Q. 1 a) Name the opioids commonly used in the perioperative setting with their dosage equivalent to 10 mg Morphine Sulphate.
   b) Write down the various opioid receptors and their effects.
   c) What is an opioid agonist-antagonist?

Q. 2 Gravida 3, para 2, presents to you at 38 weeks' gestation. She has a past history of two C-sections. Her obstetrician and gynaecologist wants to take her to C-section now for continuing vaginal bleeding. She is 50 years old, BMI 34.5. No past medical problems.
   a) What are the causes of antepartum haemorrhage?
   b) What invasive monitoring will you use during management of severe haemorrhage?
   c) What is uterine atony? How is it managed?
   d) What is your anaesthetic choice and why?

Q. 3 An 18 years, male patient presented in emergency department (ED) being involved in road traffic accident (RTA). He sustained blunt abdominal trauma with bruising in right hypochondrium and fractured right femur. On arrival he was unconscious, with impalpable radial pulse, SPB 65 mmHg, temperature 35.5°C.
   a) What do you mean by damage control resuscitation (DCR)?
   b) What are the three components of DCR?
   c) What are the end points of resuscitation in DCR?

Q. 4 What are the options for relief of pain following day care circumcision in a two year old child? What option will you choose and why?
Q.7 ASA-1 lady has been anaesthetized (GA) for ovarian cystectomy. Immediately after antibiotic (cefuroxime) administration she becomes hypotensive, peak airway pressure increased from 15 cm H₂O to 35 cm H₂O and SPO₂ decreased from 99% to 85%.

a) How will you manage this situation?
b) What is hypersensitivity reaction?
c) Outline drugs used in anaesthetic practice which can cause anaphylactic reaction.

Q.8 A 40 years lady ASA-II, known asthmatic is scheduled for laparoscopic cholecystectomy.

a) How will you prepare her preoperatively?
b) During surgery she became hypoxic, enumerate the causes and brief management.
c) At extubation, she goes into severe bronchospasm, how will you manage?

Q.9 A 25 years, ASA-1 has been operated for appendectomy. Postoperatively in PACU he develops hypoxia and in-coordinated movements.

a) What are the common causes of hypoxia and in-coordinated movements in PACU?
b) How do you assess the adequacy of reversal of neuromuscular blockade clinically?
c) Why do you monitor neuromuscular blockade?
d) Write a note on “Rocuronium bromide”.

Q.10 a) What do you mean by informed consent?

b) What are some common situations in which patient’s ability to make decisions about surgery and anesthesia may be questioned?

c) What will you do in an emergency situation or when the patient is incapable of making a decision?