Q. 1 You have been called to intensive care facility for opinion of a rash in a newborn who has been put on pacemaker. Examination revealed erythematous, slightly scaly eruption on the face and periorbital skin. Investigations revealed low platelet count.

a) What is most likely diagnosis?
b) How will you confirm your diagnosis?

Q. 2 A young lady noticed gradually increasing yellow discoloration of skin. Examination revealed diffuse yellow discoloration of skin more so over palms, soles and face. However sclera was normal.

a) What is your diagnosis?
b) What will be your approach to reach the final diagnosis with justification?

Q. 3 A nine years old boy developed pain and swelling of testicles. Next day he also developed pain in knee joints and colicky pain abdomen. Parents also observed rash over both lower legs and brought him to hospital. On examination testicles and knee joints were swollen and palpable purpuric lesions were seen over both shins.

a) What is the diagnosis?
b) What investigation(s) are required for confirmation of the diagnosis?
   Mention alongwith findings.
c) What complications may develop in this child?
Q.11 A 29-year old married woman presented with a 3 month history of fatigue, generalized weakness, easy bruising and joint pains. During last three years she had two abortions. On examination she appeared pale and had oral ulcers. She also had bullous skin lesions and photosensitive skin rash on her face. Blood tests showed pancytopenia.

a) What is the most likely diagnosis?
b) What conditions will you consider in the differential diagnosis for this patient?
c) What investigations will you carry out giving justification?

Q.12 A 53 years old woman complained of bluish color change on her face, neck and hands for last six months. She had a previous medical history of hypertension and abdominal discomfort for which she had ingested some solution given by a Hakeem daily for two years. Physical examination showed blue-gray pigmentation on exposed parts, fingernails and oral cavity. Systemic examination was normal. Histology revealed numerous small black to brown pigment granules in basement membrane of hair follicles and basal lamina of sweat glands.

a) What is your diagnosis?
b) What are the differential diagnoses?
c) What is the prognosis of this condition?

Q.13 A 30 years old male presented with 2 years history of multiple pruritic, tense, fluid filled lesions over elbows, dorsum of hands, and feet. Lesions healed with scarring, milia & hyper-pigmentation. There was no history of gastrointestinal complaint and porphyrin studies were normal.

a) What is the most likely diagnosis?
b) Enumerate investigations which can confirm your clinical diagnosis. Mention finding(s) of each investigation.
Q.14 A 40 years old male alcoholic, presents to emergency department with complaints of abdominal pain and severe diarrhea. On examination he has redness and scaling on face, neck and dorsa of hands and feet. At places, skin is thickened and hyperpigmented. He is depressed and not co-operative. There are signs of peripheral neuropathy.

a) What is the most likely diagnosis?
b) What other conditions can closely resemble the skin changes?
c) What is the basic cause of this condition?
d) How will you treat him?

Q.15 A seven years old child has been suffering from headaches and recurrent bouts of abdominal pain for the last six months and for which, no cause has been found. He is referred to you by pediatrician for evaluation of a skin rash which has developed recently. On examination the rash is distributed over the limbs consisting of papules, ulcers and depressed scars surrounded by telangiectasias.

a) What is your likely diagnosis?
b) What are the treatment options in this patient?
c) What is the prognosis?
Q.16 A 22 year old male presented with multiple papules on the lips for last one year. Physical examination revealed macrocephaly and many white, smooth papules distributed the lower lip, the tongue, maxillary gingiva, alveolar mucosa and both sides of the buccal mucosa. His past medical history revealed thyroid cancer, which had been removed when he was 15 years old. His father also had the same type of tumor at the same age. Histopathologic examination of the biopsy specimen revealed papiliferous oral mucosa with mild epithelial hyperplasia, acanthosis, hyperkeratosis and inflammatory infiltrate, diagnosed as benign fibromas.

a) What is your diagnosis?
b) What is the underlying pathology of this disease?
c) What other conditions may result from similar pathology?
d) What extracutaneous features may be seen in this disease?

Q.17 A 35 years old patient presented with one month history of extensive psoriasis covering more than eighty percent of body surface area. His disease started ten years ago and was quite well controlled with daily application of diluted clobetasol ointment and emollients. During the last one year he was hospitalized thrice because of exacerbation of skin rash and generalized aches and pains. On examination he had gross cushingoid features. His pulse was 116 per minutes; blood pressure was 80/60 mm Hg respiratory rate 30/minutes and temperature 100 degree Fahrenheit. General and systemic examination was otherwise unremarkable except for widespread cutaneous striae. Cutaneous examination also revealed mild atrophy and scaling. Investigations including CBC, urinalysis, X-Ray chest, urea, creatinine and LFTS were within normal limits.

a) What complication has this patient developed?
b) How will you confirm it?
c) How will you further manage him? Justify.
Q.18 A 70 years old retired college professor comes to the clinic with the history that her pet cat had some infestation and it was treated successfully by the veterinary doctor. But she believes that even after successful treatment, her cat has still infestations, she says that fleas are transferred to her body and scalp and crawling on her body all the time. For an evidence she also brings some skin scrapings as well.

a) What is the most probable diagnosis?
b) What other conditions will you consider in the differential diagnosis?
c) How will you work up this case?

Q.19 A 30 year old lady presents with vaginal discharge. Enlist differential diagnoses considering the different types of discharge and one laboratory test for confirmation in each case.

Q.20 A five year boy presented with palmoplantar hyperkeratosis, erythematous scaly lesions on seborrheic sites and metal impairment. Physical examination revealed hypotonia epicanthic folds, up slanting palpebral fissures, flat nasal bridge, small mouth and ears, large tongue, excess nuchal skin, a single transverse palmar crease and clinodactyly of the 5th finger. The parents are worried about the occurrence of disease in next pregnancy.

a) What is your diagnosis?
b) What are the possible underlying defects and their importance in predicting the occurrence of disease in subsequent pregnancies?
c) What are the associated dermatological disorders? Name any three.

The End
Q.4 A 1½ years old girl suddenly developed high grade fever which was not associated with any other symptom. The fever subsided after 4 days. As the fever settled, the child developed rash consisting of discrete rose-pink maculo-papules on the neck and trunk; later spread to the arms, face and legs. Cervical and occipital lymph nodes were enlarged. There was no history of medication.

a) What is the diagnosis?
b) What is the cause of the disease?
c) Enlist possible complications which may occur in this child.

Q.5 A 25 years old lady presented with 3 weeks history of arthritis and severe sore throat. For the same duration she was observed to develop spike of high grade fever daily in the evening along with salmon-colored, maculopapular non-pruritic rash over proximal limbs, trunk and face. There was no history of any medication. Investigations revealed TLC 11,000/μL with 80% granulocytes. ANA, RA factor, ASO titre, Bacterial and viral studies were negative. However serum ferritin was markedly raised.

a) What is the most likely diagnosis?
b) Enlist five treatment options for this disease

Q.6 A 30 years old woman presents to you with short thickened, brittle and discolored nails. There is diffuse hyperkeratosis of the palms and soles. Further examination revealed fine, brittle and sparse hairs over the body. There is family history of deafness.

a) What is the most likely diagnosis?
b) What is the mode of inheritance of this disease?
c) How will you manage this patient?
Q.7 A 10 years old girl presents with recurrent eruption of very pruritic, excoriated and few crusted papules and nodules on the face, hands, forearms and feet with summer exacerbations, very few lesions are also seen on the trunk.

a) Enlist the differential diagnoses?
   Histopathology report shows epidermal acanthosis, spongiosis and dermal perivascular mononuclear infiltrate and oedema in the fresh lesions. Other investigations including Porphyrin studies were negative.

b) What is the most likely diagnosis?

c) What are the options for treatment in this disease?

Q.8 A middle-aged woman had macroGLOSSIA, hepatomegaly, peripheral neuropathy and proteinuria. Cutaneous examination reveals periorbital ecchymosis and scleroderma like skin changes affecting the hands.

a) What investigations will you request?

b) What are the treatment options in this case?

Q.9 A 68 years old man presents to you with matting of axillary hair. Examination revealed scattered concretions on the hair shaft.

a) What three diseases will you consider in differential diagnosis?

b) What test can you perform in your office that will help you in making a diagnosis?
Q. 10 A young boy presented with infected eczematous lesion on the elbows, knees, knuckles, and ankles. These lesions occurred since infancy. He is on some drugs which seemed to work in infancy and the lesions used to disappear, but now he does not respond to it. In infancy he had vesicobullous dermatitis of hands, feet, and periorificial areas.

a) What is the diagnosis and mode of inheritance?
b) Why is he not responding to the drug?
c) What tests will confirm the diagnosis?