higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

MEDICAL PRACTICE N5
(SECOND PAPER)

19 JUNE 2018

This marking guideline consists of 10 pages.

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SECTION A

Answer ALL the questions in SECTION A.

QUESTION 1

1.1 1.1.1 A resistance against something when continually subjected to it, e.g. with continual use of drugs. The person must constantly take in more to get the same effect.

1.1.2 Something consists of more than one element or dimension.

1.1.3 Substances that stimulate the body and keeps the mind alert.

1.1.4 Something is seen or heard that does not exist.

1.1.5 A person is in a stage of delight and feels very good.

(5 × 2) (10)

1.2 1.2.1 Egocentric
1.2.2 Promiscuity
1.2.3 Sadist
1.2.4 Vasectomy/castration
1.2.5 Voyeurism

(5 × 2) (10)

1.3 1.3.1 False
1.3.2 False
1.3.3 False
1.3.4 False
1.3.5 False

(5 × 2) (10)

1.4 Brain damage, child will be mentally retarded (2)

1.5 Trisomy 21. Individuals have 47 chromosomes in each cell, instead of 46. (2)

1.6 As soon as possible after birth (2)

1.7 Excessive secretion of water in the ventricles of the brain (2)

1.8 Neurotic nucleus (2)
[40]

TOTAL SECTION A: 40

SECTION B

QUESTION 2

2.1 The result of the excess use of alcohol brings about physiological changes. People build up a resistance to alcohol. The more they drink, the more they can drink. The reason for this is not as previously claimed that there is an increase in the metabolism of alcohol in the person, but it is a process of adaptation against the effect of alcohol in the central nervous system.

There is, however, no clarity about the physiological basis of alcoholism. In other words there are certain physiological factors playing a role why certain people become alcoholics. The fact that people differ in their resistance to alcohol, the idea that hereditary factors might play a role as well as the fact that people have different metabolisms.

Food shortages, especially a shortage in vitamin B, may in some cases have an influence. A further possibility is that alcoholism can be the result of a biochemical fault, where genetic factors may contribute to certain important enzymes that are not produced. This may lead to certain important nutrients not being absorbed by the body. There is a faster absorption of alcohol when a little food is eaten.

Research shows that there is a relationship between genetic factors and alcoholism. Orphans from alcoholic parents more easily become alcoholics than orphans whose parents were not alcoholics. If the appearance of alcoholism is a problem in a family it must serve as a warning to the rest of the family that they should change their drinking habits drastically. (10)

2.2 Homosexuality shows no clear form of perceptible clinical form. A popular meaning which is a misconception, is that the homosexual betrays himself through feministic behaviour and attitude, an affected voice, talking full of airs, a certain way of walking and a selectiveness of clothing. These characteristics are shown because of exhibitionistic motifs.

Another misconception is that homosexuals on the whole are employed in female occupations for example ballet dancers, female hairdressers, window dressers, fashion designers and actors. These occupations draw a considerable amount of homosexuals, but on the other hand we also see them in a more male-orientated occupation.

Even personality tests seldom help to identify the homosexual. Text books draw a line between active and passive homosexuals. The passive plays the female role. In the case of a homosexual the same person can play an active or passive role, depending on the partner. Even between the same partners there can be a change of roles at different occasions.

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A difference can be made between the latent homosexual and the real or pronounced homosexual. Latent homosexualism is unconscious, but shows in different situations, e.g. excessive embarrassment when the person must undress in front of others.

In married life, problems may arise and impotency may result. Excessive sexual activity on the other hand sometimes hide unconscious homosexual inclinations. The Don Juan type of person who is preoccupied to hunt women could be a defense against unconscious homosexual inclinations.

Compensation for latent homosexuality sometimes leads to behavioural problems like a state of fear, bitterness, destructive behaviour and pursuit of delusions. (5)

2.3 **INFECTIONS**

Infections can be transmitted from the mother to the child or it may be contracted after birth. Under the first we have congenital syphilis and the rubella syndrome being the most important.

Congenital syphilis
The spirochaete syphilis penetrates through the placenta and attacks the fetus in the womb. The child is born with different abnormalities , one of which is a mental deficiency.

The rubella syndrome
If the pregnant mother contracts German measles during the first three months of pregnancy, the chances are good (50-60%) that the baby might be born with a number of psychic abnormalities. Most common deviations are blindness, deafness, cataracts on the eyes, malformation of the heart and a mental deficiency. It often happens that the baby is born blind, deaf and mentally retarded. Today the person can be injected against rubella avoiding the risk.

Meningitis and encephalitis
This is the most common form of infection after birth, that may cause brain damage if not treated early.

Disorders in metabolism and malnutrition
These factors are being efficiently researched. Treatment and prevention are the best ways of combating it. Unfortunately only 5% of all mental deficiencies are as a result of this type of disorder.

Malnutrition can lead to mental deficiency, especially due to a deficiency in vitamins, especially the B-complex and proteins. Excessive dehydration can lead to infantile gastro-enteritis.

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INJURIES

Brain damage can cause mental deficiency and can happen during the prenatal stage, during birth or at a later stage.

Injury before birth is nominal because the fetus is well-protected. Injury during birth is often a factor for mental deficiency. When there are complications at birth especially where instruments are used, the skull may be damaged or the baby could be receiving too little oxygen. Brain injury after birth is responsible for only a small percentage. It can still happen at any age.

Radiation (X-rays)
If the mother is exposed to X-rays during pregnancy, the fetus is exposed to brain damage. If this is done during the first three months the chances of brain damage in the fetus is even greater.

Poisoning
Mental deficiency as a result of poisoning can take place before or after birth. Chemical preparations like quinine and lead used to do illegal abortions are the cause of many cases of mentally deficient persons.

Alcohol plays a part in the appearance of mental deficiency. Excessive use of alcohol during pregnancy has an effect on the development of the brain in the fetus. Poisoning after birth, especially lead, is responsible for a small percentage of mental deficiency.

Chromosome dysfunctions
A small percentage of mental deficiencies is due to chromosome deficiencies. Here we think of the Mongolian and the super female. The composition of the latter chromosome is XXX.

Rhesus incompatibility
If there is a clash in the blood groups of the parents, e.g. the mother is Rh-negative and the father Rh-positive, it can lead to brain damage in the fetus. Antibodies move over the placenta and attack the baby's blood.

Intermarriages
In earlier years this factor played a much bigger role as at present it does not occur frequently. Even in the animal kingdom problems can arise if there is too much inbreeding.

Environmental factors
As in the case of heredity it is not possible to pinpoint the specific contribution that environmental factors have on mental deficiency. We know that the environment plays an important role in the mental development of a child. In a poor environment the mental development of a child is slow. A poor child in a poor environment can easily become mentally deficient where in a better environment this child would development far better. (Any 5 × 1) (5)

[20]

QUESTION 3

3.1 3.1.1 This person gets sexual delight by displaying his body especially the sex organs, to people of the opposite sex. This is a deviation which in its pathological form is only seen by men. Although women use exhibitionism as in nude dancing or in some cases photographic models, this is not a perversion. Practical motives from an economical origin is an important consideration in this case.

In the lesser pathogenic and social acceptable form this deviation comes under the disguise (undercover) of different types of camouflage. Beaches and public swimming pools lends itself to practice this type of exhibitionism. Ladies fashions in the Victorian era made scope for the exercising of exhibitionistic inclinations. In its pathogenic form it is a serious deviation which reacts poorly on therapy and treatment is not lasting. (5)

3.1.2 This person gets sexual stimulation from touching certain body parts like hair, feet, hands or legs of the opposite sex. Certain pieces of clothing like stockings, handkerchiefs, lingerie and especially shoes have a high fetish value. Soap, perfume, flowers and certain materials like satin and silk has a symbolic value for certain fetishists. In all it can be said that the further the stimulating object is away from the sexual organs the bigger the deviation. As with most other perversions this is mainly found in men.

In its more normal form, fetishism is part of normal love relations in the sense that a specific part of the body or characteristic item associated with love is often over-stressed. The adolescent would love to have a handkerchief or other possession of another person whom he/she may feel attracted to and would preserve or pamper this item. In this case the substitute is not replaced by the actual person as in the case of fetishism. The cause of this deviation is not clear. (5)

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3.2 3.2.1 Also known as high blood pressure. This factor is the most prominent cardiovascular disturbance. Approximately half of all people above the age of forty-five die as a result of some defect of the blood flow.

Stress plays a large role regarding blood pressure especially when emotions are involved. Research has found that most potential high blood pressure sufferers repress their emotions. The person is outwardly friendly, helpful, gentle and tends to be a perfectionist. However, underneath this facade, the person may be aggressive and filled with frustration or bitterness. The repression of feelings leads to a lot of stress and anxiety in the person. As a result the blood vessels will become constricted over time, the heart must work much harder to pump blood through the body and this in turn results in high blood pressure. A person's personality plays a large role in the way he/she handles stress as well as the factors causing the stress. (5)

3.2.2 An ulcer is a raw sore on one's stomach lining (mucous membrane). This sore is directly caused by an increased secretion of acid. The secretion of this acid is a natural process when food is present or when thinking of food. In the ulcer sufferer, the acid is secreted even when food is not present therefore it starts attacking the stomach lining which is usually well-equipped against stomach acid, but if there is the slightest tear or break in the lining, the acid will make it worse and eventually form a sore.

Research has found that there is a connection between the developing of a peptic ulcer and emotional factors (stress, frustration, etc.). Even rats and monkeys that were constantly exposed to stress got ulcers. The individual's personality make-up also plays an important role. Research has shown that most ulcer sufferers find themselves in highly competitive jobs. This leads to the conclusion that ulcers is also a job-related illness found in ambitious business men or women, however, there is no certain personality type associated with this illness. (5)
[20]

QUESTION 4

4.1 The outstanding characteristics of a person who suffers from a phobia is an irrational fear for an object or situation which can be seen objectively. The person might know that his/her fear is unfounded and even ridiculous, but it is not possible to control the fear and the person is overcome by the fear as soon as he/she he is confronted with such a situation or with the object.
Secondary symptoms relating to this fear include excessive perspiration, headache, backache, dizziness, shivering, vomiting, diarrhoea.

The following is a few of the unlimited number of phobias that are found:

Agoraphobia	-	fear of open spaces
Acrophobia	-	fear of heights
Clostrophobia	-	fear of closed spaces
Aquaphobia	-	fear of water
Zoophobia	-	fear of animals
Pirophobia	-	fear of fire

As in the case of all the other neuroses, the phobia sufferer cannot always hide the fear and it may show publicly. The phobia might relate to the environment, e.g. a city dweller may have a fear for lifts while a person living in the country might have a phobia for cattle.

In its worse form a phobia can be very restricting. The person suffering from an acute fear for open spaces cannot cross a street. Sometimes these people lock themselves in a room for years or months. The person with claustrophobia cannot be a passenger in a car, even the smallest room makes him/her anxious. The result is that this type of person cannot socialise or live up to the demands of a professional life. (10)

4.2 4.2.1 Amnesia or loss of memory is a condition whereby the person loses information about his/her past and even identity. He/she forgets his/her name, home place, occupation, marital status, etc. This memory loss is never complete. The person's vocabulary, social habits as well as memory regarding contents not relating to himself/herself remains intact.

It can be the result of brain damage in the form of cerebral concussion. In most cases it is the result of psychological factors. This is an ideal of escaping from an emotional conflict situation. The person solves his/her problem by committing psychological suicide. Dragging factors like financial worries, marital and love problems, guilt, etc. are most common.

Amnesia is temporary in nature, except where serious brain damage has occurred. When circumstances take a favourable turn this disappears completely. (5)

4.2.2 Sleep is an ideal escape mechanism. The student who has to study for a test or examination cannot open his/her eyes even early in the evening. The audience listening to a boring speaker keeps on yawning. It is even noted that primitive Eskimos during times of great exhaustion go into a state of hibernation.

In its pathological form this is called narcolepsy. The person is overwhelmed by a need to sleep anything from a few hours to years. Sometimes this person repeatedly goes to sleep during the day. After the assassination of President Kennedy, a young South American girl fell into a sleep lasting more than three years. In South Africa a woman slept for thirty-three years after the death of her fiancé. (5)

[20]

QUESTION 5

5.1
- It must be tidy and neat.
- It must be colourful with plants and flowers.
- Magazines must be kept neat and they must be recent magazines.
- Children's toys must be washable. This will prevent the spreading of diseases.
- Educational pamphlets must be placed in the waiting room.
- Use a light colour paint on the walls to make the room more cheerful.
- Have cheerful wall hangings and pictures.
- Have comfortable furniture with sufficient space between each piece of furniture, preventing the feeling of being squeezed in.
- There must be adequate lighting for reading.
- There must be a place/stand on which to hang jackets/coats and hats.
- Make sure that the air circulation and room temperature is comfortable and kept constant.
- Avoid items that can affect the patients, e.g. flowers causing hay fever or things that can cause an allergic reaction.
- Smoking should not be llowed as it is bad for a person’s health as well as those around the smoker. (10)

5.2
- It must be neat and tidy.
- The stock must be replenished regularly.
- Soiled or dirty linen should immediately be replaced with clean linen.
- Dirty bins must be emptied and cleaned in the mornings and at lunch time.
- Before a patient is shown into the room, check whether bedding is neat.
- Clean the instruments and put them back in the correct order.
- Used instruments must be washed and sterilised.
- Syringes must be thrown away. The needles must first be broken. (8)

5.3
- About 15 minutes should be allowed for regular and follow-up consultations.
- Appointments taking longer (for regular and follow-up consultations) are granted more time.
- If the doctor is fully booked and a patient must see him/her urgently, a patient can be fitted in, although he/she might have to wait. This should be told to the patient. (Any 2 × 1) (2)

[20]

TOTAL SECTION B: 60
GRAND TOTAL: 100

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