READING TEST 9

PART A

TIME: 15 minutes
Look at the four texts, A-D, in the separate Text Booklet.
For each question, 1-20, look through the texts, A-D, to find the relevant information.
Write your answers on the spaces provided in this Question Paper.
Answer all the questions within the 15-minute time limit.
Your answers should be correctly spelt.

Text A

Brain Imaging In Children

A headache is a result of disorders that affect pain-sensitive sites, such as meninges, blood vessels, paranasal sinuses and muscles; it is also one of the most common causes of pain in children. The prevalence of severe and frequent headaches is 25.25 per thousand in children. A large number of physicians and parents of sick children are concerned that inter-carcinoma lesions may be due to headaches. The most important means to diagnose the cause of headaches is to take precise medical history and para-clinical measures. Brain imaging method, including CT scan and MRI, is one of the diagnostic methods for children with headaches. The main reason for performing MRI and CT scans in patients with a headache is the diagnosis of curable lesions, which can increase the patient's longevity or improve her quality of life. Cases such as brain tumors, hydrocephalus vascular malformations, and subdural hematoma are in this category. Another important cause for conducting MRI in headache patients is a way to alleviate their anxiety due to the presence of a brain tumor or intracranial disease.

Text B

Cases in which imaging should be done include important changes in the type of headache, headache worsening, sudden development of headache or when it is stimulated by awakening of sleep, and when it is associated with a neurological symptom. It has been reported that there are abnormal findings in the imaging of patients, who are suspected of having a headache based on the findings of the study. Secondary pathologic factors are more common than those in the general population of headache patients. Parents' anxiety and their concern about headaches in their children and the availability of imaging measures have caused most children to experience CT scan and radiation due to the importance of headaches in children and due to limited studies in under developing countries. Patients below 12 years of age were asked for, imaging actions, such as CT scan and MRI, were the main inclusion criteria. The exclusion criteria included being older than 12 years of age, lack of consent to enter the study, and defects in the medical records. Subsequently, the CT and MRI reports of these patients were reviewed and the findings were recorded. Abnormal findings in the CT scan include mass, cysts, infarcts, hydrocephalus, calcification, hematoma, ventricular dilation and edema. Abnormal findings in MRI include sinusitis, retinal cysts, masses, cysts, atrophy, ventricular dilatation, age variations, hydrocephalus, hematoma, demyelinating disease, mastoiditis, encephalomalacia, schizophyllum and hypoplasia of corpus callosum, the prevalence of which were measured after collecting reports.

Text C

All patient information, including demographic factors and para-clinical symptoms, were recorded in a researcher-made check list and entered into SPSS. In the descriptive part, abnormal CT scan and MRI findings are presented as the main variable in different groups. All of the demographic and clinical characteristics of patients were also reported based on descriptive criteria. In the analytical section, based on statistical assumptions, parametric and nonparametric proportional tests were used. CHI-SQUARE test was used to analyze the qualitative findings and independent T-test was used to compare quantitative data; non-parametric Mann-Whitney was used if the initial assumptions were not as normal as they were supposed to. All tests were examined at a 5% error level.

Text D

Total amount of 353 people were included in the study, of which 7 were excluded during the study. In the first group, CT scan was performed on 217 patients, of which 85 subjects were girls and 132 were boys and 11.1% were abnormal. In the second group, 136 people were subjected to MRI, of which 56 (41.1%) were female and 80 (58.8%) were male, and 24.3% were abnormal. Also, according to gender segregation, abnormal findings in CT scan were significantly higher in boys (63% boys and 37% girls) (P = 0.03), and it was also found that MRI findings were also significantly more common in boys in comparison to girls (66% vs. 34%) (P = 0.04). The results of the study showed that the most common CT scan abnormal finding was mass (21%) and hematoma (21%). Then, cysts (14%) and Ventriculomegaly (14%) were the most frequent forms of abnormality. Prevalently found abnormality was cysts in MRI (30%). Atrophy (12%) and Ventriculomegaly had the second and third frequencies (15%) (P> 0.05).

Questions 1-7

For each question, 1-7, decide which text (A, B, C or D) the information comes from. You may use any letter more than once.
In which text can you find information
about; 1 Research methodology. Answer
_____
2 Patients who underwent study.
Answer _____
3 Importance of detection of the causes in early stages.
Answer _____

4 Reasons why imaging shall be done.
Answer _____
5 Data segregation.
Answer _____

6 Condition in which there is an accumulation of cerebrospinal fluid (CSF) within the brain.

Answer _____7 A small localized area of dead tissue resulting from failure of blood supply.Answer _____

Questions 8-14

Answer each of the questions, 8-14, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

8 Which age group patients were included in the study?

Answer _____

9 What is the reason presented for taking MRI in children with headache?

Answer _____

10 What is define as inflammation of the air cavities within the passages of the nose?

Answer _____

11 Was any defect in medical records an inclusion criteria?

Answer _____

12 Who shows more peculiarities in CT imaging?

Answer _____

13 What method was followed if the initial assumptions were abnormal?

Answer _____

14 What is known to be more common with respect to CT scanning?

Answer _____

Questions 15-20

Complete each of the sentences, 15-20, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

15 _____ is referred to as a solid swelling of clotted blood within the tissues.

16 The _____ were presented in two sections of descriptive and analytical.

17 The percentage of boys who underwent CT scan is _____

18 _____ can be defined as a brain condition that occurs in the fetus when the lateral ventricles become dilated

19 A _____ is any disease of the nervous system in which the myelin sheath of neurons is damaged.

20 _____ can be defined as the general physiological process of reabsorption and breakdown of tissues.

PART B

In this part of the test, there are six short extracts relating to the work of health professionals. For questions 1-6, choose the answer (A, B or C) which you think fits best according to the text.

1 According to the notice given

- health rate improved from 2003-2017
- many disparities present in 2012-2017 widened over time
- increase in physical activity led to improved health score

Nutrition

Between 2003 to 2004 and 2016 to 2017 in the United States, the mean AHA healthy diet score improved in both children and adults. The prevalence of an ideal healthy diet score increased from 0.2 percent to 0.6 percent in children and from 0.7 percent to 1.5 percent in adults. These improvements were largely attributable to increased whole grain consumption and decreased sugar-sweetened beverage consumption in both children and adults, as well as a small, non-significant trend in increased fruit and vegetable consumption. No major trends were evident in children or adults in progress toward the targets for consumption of fish or sodium. Between 2012 and 2017, although AHA healthy diet scores tended to improve in all race/ethnicity, income, and education levels, there has been constant inequalities as well. with generally smaller improvements seen in minority groups and those with lower income or education.

About one in every three US adults or 30.4 percent, do not engage in leisure time physical activity. Hispanic and Non-Hispanic black adults were more likely to be inactive. Among students in grades 9-12, only about 27.1 percent meet the American Heart Association recommendation of 60 minutes of exercise every day. More high school boys (36 percent) than girls (17.7 percent) reported having been physically active at least 60 minutes per day on all 7 days.

2 The term which is more close to condition in which the child may reply instantly

- somnolence
- hypotonia
- infantile reflex

Acute Bilirubin Encephalopathy (ABE)

ABE is a term to describe the variable spectrum, from subtle to advanced manifestations of bilirubin toxicity present in the first weeks of life (American Academy of Pediatrics Subcommittee on Hyperbilirubinemia, 2004; Van Praagh, 1961). Symptoms associated with ABE include a range of neurological manifestations, sleeping disorder, somnolence, hypotonia, loss of the Moro reflex, followed by a stage characterized by hypertonia of the extensor muscle groups (backward arching of the neck and backward arching of the trunk). Additionally, fever and/or a high pitched cry may be present. Different investigators have used different methods to characterize and define clinical manifestations of ABE in the infant

3 The notice

- places women at the centre of the care
- explains what can be done in order to decrease mortality rate
- talks of standards that ensure healthy life

Care For Women

Undoubtedly, encouraging women to give birth in health facilities, where there are skilled birth attendants, is essential and has helped reduce global newborn and maternal mortality rates for decades. However, there is room for improvement in the quality of care provided in these facilities.

To meet Sustainable Development Goal 3 of ensuring healthy lives and promoting well-being for all at all ages, we cannot keep our focus solely on survival. High quality care for all pregnant women and their newborns, throughout pregnancy, childbirth and the postnatal periods, is essential to ensure that mothers and children both survive and thrive.

4 The notice clearly explains that

- disease control is a still a big problem
- disease has successfully been managed
- disease is widespread and is affecting population across the globe

Wild polio

Overall the Committee was encouraged by continued progress in WPV1 eradication, with the number of cases globally falling to an all-time low in 2017. In addition, there has been no international spread of WPV since the fifteenth meeting in November 2017.

The Committee commended the continued high level commitment seen in sub continents and the high degree of cooperation and coordination, particularly targeting the high risk mobile populations that cross the international border, such as nomadic groups, local populations straddling the border, seasonal migrant workers and their families, repatriating refugees (official and informal), and guest children (children staying with relatives across the border). Stopping transmission in these populations is going beyond efforts and cannot be underestimated, underlining the critical continuing need for cross border activities in surveillance and vaccination.

5 The notice talks more about

- how ICD works
- ICD purpose and uses
- actions undertaken by the ICD

ICD - Health Trends

ICD is the foundation for the identification of health trends and statistics globally, and the international standard for reporting diseases and health conditions. It is the diagnostic classification standard for all clinical and research purposes. ICD defines the universe of diseases, disorders, injuries and other related health conditions, listed in a comprehensive, hierarchical fashion that allows for:

- easy storage, retrieval and analysis of health information for evidence-based decision-making;
- sharing and comparing health information between hospitals, regions, settings and countries; and
- data comparisons in the same location across different time periods.

Uses include monitoring of the incidence and prevalence of diseases, observing reimbursements and resource allocation trends, and keeping track of safety and quality guidelines. They also include the counting of deaths as well as diseases, injuries, symptoms, reasons for encounter, factors that influence health status, and external causes of disease

6 What is correct?

- Ebola virus is common among Waganta population
- There has been widespread prevalence of the virus in Iboko
- Virus in Bikoro is spreading at a rate closer to Waganta

Distribution of Ebola virus disease cases by health zone in Democratic Republic of the Congo, 1 April – 9 July 2018

Description	Bikoro	Iboko	Wangata	Total
Cases				
New Suspected	3	2	0	5
New Probable	0	0	0	0
New Confirmed	0	0	0	0
Total New Cases	3	2	0	5
Cumulative Cases				
Total Suspected	3	2	0	5
Total Probable	11	4	0	15
Total Confirmed	10	24	4	38
Total Number of Cases	24	30	4	58

PART C

In this part of the test, there are two texts about different aspects of healthcare. For questions 7-22, choose the answer (A, B, C or D) which you think fits best according to the text.

Text 1: Viral Infection – Yellow Fever

Yellow fever is a viral infection spread by a particular species of mosquito. It's most common in the areas of Africa and South America, affecting both travellers to and residents of those areas. In mild cases, it causes fever, headaches, nausea and vomiting. However, it can become more serious, causing heart, liver and kidney problems along with bleeding (haemorrhaging). Up to 50 percent of people with the more severe form of yellow fever die of the disease. There's no specific treatment for yellow fever, but getting a yellow fever vaccine before travelling to an area in which the virus is known to exist can protect you from the disease. During the first three to six days after contracting yellow fever — the incubation period — there won't be any signs or symptoms of the disease. After this, the virus enters an acute phase and, in some cases, a toxic phase follows which can be life-threatening.

Once the yellow fever virus enters the acute phase, you may experience signs and symptoms including: fever, headaches, muscle aches - particularly in your back and knees - nausea, vomiting or both, loss of appetite, dizziness, red eyes, face or tongue. These signs and symptoms usually improve and disappear within several days. Although signs and symptoms may disappear for a day or two following the acute phase, some people with acute yellow fever then enter a toxic phase. During the toxic phase, acute signs and symptoms return and more severe and life-threatening ones also appear. These can include yellowing of the skin and the whites of the eyes (jaundice), abdominal pain and vomiting - sometimes of blood - decreased urination, bleeding from your nose, mouth and eyes, heart dysfunction (arrhythmia), liver and kidney failure, and brain dysfunction, including delirium, seizures and coma.

Make an appointment to see your doctor four to six weeks before travelling to an area in which yellow fever is known to occur. If you don't have that much time to prepare, call your doctor anyway. Your doctor will help you determine whether you need vaccinations and can provide general guidance on protecting your health while abroad. Seek emergency medical care if you've recently travelled to a region where yellow fever is known to occur and you develop severe signs or symptoms of the disease. Even if you develop mild symptoms, call your doctor. Yellow fever is caused by a virus that is spread by the Aedes aegypti mosquito. These mosquitoes thrive in and near human habitations where they can breed in even the cleanest water. Most cases of yellow fever occur in sub-Saharan Africa and tropical South America.

Humans and monkeys are most commonly infected with the yellow fever virus; mosquitoes transmit the virus back and forth between monkeys, humans or both. When a mosquito bites a human or monkey infected with yellow fever, the virus enters the mosquito's bloodstream and circulates before settling in the salivary glands. When the infected mosquito bites another monkey or human, the virus then enters the host's bloodstream, where it may cause the illness to develop.

You may be at risk of the disease if you travel to an area where mosquitoes continue to carry the yellow fever virus. These areas include sub-Saharan Africa and tropical South America. Even if there aren't current reports of infected humans in these areas, it doesn't necessarily mean you're risk-free. It's possible that local populations have been vaccinated and are protected from the disease, or that cases of yellow fever just haven't been detected and officially reported. If you're planning on travelling to these areas, you can protect yourself by getting a yellow fever vaccine at least 10 to 14 days before travelling. Anyone can be infected with the yellow fever virus, but older adults are at greater risk of becoming seriously ill.

Diagnosing yellow fever based on signs and symptoms can be difficult because, early in its course, the infection can be easily confused with malaria, typhoid, dengue fever and other viral hemorrhagic fevers. To diagnose your condition, your doctor will likely: Ask questions about your medical and travel history, collect a blood sample for testing. If you have yellow fever, your blood may reveal the virus

itself. If not, blood tests called enzyme-linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) can also detect antigens and antibodies specific to the virus. Results from these tests may take several days. No antiviral medications have proved helpful in treating yellow fever and, as a result, treatment consists primarily of supportive care in a hospital. This includes providing fluids and oxygen, maintaining adequate blood pressure, replacing blood loss, providing dialysis for kidney failure, and treating any other infections that develop. Some people receive transfusions of plasma to replace blood proteins that improve clotting. If you have yellow fever, you may also be kept away from mosquitoes, to avoid transmitting the disease to others.

Text 1: Questions 7-14

7 Yellow fever is common in;

- Africa
- South America
- Both

Not given

8 Which of the following is not a sign of yellow fever?

- Back pain
- Vomiting
- Nausea

Dry tongue

9 Signs/symptoms of toxic phase;

- Loss of appetite
- Yellowness of eyes
- Brain dysfunction

B and C

10 Seizures may occur during;

- Acute phase
- Toxic phase
- Sometimes in both the phases
- Not given

11 Yellow fever, which is a viral disease, is spread by;

- Aedes albopictus mosquito
- Aedes aegypti mosquito
- Female aedes mosquito
- Male aedes mosquito

12 Mosquitoes transmit the virus from

- Humans to monkeys
- Monkeys to humans
- Human to human
- A & B

13 Travelling to areas where the disease is common is recommended after vaccination of;

- 10 days
- 12 days
- 14 days
- 10-14 days

14 Supportive care in hospitals includes;

- Free medical check up
- Free BP check up
- Effective dialysis procedures in case of kidney failure
- B and C

Text 2: Aortic Dissection or Dissecting Aneurysm

An aortic dissection is a serious condition in which a tear develops in the inner layer of the aorta, the large blood vessel branching off the heart. Blood surges through this tear into the middle layer of the aorta, causing the inner and middle layers to separate (dissect). If the blood-filled channel ruptures through the outside aortic wall, aortic dissection can be fatal. Aortic dissection, also called a dissecting aneurysm, is relatively uncommon. Anyone can develop the condition, but it most frequently occurs in men between 60 and 70 years of age. Symptoms of aortic dissection may mimic those of other diseases, often leading to delays in diagnosis. However, when an aortic dissection is detected early and treated promptly, your chance of survival greatly improves.

Aortic dissection symptoms may be similar to those of other heart problems, such as a heart attack. Typical signs and symptoms include sudden severe chest or upper back pain (often described as a tearing, ripping or tearing sensation, that radiates to the neck or down the back), loss of consciousness (fainting), shortness of breath, sweating, weaker pulse in one arm compared to the other etc. If you have signs or symptoms such as severe chest pain, fainting, sudden onset of shortness of breath or symptoms of a stroke then seeking medical assistance is imperative. While experiencing such symptoms doesn't always mean that you have a serious problem, it's best to get checked out quickly because early detection and treatment may help to save your life.

An aortic dissection occurs in a weakened area of the aortic wall. Chronic high blood pressure may stress the aortic tissue, making it more susceptible to tearing. You can also be born with a condition associated with a weakened and enlarged

aorta, such as Marfan syndrome or bicuspid aortic valve. Rarely, aortic dissections may be caused by traumatic injury to the chest area, such as during motor vehicle accidents.

Aortic dissections are divided into two groups, depending on which part of the aorta is affected: Type A: This is the more common and dangerous type of aortic dissection. It involves a tear in the part of the aorta just where it exits the heart or a tear extending from the upper to lower parts of the aorta, which may extend into the abdomen. Type B: This type involves a tear in the lower aorta only, which may also extend into the abdomen. Risk factors for aortic dissection include Uncontrolled high blood pressure (hypertension), found in at least two-thirds of all cases, Hardening of the arteries (atherosclerosis), Weakened and bulging artery (pre-existing aortic aneurysm), aortic valve defect (bicuspid aortic valve), A narrowing of the aorta you're born with (aortic coarctation)

People with certain genetic diseases are more likely to have an aortic dissection than other people. These genetic diseases include Turner's syndrome, high blood pressure, heart problems, and a number of other health conditions may be a result of this disorder. Marfan syndrome: This is a condition in which connective tissue, which supports various structures in the body, is weak. People with this disorder often have a family history of aneurysms of the aorta and other blood vessels. These weak blood vessels are prone to tears (dissection) and rupture easily. Ehlers-Danlos syndrome: This group of connective tissue disorders is characterized by skin that bruises or tears easily, loose joints and fragile blood vessels. Loeys-Dietz syndrome: This is a connective tissue disorder marked by twisted arteries, especially in the neck. People who have Loeys-Dietz syndrome are thought to be at risk of developing aortic dissections and aneurysms.

An aortic dissection can lead to death, due to severe internal bleeding, including into the lining around the heart (pericardial sac), organ damage (such as kidney failure or life-threatening damage to the intestines), strokes (possibly including paralysis), and aortic valve damage, such as causing the aortic valve to leak (aortic regurgitation). Detecting an aortic dissection can be tricky because the symptoms are similar to those of a variety of health problems. Doctors often suspect an aortic

dissection if the following signs and symptoms are present: sudden tearing or ripping chest pain, widening of the aorta on a chest X-ray, blood pressure difference between the right and left arms.

Text 2: Questions 15-22

15 In aortic dissection a tear develops in;

- Outer layer of aorta.
- Inner layer of aorta.
- Middle aorta.
- A blood vessel branching off the heart.

16 Dissecting aneurysm is common among;

- Men
- Women
- Both

Children

17 Symptoms of aortic dissection include;

- Chest pain and swelling
- Weak pulse in both arms
- Loss of consciousness.

All of the above

18 Aortic dissection can also be caused due to;

- High BP
- Weak aortic wall
- Inborn symptoms
- Traumatic injury to chest during accidents

19 The most dangerous type of aortic dissection is;

- Type A

- Type B
- Aortic aneurysm
- Aortic coarctation

20 A condition in which connective tissue is weak is called;

- Turners syndrome
- Loeys-Dietz syndrome
- Ehlers-Danlos syndrome
- Marfans syndrome

21 People with Loeys-Dietz syndrome are likely to develop;

- Aneurysms
- Ruptured blood vessels
- Twisted arteries in the neck
- Aortic complications

22 Detecting aortic dissection is;

- Easy
- Difficult
- Impossible
- Sometimes possible