EXAMINATION FOR THE

FELLOWSHIP OF THE COLLEGE OF FAMILY PHYSICIANS

FCFP(SA) - PART I

PAPER 1

MULTIPLE CHOICE QUESTIONS AND EXTENDED MATCHING QUESTIONS SAMPLE PAPER

TIME ALLOWED : (2 HOURS)
EXAM NO:

INSTRUCTIONS

- 1. Write your Examination Number in the space provided above and in the top right hand corner of every page. Do not write your name anywhere on this paper.
- 2. Note that there are 100 questions in this paper to be answered on the question paper. The paper is divided into two sections as follows:

<u>Section A:</u> Multiple Choice Questions (60 questions). Each question consists of a clinical scenario followed by a number of options labeled (A - E). Tick the most appropriate response for each clinical scenario question asked.

<u>Section B:</u> Extended Matching Questions (40 questions). There is an opening theme and a number of options, followed by clinical scenarios/statements. Insert the alphabet of the most appropriate option that answers the statement or scenario. (You may use one option more than once to respond to the statements that follow).

- 3. There is no negative marking for this paper but the minimum pass mark is 50%.
- 4. Ensure that this paper is handed over to the invigilator for marking.
- 5. Note that this paper consists of 27 pages; ensure that you have received all 27 pages and that the **entire** paper is handed over for marking

END OF INSTRUCTIONS - DO NOT TURN THE PAGE UNTIL TOLD TO START!

SECTION A (MCQs)

1. A 45 year old female is brought by family to the emergency department following a motor vehicle accident and complains of chest pain and shortness of breath. Which of the following is true?

A.	She is most likely having a panic attack	
B.	She is most likely having a panic attack	V
C.	A pneumothorax is dull to percussion with decreased air entry and decreased vocal fremitus	
D	A haemothorax is hyper resonant to percussion with decreased air entry and decreased vocal fremitus	
Е	A haemothorax is dull to percussion with decreased air entry and increased vocal fremitus	

2. In assessing suicide risk one of the most critical indicators is:

A.	Affect	
B.	Sleep Disturbance	√
C.	Feeling of hopelessness	
D	Appetite Disturbance	
Е	Tearfulness	

3. With regard to the Immune Reconstitution Inflammatory Syndrome (IRIS) which of the following is incorrect:

A.	10 – 25% of patients who start HAART will experience IRIS	
В.	IRIS may be associated with infection due to Mycobacterium avium complex, Cryptococcus neoformans and cytomegalovirus	
C.	Studies have shown that dermatological manifestations are the commonest events related to IRIS	
D	Initiation of HAART at an older age has been associated with a higher incidence of IRIS	√
Е	Corticosteroids should not be used routinely in the management of IRIS	

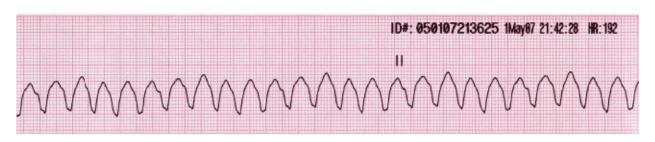
4. A 48 year old Indian man presents to your hospital with dyspnoea, significant chest pain for 8 hours in duration and sweating. He is hypertensive and has a 20 pack year smoking history. Choose the most appropriate immediate management of this patient

A.	Paracetamol 500mg PO stat, CXR, ECG	
B.	Oxygen, CXR, IV Fluids, Morphine	
C.	Low flow oxygen, salbutamol nebs, IV Fluids, hydrocortisone, CXR	
D	Aspirin, Oxygen, ECG, Nitrate sublingual/spray, morphine, cardiac enzymes	√
Е	TNT sublingually, nifedipine po, oxygen	

5. A 20 pack year smoking history means that the person has been:

A.	Smoking 20 packets of cigarettes a month for 20 years	
B.	Smoking 40 packets of cigarettes a month for 20 years	
C.	Smoking 40 cigarettes a day for month for 5 years	
D	Smoking 40 cigarettes a day for 10 years	V
Е	Smoking 20 cigarettes a day for 10 years	

6. You are monitoring a patient. He suddenly develops this persistent rhythm (see below). You ask about symptoms, and he reports that he has palpitations, and his BP unrecordable. What is your next action?



A.	Administer magnesium sulfate 1 to 2 g IV diluted in 10 ml D/W given over 5 to 20 minutes.	
B.	Give an immediate synchronized shock.	
C.	Administer adenosine 6 mg: seek expert consultation.	
D	Give sedation and perform synchronized cardio-version.	V
Е	Give an immediate unsynchronized shock.	

7. Which of the following is a contraindication to the use of thrombolytic therapy in patients with acute myocardial infarction?

A.	Active gastrointestinal bleeding.	
B.	Recent surgery (2 weeks postoperative)	
C.	History of cerebrovascular accident	
D	Suspected aortic dissection	
Е	All of the above.	V

8. A 24 year old man is commenced on drug therapy for pulmonary tuberculosis. Which one of the following statements about isoniazid therapy is true?

A.	It produces a peripheral neuropathy	√
В.	It produces toxic effects more commonly in fast acetylators	
C.	It is useful as monotherapy for chronic but not acute pulmonary TB	
D	It does not cross the blood brain barrier after oral administration	
Е	It typically produces a cholestatic jaundice.	

9. Blood gas analysis of a man presenting at A + E shows the following:

- pCO2 60 mm Hg (35-45 mm Hg)
- pH 7.32 (7.35-7.45)
- bicarbonate 31 mEq/L (24 mEq/L)
- Na⁺ 140 mEq/L (135-145 mEq/L)
- K⁺ 4.0 mEq/L (3.5-5.5 mEq/L)
- Cl⁻ 100 mEq/L (98-109 mEq/L)

What is the primary disorder?

A.		
	metabolic acidosis with a normal anion gap	
B.	metabolic acidosis with an elevated anion gap	
C.	metabolic alkalosis	
D	respiratory acidosis	$\sqrt{}$
Е	respiratory alkalosis	

10. Mr. Ndlovu has been on anti-TB regimen two for a week when you see him for review. He complains that he started itching on the day TB treatment was started. There is no rash to see, but he complains that the itch worries him especially when he is trying to fall asleep at night. Which drug is most likely to cause itching?

A.	INH	
B.	Rifampicin	
C.	PZA	V
D	Ethambutol	
Е	Streptomycin	

SECTION B (EMQs)

Theme 1: Knee pains

OPTIONS:

- A.
- Baker's cyst Bipartite patella B.
- Bursitis C.
- D.
- E.
- Chondromalacia patellae Dislocation of patella Osgood-Schlatters disease F.
- Osteoarthritis G.
- Recurrent subluxation of patella H.
- Septic arthritis I.

What is the likely diagnosis for each of the following patients?

1.	A 15-year-old girl has pain in the knee on walking up or down stairs. Pressing the patella against the knee causes pain.	D
2.	A 72-year-old woman complains of pain behind the patella. She is a keen gardener and has been doing a lot of weeding recently. The knee is tender, and has aspiration of the prepatellar fluid relieves some of the pain. The aspirated fluid is negative for crystals and bacteria.	С
3.	A 68-year-old man has a swelling behind his knee that is not painful, and he notices slight discomfort when he bends down.	A
4.	An overweight 57-year-old woman has been experiencing progressively worse aching in both knees over the past couple of years. The pain gets worse towards the end of the day.	G
5.	An overweight 57-year-old woman has been experiencing progressively worse aching in both knees over the past couple of years. The pain gets worse towards the end of the day.	F

Theme2: MOUTH PROBLEMS

OPTIONS:

- A. Aphthous ulcer
- B. Leukoplakia
- C. Mucocoele
- D. Gingivitis
- E. Oral candidiasis
- F. Lichen planus
- G. Basal-cell carcinoma
- H. Angular stomatitis
- I. Ulcerative stomatitis
- J. Epithelioma
- K. Leukaemia

What is the likely diagnosis for each of the following patients?

6.	1. A 45-year old man is referred to you by his dental hygienist, who noticed pale grey opaque areas interspersed with a few red inflamed patches on his tongue while scraping the tobacco stains off his teeth.	В
7.	An elderly man with ill-fitting dentures complains of painful inflamed cracks at the corners of his mouth.	Н
8.	The above patient also has a fissure on his lip that fails to respond to treatment, although the inflamed cracks at the corners of his mouth heal well.	J
9.	A 55-year old man presents with bleeding gums. On examination there is a line of inflammation at the border of the gum, the interdental papillae are swollen, and he has halitosis.	D
10.	A 67-year-old man with COPD has recently had an infective exacerbation. He complains of an unpleasant taste in his mouth, and examination reveals white deposits adhering to the mucous membranes.	Е

Theme3: HEADACHES

OPTIONS:

- A. Subdural hemorrhage
- B. Tension headache
- C. Migraine
- D. Glaucoma
- E. Paget's disease of the skull
- F. Cluster headache
- G. Analgesic rebound
- H. Meningitis
- I. Temporal arteritis
- J. Carbon monoxide poisoning
- K. Subarachnoid hemorrhage
- L. Space-occupying lesion
- M. Cervical spondylosis
- N. Extradural hemorrhage
- O. Trigeminal neuralgia.

Choose the most likely diagnosis from above for each of the following clinical scenarios:

11.	A 45-year-old smoker complains of recurrent headaches focused	F
	around his left eye, which becomes red and watery. They last for	
	about an hour almost every day for a month and then disappear for	
	several months.	
12.	A 64-year-old woman has a 3-day history of a unilateral throbbing	I
	and facial pain. She tells you that it hurts to brush her hair and her	
	jaw aches on prolonged chewing.	
13.	A 36-year-old secretary is complaining of recurrent headaches for the	В
	last few weeks. She describes feeling as if a band has been tightened	
	around her forehead. The headaches are worse in the late afternoon.	
14.	A 43-year-old carpenter has a 1-month history of worsening	L
	headache. It is waking him up at night and is painful on bending over.	
	He has also noticed a difference at work, as he cannot grip the	
	hammer firmly enough.	
	nammer minny enough.	
15.	An 86-year-old woman has been suffering from headaches following	A
	a fall 2 weeks ago. Her daughter rings you as the patient is becoming	
	intermittently drowsy and more unsteady on her feet.	

Theme 4: Concepts in evidenced based medicine

OPTIONS:

- A. Prevalence
- B. Absolute risk reduction
- C. Attributable risk
- D. Correlation coefficient
- E. Hazard ratio
- F. Negative predictive value
- G. Null hypothesis
- H. Number needed to treat
- I. Odds ratio
- J. Positive predictive value
- K. Incidence
- L. *P*-value
- M. Relative risk
- N. Sensitivity
- O. Specificity

Which of the above best fits each of the descriptions below?

16.	The proportion of true negatives identified by a screening test.	O			
17.	The likelihood of a person with a positive screening test actually having the disease in question.				
18.	The disease incidence in the exposed population minus the disease incidence in the unexposed population.	С			
19.	The disease incidence in the exposed population divided by the disease incidence in the unexposed population.	M			
20.	The statement that there is no difference between the two groups being studied.	G			
21.	The inverse of attributable risk.	Н			
22.	The number of new cases of a disease to treat.	K			
23.	The probability of an outcome arising by chance.	L			

END OF PAPER 1(Note that this paper carries 100 marks). Please hand over entire paper to invigilator for markind.