 NATIONAL BOARD OF EXAMINATIONS

EMERGENCY MEDICINE

PAPER-IV

Time: 3 hours
Max. Marks:100

EM/D/20/52/IV

Important Instructions:

- ***You are provided with 5 answer sheet booklets. Each individual answer sheet booklet consists of 10 pages excluding the covering jackets.***
- ***Answers to all the questions must be attempted within these 5 answer sheet booklets which must be later tagged together at the end of the exam.***
- ***No additional supplementary answer sheet booklet will be provided.***
- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

1. a) Causes of ED crowding. 4+6
   b) Measures to deal with ED crowding.

2. a) FLORALI trial. 4+6
   b) Airway management in COVID-19.

3. A 12-year-old boy weighing 49 kg presents to the ER with abdominal pain, nausea and vomiting since 2 days. The blood glucometer gives a 'high' reading. He is acidotic with a pH of 7.15 and bicarbonate of 8 mmol/l. The blood ketones come as 4mmol/l. You diagnose him as diabetic ketoacidosis. Discuss: 3+2+1+2+2
   a) Fluid management in DKA.
   b) Insulin therapy in DKA.
   c) Role of bicarbonate.
   d) Investigations and monitoring.
   e) What are the complications of diabetic ketoacidosis?

4. A 2-year-old boy presents to the ER with high grade fever and refusal to bear weight on right leg since one day. There is no history of fall or trauma. He had sore throat about 3-4 days back. Child cries during movement of the right leg. Knee appears to be normal. Vaccination is complete as per schedule. There is no history suggestive of any significant medical illness: 3+2+2+3
   a) What is the likely differential diagnosis in the above case?
   b) What is the Kocher's criteria?
   c) What investigations would you ask for?
   d) What would be the treatment for this child in the ER?

5. a) Levels of evidence in bio-medical research. 5+5
   b) Linear Correlation Coefficient.

P.T.O.

EMERGENCY MEDICINE

PAPER-IV

6. A 1-year-old child presents to the ER with history of fever, abdominal pain, vomiting and bloody diarrhea since 1 day. Discuss: 4+2+4
   a) Differential diagnosis of bloody diarrhea in children.
   b) What investigations would you ask for?
   c) How would you treat a child with sepsis in the ER?

7. You are the ED consultant on floor. You are called in that one of the relatives is having a heated argument with one of the ER resident doctor. Discuss: 5+5
   a) Factors leading to difficult patient-physician interaction.
   b) Emergency department preparedness and prevention of violence.

8. a) Updated recommendations from 2020 AHA pediatric advanced and basic life support guidelines. 6+4
   b) Neuroprognostication after cardiac arrest in adults.

9. A 78-year-old male comes to the ER after a slip and fall. She is in severe pain and has fracture of the femur neck. She has diabetes mellitus, hypertension and COPD. Pain is persistent even after intravenous analgesics that can be offered. You decide to do a fascia iliaca block for pain relief. Discuss: 2+3+3+2
   a) Anatomy of the fascia iliaca.
   b) Indications, contraindications and complications.
   c) Brief description of various approaches to the fascia iliaca block.
   d) Drugs used with doses.

10. A 56-year-old diabetic, hypertensive and with ischemic heart disease presents to ER with Type I respiratory failure, hypotension and severe acidosis. He has pneumonia and appears to be confused. You decide to intubate this sick acidotic patient. 6+4
    a) Salient features of intubating the sick, acidotic patient in the ER.
    b) Ketamine versus etomidate as induction agents in this patient.

****