

Date : October 11, 2025
Total Marks : 100
Writing Time : 150 minutes (2.5 hours)
Reading Time : 15 Minutes (prior to writing time)

1. Write your Registration Number clearly and correctly on the Answer Booklet.
2. The first 15 minutes is to check the number of pages of Question Paper, printing errors, clarify doubts and to read the instructions. You are NOT permitted to write during this time.
3. This paper consists of **TWO SECTIONS**, namely SECTION A & SECTION B:
 - **SECTION A** has two parts:
 - Part I - 30 Multiple Choice Questions
 - Part II - 4 Short Answer QuestionsAll questions under SECTION A are **COMPULSORY**.
 - **SECTION B** consists of two Case Studies. Choose only **ONE** case study and answer the questions of your choice.
4. All answers should be written on the Answer Booklet provided to you. Candidates are not allowed to write anything on the question paper. If required, ask for additional Answer Booklet.
5. All answers should be written with correct numbering of Section, Part and Question Number in the Answer Booklet provided to you. Note that any answer written without indicating the Section, Part and Question Number will NOT be evaluated and no marks will be awarded.
6. Begin each Section and Part in a fresh page of the Answer Booklet.
7. You are not permitted to tear off any sheet(s) of the Answer Booklet as well as the Question Paper.
8. Use of any other paper including paper for rough work is not permitted.
9. **You must hand over the Answer Booklet to the Invigilator before leaving the examination hall.**
10. This paper has **9 printed pages**, including this instruction page.

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SECTION A

PART I: Multiple Choice Questions [30 marks]

Choose the correct answer and write down the letter of your chosen answer in the Answer Booklet against the question number e.g. 31 (d). Each question carries ONE mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.

1. Which of the following vaccine must be given within 24 hours of birth?
 - a) Oral Polio vaccine
 - b) Hepatitis B
 - c) BCG
 - d) Pentavalent
2. Which one of the following is a Serious Adverse Event Following Immunization (AEFI)?
 - a) Fever after vaccination
 - b) Pain at the site of vaccination
 - c) Seizure after vaccination
 - d) Redness of the skin at the site of vaccination.
3. Which of the following is used in the prevention of complications of measles?
 - a) Antibiotics
 - b) Antipyretics
 - c) Vitamin A
 - d) Analgesics
4. Which test is designed to assess the body's ability to metabolize blood glucose?
 - a) Postprandial glucose
 - b) Fasting Plasma Glucose
 - c) Oral Glucose tolerance test
 - d) Random blood glucose.
5. Side effect of metformin is
 - a) Weight gain
 - b) Hypoglycemia
 - c) Gastrointestinal disturbances
 - d) Weight loss
6. According to WHO guidelines, at what level of 10-year cardiovascular disease (CVD) risk should statin therapy be initiated?
 - a) 5% to <10%
 - b) 10% to <20%
 - c) 20% to 30%
 - d) More than or equal to 30%

7. What is the recommended target blood pressure for patients receiving antihypertensive treatment, according to current guidelines?
 - a) 120-130mmHg systolic and 70-80mmHg diastolic.
 - b) Less than 140mmHg systolic and 90mmHg diastolic
 - c) 120-130mmHg systolic and 80-90mmHg diastolic.
 - d) 130-140mmHg systolic and 70-80mmHg diastolic.
8. The most common position of appendix is
 - a) Ileocecal
 - b) Retrocecal
 - c) Subcecal
 - d) Pre-ileal
9. Most feared side effect of Anti snake venom is
 - a) Renal Failure
 - b) Paralysis
 - c) Congestive cardiac failure.
 - d) Anaphylaxis.
10. A 30-year-old woman has had headaches for 6 months, worsened over the past 5 days but improved after stopping analgesics. What is the likely diagnosis?
 - a) Medication overuse headache
 - b) Tension headache
 - c) Chronic migraine
 - d) Cluster headache
11. Crohn's disease
 - a) It is the disease of small intestine only
 - b) Can affect any part of the gastrointestinal tract
 - c) Mostly involve the colon
 - d) Spreads to the lymph nodes
12. The most common organism causing urinary tract infection is
 - a) Escherichia Coli
 - b) Streptococcus aureus
 - c) Klebsiella
 - d) Proteus
13. Which is true for ventricular tachycardia?
 - a) Responds to carotid sinus massage
 - b) Narrow QRS complex in ECG
 - c) Intravenous adenosine is the treatment of choice
 - d) There is atrioventricular dissociation.

14. A 36-week pregnant woman has breathlessness, excessive abdominal distension, a tense but non-tender abdomen, symphysis-fundal height of 41 cm, muffled fetal heart sounds, and difficulty palpating foetal parts.
- a) Abruptio placenta
 - b) Hydrocephalus of foetus
 - c) Polyhydramnios
 - d) Fetal-maternal ascites
15. A young man presents with a painless ulcer on the genital region, with non-tender swelling of the inguinal lymph nodes. What is the most likely diagnosis?
- a) Chancroid
 - b) Syphilis
 - c) Herpes Genitalis
 - d) Granuloma inguinale
16. A 30-year male presents to the emergency after a road traffic accident with thigh pain, swelling, and deformity. What is the most immediate life-threatening complication of femoral shaft fracture?
- a) Pulmonary embolism
 - b) Fat embolism syndrome
 - c) Hemorrhagic shock
 - d) Deep vein thrombosis
17. Which of the following red cell indices indicates the size of red blood cells?
- a) Hemoglobin concentration
 - b) RDW
 - c) MCV
 - d) MCHC
18. All vaccines should be stored within a specific temperature range of
- a) +4°C to +10°C
 - b) +2°C to +8°C
 - c) 0°C to 8°C
 - d) -2°C to -8°C
19. How many antenatal visits are recommended by the WHO for a low-risk pregnancy?
- a) 2 visits
 - b) 4 visits
 - c) 6 visits
 - d) 8 visits

20. A patient presents to the outpatient department (OPD) with hand tremors, tachycardia, and significant weight loss. Which of the following thyroid function test profiles is most indicative of hyperthyroidism?
- a) raised TSH, low T3 and T4
 - b) Low TSH, raised T3 and T4
 - c) Low TSH, T3 and T4
 - d) Normal TSH, normal T3, raised T4
21. A patient stopped alcohol consumption for 3 days and presented with irritability, disorientation, paranoid delusions, agitation, visual hallucinations, and altered sensorium. What is the likely diagnosis in this case?
- a) Delirium tremens
 - b) Wernicke's encephalopathy
 - c) Korsakoff psychosis
 - d) Alcohol-induced psychosis
22. Which of the following systemic disease is most commonly associated with early cataract formation?
- a) Diabetes mellitus
 - b) Hypertension
 - c) Hyperthyroidism
 - d) Asthma
23. On otoscopic examination, a classic finding in acute otitis media is
- a) Retracted tympanic membrane
 - b) Bulging and erythematous tympanic membrane
 - c) Normal translucent tympanic membrane
 - d) Perforated tympanic membrane with granulation tissue
24. Which of the following is the most common congenital heart defect?
- a) Tetralogy of Fallot
 - b) Patent Ductus Arteriosus (PDA)
 - c) Ventricular Septal Defect (VSD)
 - d) Atrial Septal Defect (ASD)
25. Beriberi is caused by deficiency of
- a) Niacin
 - b) Vitamin A
 - c) Vitamin B1
 - d) Vitamin E alpha
26. A newborn baby looked normal at birth but within few hours her lips are blue. A harsh murmur is heard on auscultation. What is the most likely cause of the cyanosis?
- a) Atrial septal defect
 - b) Coarctation of aorta
 - c) Ebstein's anomaly
 - d) Ventricular septal defect

27. In females, *Neisseria gonorrhoeae* infection typically presents with which type of vaginal discharge?
- Thick white and curd like
 - Mucopurulent discharge
 - Thin, scanty, white and frothy
 - Copious, yellow-green and frothy.
28. Screening of gestational diabetes mellitus should be performed between or at
- First antenatal visit
 - First trimester
 - 24th week and 28th week of gestation
 - 12th week and 18th week of gestation
29. Neonates die during resuscitation because of the failure to
- oxygenate
 - intubate
 - perform CPR
 - diagnose the condition
30. In a vaccine vial monitor (VVM) the active ingredient is in the
- Outer grey circle
 - Inner white square
 - Outer white square
 - Inner grey circle

PART II – Short Answer Questions [20 marks]

This part has 4 Short Answer Questions. Answer ALL the questions.

- A 45-year-old man presents to the OPD with fever, productive cough, and pleuritic chest pain on the right side for 3 days. On examination, he is febrile, has a respiratory rate of 28/min, and crepitations are heard in the lower zone of right lung.
 - What is the most likely diagnosis? **(1 mark)**
 - Mention two common causative organisms. **(2 marks)**
 - How will you treat the patient? **(2 marks)**
- A 25-year-old male is hit by car and is brought to the Emergency department within 10 minutes after the accident. Vital Signs on arrival: BP: 90/60 mm of Hg, Pulse: 140/min, Respiratory Rate: 30/min and Temperature: 37 degree C.
 - Is this patient critically ill? If so, why? **(2 marks)**

On further examination, the pulse oximeter reading is 85% and patient responds only to pain. Skin is cool to touch and appears pale. The pulse is weak and thready. Capillary refill time is 5 seconds.

- ii. What is the immediate management of the airway to prevent complications? **(2 marks)**
- iii. What life-threatening condition the patient may be suffering? **(1 mark)**

3. A 40 year old male came to the OPD with headache and blurring of vision for a duration of one month. His BP was 160/100 mmHg. He is not a known case of any chronic diseases or not on any medication.
- a) What is your next step **(1mark)**
 - b) What type of hypertension is the patient suffering? **(1 mark)**
 - c) Mention the basic investigations are required for the patient? **(2 marks)**
 - d) Name one angiotensin receptor blocker used for treatment of hypertension **(1 mark)**
4. 35 year old lady working in a hotel feels tired very easily, intolerant to cold and has menstrual irregularities. Few days back her friends noticed hoarseness of her voice. On examination the heart rate was 60/minute, BP 120/80 mmHg, had dry skin and cold hands.
- a) What is the most likely diagnosis? **(1 mark)**
 - b) How would you confirm the diagnosis? **(1 mark)**
 - c) How would the test report confirm the diagnosis? **(2 marks)**
 - d) Name the drug used to treat the condition **(1 mark)**

SECTION B: Case Study [50 marks]

Choose either Case I OR Case II from this section. Each case study carries 50 marks. Mark for each sub-question is indicated in the brackets.

CASE I

A 29 year old woman gravida 3, had blood pressure of 160/110 mmHg during her first antenatal visit at 24 weeks of gestation. She is not a known hypertensive. On examination the fundal height was 22 weeks. The foetal heard was present. There was no pallor or pedal edema.

- a) What is the condition the patient is suffering? **(1 mark)**
- b) How is the condition diagnosed? **(2 marks)**
- c) List the severe/fulminant features of the condition **(3 marks)**
- d) When the condition is accompanied by seizures, what is the condition called? **(1 mark)**
- e) What is the target Blood pressure with treatment? **(1 mark)**
- f) How will you manage the seizures or the second condition? **(10 marks)**
- g) How will you prepare the loading dose of the drug **(5 marks)**
- h) Mention 3 things you will check for toxicity of the drug? **(3 marks)**
- i) Name the antidote for the drug. **(1mark)**
- j) How will you give the antidote? **(2 marks)**
- k) The seizure continued with the loading dose. How much of the drug will you give and the route? **(2 marks)**

Two hours later the patient delivered a 2 kg boy baby. Placenta was delivered normally but there was per vaginal bleeding of about 1000ml. The blood pressure was 90/60 mmHg, pulse rate 100/min, the uterus was soft.

- l) What is the condition called? **(1 mark)**
- m) Mention 3 causes of the condition? **(3 marks)**
- n) Differentiate between placenta previa and abruption placenta **(5 marks)**
- o) How will you manage the patient? **(10 marks)**

CASE II

A 41 year old male smoker presented to emergency department with chest pain for 5 hours duration. He also had breathlessness and dry cough. On examination his pulse rate was 110/min, BP 139/89mmHg and SPO2 of 80%. Patient was sweating. The chest was clear. On further history taking patient says, the chest pain radiates to the left hand.

- a) Mention the causes of chest pain **(10 marks)**
- b) What could be the cause for the above patient's chest pain and justify **(5 marks)**
- c) What urgent investigation would you request to confirm the diagnosis? **(7 marks)**
- d) What are the findings in the report to confirm the cause of pain for the patient **(7 marks)**
- e) How will you manage the patient? **(10 marks)**
- f) What are the complications if the condition is not treated or treatment delayed? **(8 marks)**
- g) What additional investigations would you like to request, once the patient is stabilised? **(3 marks)**

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