EXAMINATION FOR THE

FELLOWSHIP OF THE COLLEGE OF FAMILY PHYSICIANS

FCFP (SA) – PART I

MODIFIED ESSAY QUESTIONS (MEQ)

SAMPLE PAPER 2

TIME ALLOWED: (2 HOURS)

EXAM NO:……..

INSTRUCTIONS:

1. Write your examination number **only** in the space provided above. Do not write your name anywhere on this paper.
2. There are …. pages in this paper. Ensure that you receive all… pages before you commence your answers.
3. There are 7 questions in this paper, and are equally weighted. You must answer all questions and should therefore not spend more than 15 mInutes on each question.
4. Your answer must be entered in the space provided, and should be concise. The mark allocation per sub question should guide in terms of the length of your answers.
5. Hand over the complete paper with your answers to the invigilator at the end of the examination.

You are the Family Physician who does seasonal work at Injabulo clinic, a modestly equipped clinic in the rural area of Zululand. The nurses have the following patients booked to see you.

Question 1

Mrs. Smith a 32-year-old female patient is your first patient with a 6-month history of loose bowel movements, about 8 per day. Blood has been present in many of them.

She has lost 15 kg. On examination the patient looks ill. Her BP is 130/70 and pulse 108 /min.

There is generalized rebound tenderness with no rebound. A sigmoidoscopy done by you reveals friable rectal mucosa with multiple bleeding points. (favors UC)

Question 1.1

What further history would you enquire about? (2)

Suggested answer: Any risk factors like family h, previous attacks, low fibre diet; Does she have pain and what is the character of the pain. (Colic is characteristic of CD)

Question 1.2

List 2 differences between ulcerative colitis and Crohns disease? (4)

Suggested answer: Presentation: colic is characteristic of CD. Sigmoidoscopy shows mucosal bleed in UC but oedema in CD. Process is limited to colon and has increased risk of ca in UC.

Question 1.3

What form of inflammatory bowel disease would this patient most likely have? (2)

Suggested Answer: UC favoured by young F, bloody diarrhoea and sigmoidoscopy findings.

Question 1.4

The patient is concerned that she may have cancer, discuss the relationship between inflammatory bowel disease and the risk of acquiring carcinoma of the colon (2)

Suggested answer: Risk for Ca is increased 7-10 yrs after diagnosis in UC.

Question 2

Your 2nd patient is a 65-year-old female complaining of a 6-month history of stiffness in her hands. Her daughter brings her into your room. The stiffness is worse in the evening. She also has backache and painful knees.

She has significant swelling of both the proximal and distal interphalangeal joints

Question 2.1

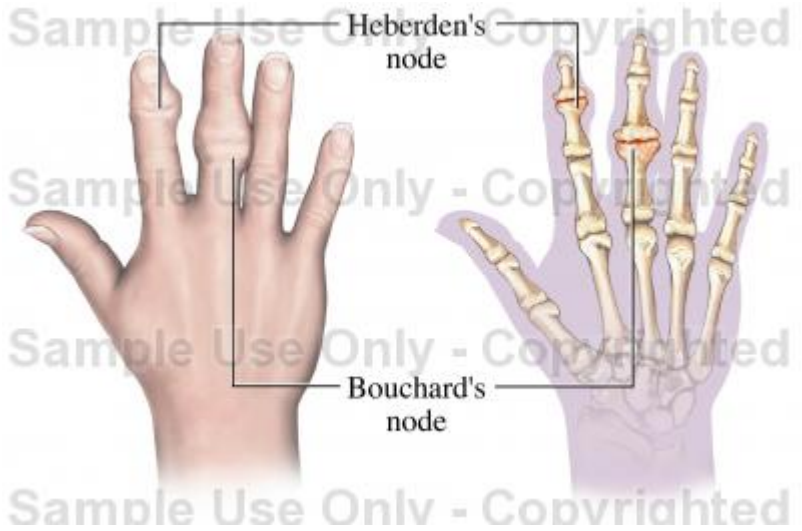
What form of arthritis has this patient most likely got? (2)

Suggested Answer: OA based on PIP and DIP involvement plus pain in the evenings.

Question 2.2

Differentiate between Bouchard and Heberdeen nodes (4)

Suggested answer: B nodes are present on PIP joints in OA. H nodes are present on DIP joints in OA.



Question 2.3

What would you expect to find on the following tests done on this patient?

2.3.1 ESR (1)

2.3.2 Rheumatoid factor (1)

2.3.3 Uric acid levels (1)

Suggested answers: 2.3.1- Normal; 2.3.2-negative; 2.3.3- normal

Question 2.4

Describe the non pharmacological management of this condition (4)

Suggested answers: Pt education, exercise programme, rest during active bout, heat, diet to maintain ideal BW, physio- and occupational therapy.

Question 3

Your 3rd patient is a 48 year old obese male, Mr. Dickens, who is brought in by his wife who states that her husband is constantly snoring in his sleep, sometimes he even stops breathing at night. She is highly stressed and says that she has no sleep because of all the noise. She also complains that he sleeps too much during the daytime as well.

Question 3.1

What is the most likely diagnosis for her husband condition? (2)

Suggested answer: Obstructive sleep apnoea.

Question 3.2

A blood gas analysis was done early in the morning today. What would a blood gas analysis reveal in this patient (3)

Suggested answer: Low pO2, high pCo2 and low pH (respiratory acidosis)

Question 3.3

List 4 medical problems that can result as a consequence of his sleep disturbance (4)

Suggested answers: Systemic hypertension, pulmonary hypertension, cardiac problems (CAD, arrhythmias, RHF), accidental death from falling asleep while driving or working.

Question 3.4

Suggest 2 modalities of treatment (2)

Suggested answers: Life-style modifications (avoid sleep on the back, weight reduction, avoid alcohol, smoking and sedative use), CPAP mask and surgery

Question 3.5

List 3 disadvantages of hypnotic sleep agents (3)

Suggested answers: Worsen upper airway muscle hypotonia, aggravate medical complications during sleep, increased falling asleep during day, while driving or working, increased incidence of accidents while awake.

Question 4

Your 4th patient is Mr. Sithole, a 25-year-old farm worker who has been coughing for the last 8 days. He comes in with his wife and 2 children. You examine him and find his chest to be clinically clear. General examination reveals no other abnormalities.

Question 4.1

Would you consider any further respiratory investigations at this stage? (1)

Suggested answer: No. Book follow- up next week to reassess the pt.

Question 4.2

If you diagnose a TB pleural effusion in Mr. Sithole, describe the mechanism of how such a pleural effusion would develop. (3)

Suggested answer: Pleural fluid accumulates when pleural fluid formation exceeds pleural fluid absorption. An *exudative pleural effusion* occurs when *local factors* that influence the formation and absorption of pleural fluid are altered. TB pleural effusions are thought to be due primarily to a hypersensitivity reaction to TB proteins in the pleural space. Thus, inflammatory response perpetuates fluid formation, as well as, reduces absorption due to thickened pleura by inflammation.

Question 4.3

Discuss how "lights criteria" for pleural effusions would aid you in your diagnosis (3)

Suggested answer: Light's criteria for an exudate:

Pleural fluid to serum protein ratio > 0.5

Pleural fluid to serum LDH ratio > 0.6 and

LDH > 2/3 of upper limits of normal serum.

The criteria will differentiate exudative from transudative pleural effusion. Next step is to define the etiology (TB, ca, pneumonia, PE) by use of further tests like ADA.

Question 4.4

Mr.Sithole has a daughter of 10 years and a son of 3 years. How would you manage his children if Mr.Sithole was diagnosed with smear positive TB? (4)

Suggested answer: First screen them for TB by full history/examination/Mantoux test/CXR. If children are well and without signs of disease I will offer 6/12 prophylaxis to child less

then 5 yrs old due to high risk of developing TB, particularly disseminated one. I will provide isoniazid 5 mg/kg (max 300 mg) daily 5x a week for a 6/12.

Question 4.5

Regimen 2 of the National TB guidelines is used by your clinic. Briefly describe how you advise Mr.Sithole to take his full course of anti TB medication if he weighs 60kg and has no renal or liver disease. (3)

Suggested answer: 3/12 of 4 tab RHZE (150/75/400/275) plus 2/12 S 1 gram IM then 5/12 of 2 tab RH (300/150) plus 2 tab E 400 mg, all 5x weekly

Question 4.6

The sister in the clinic is concerned as Mr. Sithole was coughing in the queue and she asks you to define MDR and XDR TB. Define MDR and XDR TB (4)

Suggested answer: MDR TB shows resistance to first-line drugs: isoniazid and rifampicin on in-vitro test.

XDR TB shows resistance to any fluoroquinolone, and at least one of three injectable second-line drugs (capreomycin, kanamycin, and amikacin), in addition to MDR-TB resistance pattern, according to WHO.

END OF PAPER 2: Please ensure that you return all pages of this paper to the invigilator for marking.