most sensitive to least sensitive) given in the National Immunization Schedule (NIS)?
   (a) 4 → 3 → 2 → 1
   (b) 2 → 1 → 3 → 4
   (c) 2 → 1 → 4 → 3
   (d) 4 → 3 → 1 → 2
117. Exposure to gases is a common hazard in industries. The gases can be classified as simple, asphyxiating and anaesthetic gases. Which among the following are asphyxiating gases?
1. Carbon monoxide
2. Chloroform
3. Cyanide gas
4. Hydrogen

Select the correct answer using the code given below:
(a) 1 and 3
(b) 1 and 4
(c) 2 and 3
(d) 2 and 4

118. The Employees State Insurance Act, 1948 of India provides for certain benefits to employees. Which among the following are benefits to insured persons or to other dependents under the Act?
1. Disablement benefit
2. Funeral expenses
3. Maternity benefit
4. Travel benefit

Select the correct answer using the code given below:
(a) 1 and 3 only
(b) 2 and 4 only
(c) 1, 2 and 3 only
(d) 1, 2, 3 and 4

119. Which among the following vaccines best represent interventions that focus on cancer prevention too?
1. Hepatitis A vaccine
2. Hepatitis B vaccine
3. Hemophilus influenzae B vaccine
4. Human papilloma virus vaccine

Select the correct answer using the code given below:
(a) 1 and 2
(b) 2 and 3
(c) 2 and 4
(d) 1 and 4

120. Consider the following statements:

Statement-I:
While calculating the number of expected pregnancies per year in an area, a correction factor (usually 10%) is added to the expected number of live births in the year in the area.

Statement-II:
All the pregnancies in the area may not be registered by the health worker in the area.

Which one of the following is correct in respect of the above statements?
(a) Statement-I and Statement-II are independently correct, and Statement-II is a correct explanation for Statement-I.
(b) Statement-I and Statement-II are independently correct, but Statement-II is not a correct explanation for Statement-I.
(c) Statement-I is correct but Statement-II is incorrect.
(d) Statement-I is incorrect but Statement-II is correct.
SPACE FOR ROUGH WORK