Q.1 A ten day old neonate is brought with redness around scalp, face and trunk for one day. There is history of similar rash in the mother 12 days back. Temperature 100°F, respiratory rate 40/min, heart rate 120/min. There are few vesicular lesions on the palate and gums also. Rest of the examination is unremarkable.

a) What is the likely diagnosis?
b) Give management of this baby with the above condition.
c) List 4 potentially fatal complications of the condition.

Q.2 A 9 year old boy is brought with history of poor school performance and episodes of abnormal behaviour for the past 7 months. On examination, he has history of myoclonic jerks.

a) What is the likely diagnosis?
b) List 3 relevant investigations for diagnosis.
c) What 2 recent treatment options have been considered?

Q.3 A 14 years old female presented with pain in abdomen for the past 6 days. She had developed vomiting and loose motion for the past 4 days. There is complaint of pain in abdomen for the past 24 hours. There is history of similar episodes twice in the past. On examination, heart rate is 120/min, BP 130/100 mmHg and hypotonia of both lower limbs with power of grade-II.

a) What is the probable diagnosis?
b) Write two differential diagnoses?
c) Suggest one specific investigation to confirm the diagnosis.
d) Outline treatment of the most likely diagnosis.
Q.4 A seven years old girl is brought with complains of lethargy, feeling of stiffness all over and gets easily tired for past eight weeks. There is also history of intermittent pain in the knees and right ankle joint which is relieved by analgesics. She suffered from sore throat two months back. On examinations; temperature 98°F, heart rate 90/min, respiratory rate 30/min. Both knees and right ankle is mildly swollen.

a) What is the most likely diagnosis?
b) List 2 differential diagnoses?
c) Which other relevant physical examination you will do, give justification?
d) What relevant investigations are needed? What are the treatment options?

Q.5 A mother who is recently diagnosed with smear positive pulmonary tuberculosis (TB) brings her 6 days old baby for advice regarding breast feeding and prophylaxis against TB. She has three other asymptomatic children at home ages 3 years, 5 ½ years and 7 years. There are five adult family members one having cough for the last one week. Using the national TB guidelines.

a) What advice will you give for the newborn regarding prophylaxis and breast feeding?
b) How will you manage other children for TB?
c) How will you manage the adult contacts?
Q.6 A 2 years old boy is brought with complaints of vomiting, abdominal cramps and bleeding per rectum for the past 3 hours. Mother is pregnant and taking medicines for non specific weakness. On examination, patient is drowsy, with rapid deep breathing, respiratory rate is 50/min, heart rate is 135/min and temperature 99°F.

a) What is the likely diagnosis?
b) List 2 investigations needed to confirm the diagnosis.
c) Outline the steps of treatment.

Q.7 A 7 years old girl is referred with recurrent episodes of abdominal pain, particularly right upper abdomen for the last one year. Her father is well, although he had abdominal operation at 10 years of age. On examination she is afebrile, her liver is just palpable and non-tender and the spleen is 4 cm palpable below the left costal margin. Investigations Hb 9 G/dL, reticulocyte count 10%, MCHC 41 gm/dL, WBC 6400/mm³, platelet 300,000/mm³, urea and electrolytes are normal.

a) What is the most likely diagnosis?
b) What is the cause of her abdominal pain?
c) List two more tests to confirm your diagnosis.

Q.8 A full term baby delivered by normal vaginal delivery was brought to NICU at six hours of birth with bluish discoloration of lips and tongue. On examination temperature is 98°F, heart rate is 160 bpm and R/R is 40/min. Capillary refill is 2 sec. single 2nd heart sound. O₂ saturation 70% and blood pH is 7.2.

a) What is the likely diagnosis?
b) Write atleast two differential diagnoses?
c) What immediate management you will give to this patient?
Q. 9 A 14 months old girl is brought in emergency with complains of loose motions and vomiting for last two days. On examination her weight is 7.5 kg, MUAC 11 cm, length 68 cm, temperature 98°F, H/R is 140 bpm, R/R 40/min. Capillary refill is 3.5 sec and extremities are cold and there is decreased urine output.

a) What is the likely diagnosis?
b) How will you manage this patient?

Q. 10 A three years old boy presents with acute onset of severe pain in left lumbar region which radiate towards the left groin. He had had two similar episodes over the last six months. There is history of similar complain in father and uncle. On examination he is febrile, sick looking with heart rate 110/min, BP 90/70 mmHg. His urine D/R revealed.
Appearance – slightly turbid
Colour – yellow
Protein – +
Specific gravity – 1.020
PH – 6.5
RBC – numerous / HPF
WBC – 6-8/HPF
Cast – granular-occasional
Nitrites – -ve
Crystals – oxalate ++

a) What is the most probable diagnosis?
b) What further investigations will you advise to confirm the most probable diagnosis?
c) What are the steps of management?