Q.1 A 3 year old previously healthy girl presented to the emergency with the complaint of passing decreased amount of urine for 36 hours. Few days ago she had an episode of loose stools and vomiting. On examination she is conscious, afebrile without sign of dehydration. Liver is 2cm palpable below the right costal margin, spleen is not palpable. Few petechial spots are detected on both arms and abdomen. Investigations reveal Hb 9.0 gm%, TLC is 12500/cmm, Platelet count is 80,000/cmm, blood pH is 7.25, serum HCO₃ is 19 mg%, Blood sugar is 90 mg% and Blood urea is 78 mg%.

a) What is the likely diagnosis?
b) What further investigations will you like?
c) Just enumerate the management steps.

Q.2 A 4 year old boy presented in the emergency room with headache, irritability and fits for the last 4 hours. He is not moving his right arm and leg for one day. On physical examination temperature is 102°F, Pulse is 120/min and Respiratory rate is 30/min. There are a few petechiae on the trunk and his gums are hypertrophied. Liver is palpable 4cm below the right costal margin. The plantar is upgoing on the right side of the body.

a) What is the most likely diagnosis?
b) Give 4 possible reasons for these neurological signs?
c) What are the management steps in this child?

Q.3 A previously healthy 3 year old boy is brought to emergency by his parents after having an afebrile seizure. According to mother he has developed emotional lability, abdominal pain, bone aches, intermittent vomiting and constipation since they have shifted from Larkana to Karachi 3 months ago in a house which is being extensively renovated. Birth history is uneventful and unremarkable.

a) What is the most likely diagnosis?
b) How will you confirm the diagnosis?
c) What is the treatment?
d) Name complications of this disease.
Q.4 A 5 year old boy presented with one week history of high grade fever, anorexia, headache and easy fatigability. There is also history of contact with kitten for the last 4 months. On examination the child is febrile with temperature 102°F, heart rate is 124/min and he has 2 red papules on the dorsum of left hand. His left axillary lymph nodes are palpable and tender. The laboratory investigations revealed Hb 11g/dl, TLC 12000/mm³, platelet count is 350000/mm³, ESR 38 mm and ALT is 56 IU.

a) What is the most likely diagnosis?
b) Name the etiological agent.
c) How will you treat the child?
d) Enlist 4 complications.

Q.5 A 12 year old girl presented with generalized weakness and abdominal pain for last one year. Over a period of six weeks she also has developed painful swelling of right ankle. Her past history is unremarkable and she is fully immunized including BCG. On examination she was noted to have lost weight. Her oral hygiene was poor with oral ulcers. Laboratory test showed TLC is 21,000, Hb is 9.0 gm/dl and platelets are 550,000, ESR is 65 mm, RA factor is negative and Mantoux test is 4mm after 72 hours.

a) What is the diagnosis with justifications?
b) How will you proceed to reach a diagnosis?
c) What is the treatment of choice?
d) What is the prognosis?

Q.6 A 3 year old child presented with easy fatigability and exertional dyspnea. There is history of cyanosis since birth. On examination there is a holosystolic murmur along left sternal border with single second heart sound. ECG shows left axis deviation and left ventricular hypertrophy.

a) What is the likely diagnosis?
b) What will be the jugular venous pattern in this patient?
c) Write down three investigations to reach the diagnosis.
d) Enlist steps of management.
Q.7 A 9 year old girl is brought to the outdoor with off and on history of diarrhea for the past few months and 7 days history of fever along with pain in the abdomen. On examination she is febrile, sick looking, pale with no jaundice. The abdomen is tender especially in the right hypochondrium. Liver is 6 cm palpable below the right costal margin but spleen is not palpable. The heart rate is 120/min and respiratory rate is 30/min.

a) What is the most likely diagnosis?
b) How would you investigate? Give findings.
c) What complications may occur in this girl?
d) What treatment options are available?

Q.8 An 8 year old girl presented with a history of progressive abnormal gait for the last two weeks. She has been having loose motions off and on with passage of foul smelling bulky stools. On examination patient is conscious, malnourished with no signs of meningeal irritation. The deep tendon reflexes are absent, plantar response is extensor and there is positive Romberg’s sign.

a) What is the most likely diagnosis?
b) Give other investigations with interpretation.
c) How would treat this patient?

Q.9 A 34 weeks pregnant lady who had undergone three in-utero transfusions to treat her fetus, came for follow up with report showing rhesus antibodies. You have been asked by gynaecologist to give your opinion regarding:

a) Whether this is the appropriate time for delivery or not (with reasoning)?
b) What problems may occur in the postnatal period?
c) Enumerate the early postnatal management steps.
d) What follow up is indicated for this baby?
Q.10 A preterm infant, birth weight 800 grams at 27 weeks gestation, was electively ventilated after birth and surfactant was given via endotracheal tube, Portable x-ray chest was taken. At 16 hours of age while on ventilator, condition of baby suddenly deteriorated.

a) What abnormalities are expected on first portable chest x-ray?  
b) What is the most likely diagnosis in this baby?  
c) List clinical signs which support the present clinical problem.  
d) How will you confirm and manage this baby?