

**EMERGENCY MEDICINE**

**PAPER-I**

EM/J/18/52/I

Time: 3 hours

Max. Marks:100

**Important Instructions:**

- 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) Draw neat labelled diagram of cerebral circulation. 3+3+4  
      b) How is cerebral autoregulation maintained?  
      c) Cerebral herniation syndromes.
2.   a) Anatomy of shoulder joint. 4+3+3  
      b) Pathophysiology of impingement syndrome of shoulder.  
      c) Pathophysiology of rotator cuff tear.
3.   a) Fundamentals of radiation physics. 3+3+4  
      b) Biologic effects of ionizing radiation.  
      c) Clinical features of acute radiation syndrome.
4.   a) Physiology of high altitude acclimatization. 5+2+3  
      b) List various high altitude illnesses.  
      c) Prevention of high-altitude illnesses.
5.   a) Define vertigo. 1+2+3+4  
      b) What is vestibulo-ocular reflex?  
      c) How do you differentiate peripheral from central vertigo?  
      d) Diagnostic approach to a patient with vertigo in Emergency Department (ED).
6.   a) What is neurogenic shock? 1+3+3+3  
      b) Pathophysiology of neurogenic shock.  
      c) How will you differentiate neurogenic shock from spinal shock?  
      d) How do you manage neurogenic shock?
7.   a) Pathophysiology of pain. 4+3+3  
      b) Discuss any three pain scales used in ED for adults.  
      c) Complex regional pain syndrome.
8.   a) Various gas laws relevant to hyperbaric oxygen therapy. 3+2+2+3  
      b) Physiological effects of hyperbaric oxygen.  
      c) Enumerate indications of hyperbaric oxygen therapy.  
      d) Write a note on one of the definitive indications of hyperbaric oxygen.

**P.T.O.**

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