OET UPDATED READING FOR ALL PROFESSIONS

CONTAINS 5 SETS WITH ANSWERS

2019 EDITION

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Introduction to OET Reading Sub-test

The topics are of generic healthcare interest and are therefore accessible to candidates across all professions. The Reading sub-test contains three parts and a total of 42 question items, Part A accounts for 20 marks, Part B accounts for 6 marks and Part C accounts for 16 marks. All three parts take a total of 60 minutes to complete. You will not be given extra time at the end of the sub-test to check your answers, and it is up to you to manage your time. The test is designed so that the time available is enough for you to read, choose your answers, and check your work.

Part A – 15 minutes

Reading Part A tests your ability to skim and scan quickly across different texts on a given topic in order to locate specific information. For that purpose, Part A is strictly timed and you must complete all 20 question items within the allocated 15 minutes. To complete the task successfully, you will also need to understand the conventions of different medical text types and understand the presentation of numerical and textual information. The 20 questions consist of matching, sentence completion and short answer questions.

Part B and Part C – 45 minutes

Part B

Part B assesses your ability to identify the detail or main point of six short texts sourced from the healthcare workplace. The texts might consist of extracts from policy documents, hospital guidelines, manuals or internal communications, such as emails or memos. For each text, there is one three-option multiple-choice question. To complete the task successfully, you will need to identify specific ideas at sentence level.

Part C

Part C assesses your ability to identify detailed meaning and opinion in two texts on topics of interest to healthcare professionals. For each text, you must answer eight four-option multiple choice questions. Reading Part C tests your ability to understand the explicit or implied meaning as well as the attitude or opinion presented in a longer text. To complete the task successfully, you will need to identify the relationship between ideas at sentence and paragraph level. Part C also tests your ability to accurately understand lexical references and complex phrases within the text.
DOs & DON'Ts

- In Part A you should write your answers clearly in the spaces given in the question booklet.
- Please remember that there is a strict time limit for Part A, and Part A materials will be collected from you after 15 minutes. You will therefore not have any time to check your Part A answers later in the test.
- In Part A you must use exactly the same form of the word or short phrase as given in the four texts.
- In Part B and Part C, you must shade the circle next to the appropriate answer. Answers written elsewhere in your booklet will not be marked.
- You must use correct spelling in the Reading sub-test to get the marks.
- Responses that are not spelled correctly will not receive any marks.
- American and British English spelling variations are accepted, e.g., color and colour are both acceptable.
- Abbreviations are not accepted in the Reading sub-test unless they appear in the texts.
Bed Bugs: Texts

Text A

Bed bugs have feasted on sleeping humans for thousands of years. After World War II, they were eradicated from most developed nations with the use of DDT. This pesticide has since been banned because it's so toxic to the environment. Spurred perhaps by increases in international travel, bed bugs are becoming a problem once again. The risk of encountering bed bugs increases if you spend time in places with high turnovers of night-time guests - such as hotels, hospitals or homeless shelters. Bed bugs are reddish brown, oval and flat, about the size of an apple seed. During the day, they hide in the cracks and crevices of beds, box springs, headboards and bed frames. It’s a daunting task to eliminate bed bugs from your home. Professional help is recommended.

Symptoms

It can be difficult to distinguish bed bug bites from other insect bites. In general, the sites of bed bug bites usually are:
• red, often with a darker red spot in the middle
• itchy
• arranged in a rough line or in a cluster
• located on the face, neck and arms

Text B

Reactions to bed bug bites in humans

Skin reactions are commonly associated with bed bugs, which result from the saliva injected during feeding. Some individuals, however, do not react to their bite, whereas others note a great deal of discomfort often with loss of sleep from the persistent biting. Reactions to the bites may be delayed, up to 9 days before lesions appear. Common allergic reactions include the development of large wheals, often >1-2 cm, which are accompanied by itching and inflammation. The wheals usually subside to red spots but can last for several days. Bullous eruptions have been reported in association with multiple bed bug bites and anaphylaxis may occur in patients with severe allergies. In India, iron deficiency in infants has been associated with severe infestations. It has been suggested that allergens from bed bugs may be associated with asthmatic reactions.

Text C

Bed bug-detecting canines

ABSTRACT The bed bug, Cimex lectularius L., like other bed bug species, is difficult to visually locate because it is
Detector dogs are useful for locating bed bugs because they use olfaction (smell) rather than vision. Dogs were trained to detect the bed bug (as few as one adult male or female bug) and viable bed bug eggs (as few as five, collected 5-6 days after feeding) by using a modified food and verbal reward system. Their efficacy was tested with adult bed bugs and viable bed bug eggs placed in vented polyvinyl chloride containers. Dogs were able to discriminate bed bugs from the insects Camponotus floridanus (Buckley), Blattella germanica L., and Reticulitermes flavipes (Kollar), with a 97.5% positive indication rate (correct indication of bed bugs when present) and 0% false positives (incorrect indication of bed bugs when not present). Dogs also were able to discriminate live bed bugs and viable bed bug eggs from dead bed bugs, cast skins, and feces, with a 95% positive indication rate and a 3% false positive rate on bed bug feces. In a controlled experiment in hotel rooms, dogs were 98% accurate in locating live bed bugs. A pseudoscent prepared from pentane extraction of bed bugs was recognized by trained dogs as bed bug scent (100% indication). The pseudoscent could be used to facilitate detector dog training and quality assurance programs. If trained properly, dogs can be used effectively to locate live bed bugs and viable bed bug eggs.

Text D

Bed bugs as vectors of human disease

Transmission of more than 40 human diseases has been attributed to bed bugs, but there is little evidence that such transmission has ever occurred. Older scientific literature postulated that bed bugs may be vectors of plague, yellow fever, tuberculosis, relapsing fever, leprosy, filariasis, kala azar (leishmaniasis), cancer, smallpox, and Chagas disease (Trypanosoma cruzi). Recently, the possibility of human immunodeficiency virus and hepatitis B virus transmission by bed bugs has been investigated. Human immunodeficiency virus can be detected in bed bugs up to 8 days after ingestion of highly concentrated virus in experimental blood meals. However, no viral replication has been observed within the insects and no virus has been detected in bed bug feces. Mechanical transmission of human immunodeficiency virus has not been demonstrated using an artificial system of feeding bed bugs through membranes.
In which text can you find information about

1. normal allergic reactions to bed bugs?

2. signs that bed bugs may spread diseases?

3. dogs can be trained to detect bed bug eggs?

4. bed bugs showed no viral replication?

5. bed bug bites may be seen in a cluster?

6. places where bed bugs are found?

7. what is used to facilitate quality assurance programs?

Questions 8-15

Answer each of the questions, 8-15, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

8. How much was the false positive indication rate of bed bugs by detector dogs?

9. What was used to eliminate bed bugs from developed countries?

10. What is the usual symptom exhibited by bed bug infestation?

11. What was detector dogs’ positive indication rate for distinguishing live and dead bed bugs?

12. What caused serious infestations of bed bugs in newborns?

13. What is the reason for reappearance of bed bugs in developed countries?

14. How many diseases are said to be spread by bed bug being vectors?

15. What are responsible for asthma symptoms caused by bed bugs?
Questions 16-20

Complete each of the sentences, 16-20, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

16. The usage of ______________________________ is prohibited as it is proven to be very harmful to our surroundings.
17. The presence of ______________________________ is not detected in ordure of the bed bugs.
18. To locate bed bugs, detector dogs use olfactory senses despite their ______________________________.
19. Numerous bed bug bites are found to produce ________________________.
20. ______________________________ is made from the pentane extraction of bed bugs.

END OF PART A
THIS QUESTION PAPER WILL BE COLLECTED

READING SUB-TEST – QUESTION PAPER: PARTS B & C

TIME: 45 MINUTES

INSTRUCTIONS TO CANDIDATES:

DO NOT open this Question Paper until you are told to do so.
One mark will be granted for each correct answer.
Answer ALL questions. Marks are NOT deducted for incorrect answers.
At the end of the test, hand in this Question Paper.
DO NOT remove OET material from the test room.

HOW TO ANSWER THE QUESTIONS:

Mark your answers on this Question Paper by filling in the circle using a 2B pencil.

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 extract, every physicians must

A. declare modifications regarding requirement of seasonal influenza immunization.
B. provide help to get proper immunization against the seasonal influenza virus.
C. get a flu vaccination from an appropriate place that offer a valid substantiation.

The seasonal influenza immunization

In an effort to protect our patients, visitors, and colleagues, we are announcing an important change regarding the requirement of seasonal influenza immunizations for all employees, physicians, active volunteers, vendors, contracted staff, and students. As health care providers, it is our responsibility and obligation to protect our patients, visitors, and colleagues—as well as ourselves and our family members—by being immunized against the seasonal influenza virus. As we have done in the past, seasonal influenza immunizations will be provided free of charge to all employees, physicians, contracted staff and active volunteers. Participation in this year’s seasonal influenza immunization program is required. All employees, physicians, contracted staff, active volunteers and students will be required to do one of the following:
• Receive a flu vaccination through RH Occupational Health Office.
• Provide proof of immunization if you received a vaccination outside of RH’s planned immunization program—from another health care provider or local pharmacy, for example.

2. The policy document tells us that tolerance for risk is greater for permanently implanted medical devices

A. in pediatric patients with a limited life expectancy.
B. such as pacemaker pulse generators.
C. in a healthy pediatric population.

Risk Assessment of Medical Devices

The risk assessment should consider the proposed clinical use of the device, including the anatomical location, duration of exposure, and intended use population. For example, for pediatric patients with a limited life expectancy, the tolerance for risk associated with a permanently implanted medical device may be higher than the tolerance for risk from the same device in an otherwise healthy pediatric population. The potential exposure duration should also consider which material components of the device have direct or indirect contact with tissue, and whether exposure would be a one-time exposure, a constant exposure over time, or an intermittent exposure over time that could have a cumulative effect. For example, pacemaker pulse generators commonly contain internal electronic components made from chemicals that could be toxic to the body, but appropriate bench testing can demonstrate that the pulse generator is hermetically sealed and will limit exposure of those chemicals to the surrounding tissues.

3. What is being described in this section of the guidelines?

A. changes in procedures.
B. best practice procedures.

C. exceptions to the procedures.

<table>
<thead>
<tr>
<th>Patient Admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the patient medically requires hospital inpatient services and the physician believes that the patient will need to stay in the hospital at least 2 midnights, the physician should order inpatient admission. If the patient does not medically require inpatient hospital services or the physician does not expect the patient to stay past 2 midnights, the physician should order observation or outpatient services. The certification must be signed and documented in the medical record prior to patient discharge. Hospitals may choose to have physicians record these elements of the certification either on a specific form or throughout the medical record such as in the orders, history and physical, or physician progress notes.</td>
</tr>
</tbody>
</table>

Guidelines:

- Excellent patient care should continue to be the top priority.
- Document the diagnosis, medical rationale, plan of care and anticipated discharge.
- Sign the admission order and certification (if appropriate) prior to discharge.

4. The purpose of these instructions is to explain

A. how to wear respirators effectively

B. how to use respirators appropriately

C. necessity of wearing proper respirators

<table>
<thead>
<tr>
<th>Respirators</th>
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</thead>
<tbody>
<tr>
<td>Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Workers who occasionally wear filtering face-piece respirators on a voluntarily basis must be aware of the following information. This information is intended for employees who are not required to wear respirators for protection from recognized airborne hazards. Employees who perceive exposures to any airborne contaminants, particularly outside of a chemical fume hood, should request an exposure evaluation before selecting a respirator.</td>
</tr>
</tbody>
</table>

5. The extract informs us that your

A. input will help evaluate the current HOCC program and its future program review.

B. participation ensure that patients’ needs are met exclusively by physicians.
Hospital On-Call Coverage Program Review

We are requesting your assistance with the detailed review of the Hospital On-Call Coverage (HOCC) Program; your input will help evaluate the current HOCC program and assist to identify future directions. With your participation, we can ensure that the HOCC program meets the needs of patients, participating physicians and other health care stakeholders.

The HOCC Program review has three primary objectives:

1. To identify and examine the effectiveness of key elements of the program already in place at hospitals. These elements include eligibility criteria, compensation structures, process metrics, resource requirements, and others.
2. To develop recommendations for improving the organization and delivery of on-call services based on evidence and best practices identified through the data and information collection processes.
3. To explore specific issues: Participation of doctors, use of regional call networks, and coverage for long-term care, sexual assault centres, chronic care facilities and palliative care programs.

6. What point does the extract make about processing of medical devices?

A. could significantly affect the biocompatibility of the medical devices.

B. includes passivating surface of medical devices by acid bath or other method.

C. uses resin supplier to remove all processing solvents from medical devices.

Identification of Potential Risks

An assessment of potential biocompatibility risk should include not only chemical toxicity, but also physical characteristics that might contribute to an unwanted tissue response. These characteristics can include surface properties, forces on surrounding tissue, geometry, and presence of particulates, among others. In addition, changes in manufacturing and processing parameters can also have an impact on biocompatibility. For example, the original processing for an implanted device might include placing the device in an acid bath to facilitate passivation of the implant surface. If this passivation process is changed to eliminate the acid bath in favor of a different method of passivating the surface, removal of the acid bath might unintentionally lead to a smaller reduction in pyrogenic material, which could result in pyrogenic reactions (fever) following implantation of the device. Another common change that might impact biocompatibility is a change in resin supplier. For example, if the new resin supplier does not remove all processing solvents (some of which may be known toxic compounds, such as formaldehyde), the final manufactured device could cause unexpected toxicities that were not seen with devices manufactured from the original resin.

Part C

In this part of the test, there are two texts about different aspects of healthcare. For questions 7-22, choose the
Somewhere out in the future there's a final moment with our name on it: life's only certainty is death. It's coming, and the only mystery about mortality's last call is: when? But if your doctor could tell you, would you want to hear how long you are likely to live? American researchers now believe that they are able to determine a person's "natural" life span from a simple blood test. They have identified the ability of a common gene to influence the ageing process, and the form it takes in any given individual can they say, indicate medical vulnerability and predict when the person may die. The news has created much excitement but it also has raised concerns about the ethical dilemmas involved if science is able to read our lifelines and forecast our susceptibility to deadly diseases. It's a development that revives the eternal question: should a doctor tell?

Apo E, as it's known, is not a new discovery but, hitherto, scientists believed that its only function was to remove cholesterol from the bloodstream. Only lately as they have been able to study the ever increasing numbers of elderly, has the gene's relationship with longevity become apparent. It apparently operates as a kind of caretaker gene, maintaining the system's cells and keeping them running smoothly, and its efficiency can determine the rate at which the body holds up or wears out. "Apo E is one of those genes that we suspect controls life span because it affects people's susceptibility to diseases of ageing”, says Dr Jan Vigh; a molecular geneticist at Beth Israel Hospital, in Boston. The gene has three variants, known as E2, E3, E4, and we all inherit one of them from each of our parents. More than half of us are born with two E3s, but it is the distribution of the other two forms that has proved so compelling to scientists that they have been analyzing data on the elderly.

People with one or – more rarely – two E2s tend to survive the longest, while those with E4s die considerably earlier than the rest. Studies in Canada, France, Sweden and Finland found that E2 carriers were about four times more likely to reach their 100th birthday than those born with an E4. The E2 is, it seems, an excellent caretaker. By comparison, E4 does sloppy work and its inadequacies at cell upkeep make those who have it vulnerable to illness and early death. Doctors now accept that the presence of the Apo E4 gene signals a risk of heart disease and Alzheimer's. American studies show that middle aged women with an E4 are twice as likely to develop coronary heart disease as those who don't, while E4 men have a 50 per cent higher risk than other men. Among men under 40 who require surgery for clogged heart arteries, the incidence of two E4s is 16 times higher than among others in their age group And Dr Alan Roses, the Duke University neurologist who first made the link between Apo E and Alzheimer's, says those with two E4s have about six times the normal risk of developing the disease, while people born with two E2s may be protected from it.

More than 4 million Americans are afflicted by this devastating brain disorder and nearly two-thirds of them have at least one Apo E4 gene, compared with only 15 percent in the general population. So Apo E may be a critical marker for life span and vulnerability to grave diseases, and evidence of its presence is in the records of millions of blood tests conducted for other reasons. But is it ethical or wise for doctors to use that information to tell people something they may not want to know and which, in any case, alerts them to threats that may be unavoidable? “We consulted bioethicists and got a variety of opinions," says Dr Norman Relkin, the New York neurologist who gathered other concerned doctors to discuss the issue at a conference in Chicago. After two days, they called for more research to establish the nature and the risks of the Apo E family but many researchers seem opposed to confronting people with alarming news about conditions that cannot be fought, based on blood samples given for other purposes.

"Have you done them a service?" asks Dr Lindsay Farrer, an Alzheimer's researcher at Boston University Medical Centre. "What good does it do to tell someone about being at risk from a dreaded disease that can neither be prevented nor effectively treated?" Dr Rudolph Tanzi, an Alzheimer's specialist at Massachusetts General Hospital,
agrees but, because his own family has a history of early heart problems, he was unable to resist having his own Apo E analyzed. He is an E3, in the same wide, neutral middle ground as most of humanity. The problems raised by Apo E are varied and complex. Some doctors worry about possible discrimination from employers and insurance companies if people are routinely told they may have a predisposition to serious illness and premature death. Because blows to the head seem to increase the risk of getting Alzheimer's among people with the E4 gene, should boxers and other athletes, and children wanting to play contact sports, be tested for their Apo classification? “Already!” says Dr Relkin, pregnant women are asking for their fetuses to be screened so they can consider abortion if their babies show two E4s.

Duke University's Dr Roes is working with a major drug company to try to define what gives Apo E2 its ability to improve the body's defenses, so that its protection can be duplicated in the laboratory. "The hope is that we shall be able to make a drug that does what Apo E2 does," he says. Meanwhile, for millions of people around the world, their destiny -how they will live, when they will die is perhaps already foretold in a dusty medical file.

**Text 1: Questions 7-14**

7. Researchers have identified ______

A. a way to monitor a person's life span from a blood test.
B. a gene which could affect the process of ageing in humans.
C. the mystery about mortality's last call.
D. a way to predict the vulnerability of an individual.

8. The discovery of being able to estimate the life span of a person ______

A. has generated apprehension about peoples predisposition to deadly diseases..
B. has initiated an ethical puzzle involved in being able to predict disease.
C. has rekindled debate about a perpetual dilemma for doctors.
D. has been instrumental in forecasting deadly diseases.

9. Apo E functions within a person's system as ______

A. a cholesterol gene controller..
B. a maintainer of the gene's relationship with longevity.
C. a gene which monitors and determines the ageing process.
D. the gene which inhibits the rate at which the body degenerates.

10. Scientists have been in a position to study the Apo E phenomenon because _____

A. of the steadily ageing population in North America.
B. Apo E has been known about for many years.
C. diseases which affect the elderly have increased.
D. they knew that its only function is to remove the cholesterol from the blood.

11. A molecular geneticist in Boston has found that ______

A. we all inherit Apo E2, E3 or E4 from either parent.
B. the greater number of us inherit three variants of Apo E from both parents.
C. the majority of us will inherit two Apo E3s from both parents.
D. more than half of us inherit either two Apo E2s or two Apo E4s from both parents.

12. Middle aged women with an Apo E4 gene _____

A. are at greater risk of being vulnerable to illnesses.
B. have a 50% higher risk factor than men.
C. experience a higher incidence of Alzheimer’s disease.
D. are more likely to develop heart disease.

13. Which statement is not true?
The neurologist who made initial connection with Apo E and Alzheimer’s believes people with ______

A. 2 E4s are more likely to develop the disease.
B. 2 E4s are more likely to be protected by it.
C. 2 E4s are six times more at risk of vulnerability to Alzheimer’s than others.
D. 2 E2s are less in 15% of the general population who have the disease.

14. Neurologists and bioethicists who met at a conference in Chicago ______

A. were mildly in favor of telling people alarming news about their condition.
B. agreed that there was sufficient information to establish risks of Apo E gene.
C. agreed that it was insufficient to determine extent of risks using Apo E information.
D. were not in favor of giving bad news based on blood samples only.

Text 2: E. coli Outbreak

An outbreak of E. coli in Germany that has killed at least 16 people and left hundreds battling infection across Europe raises questions about what risks the infection continues to pose and what fallout it will cause. The source of the E. coli outbreak is still unknown but has been traced to cucumbers imported to Germany from Spain. It is not clear whether the vegetables were infected at source or in transit. The European Center for Disease Prevention and Control (ECDC) says transmission of the strain of bacterium, commonly found in cattle, usually occurs through contaminated food or water and contact with animals. Infections have so far only been linked to Spanish cucumbers originating from the cities of Almeria and Malaga, but there are fears other raw vegetables such as lettuce and tomatoes could be affected. The European Union says a suspect batch of cucumbers imported from either Denmark or the Netherlands and sold in Germany is under investigation.

The ECDCP says the bacteria’s impact on individuals can be affected by their age with children under five usually at higher risk of developing disease and dying from infection. However, statistics published on May 27 showed that of 276 cases, 87% were adults and 68% were women. One hospital in Hamburg said it had up to 700 infected patients. Of 85 people at risk of renal failure, 20 were children and 65 were adults. Sweden, which appears to have the biggest cluster of cases outside of Germany, has reported several dozen people hospitalized. Escherichia coli (E. coli) is a bacteria found living in the intestines of people and animals. It can be transmitted through contaminated water or food -- especially raw vegetables and undercooked meat. It is usually harmless, but can cause brief bouts of diarrhea. Some nastier strains can cause severe diarrhea and followed by serious organ system damage such as kidney failure. Healthy adults usually recover within a week, but young children and older adults can develop a life-threatening kidney failure.

The European Food Safety Alert Network identifies the bacteria linked to the contaminated cucumbers as EHEC, or enterohemorrhagic Escherichia coli, a strain which is particularly virulent and resistant to antibiotics. In Hamburg, up to 30% of people admitted to hospital with the infection were said to have developed haemolytic-uremic syndrome, a life-threatening form of kidney failure. The ECDCP says the outbreak is the largest in the world of its kind. So far there have been more than a dozen E. coli-linked deaths in Germany and hundreds of infections, but more are expected. Infections have also been reported across Western Europe but so far the cases in Austria, Britain, Denmark, France, Netherlands, Sweden and Switzerland have all involved people returning from travel to Germany. The European Food Safety Alert Network said E. coli had been found in cucumbers from Spain, packaged in Germany, and distributed to countries including Austria, the Czech Republic, Denmark, Germany, Hungary and Luxembourg.
Germany is advising people to avoid all raw vegetables, particularly cucumber, lettuce and tomatoes. The ECDPC says there is a risk of person-to-person transmission from people carrying the infection. "Personal hygiene messages are important," it says. With exports of Spanish vegetables "paralyzed" according to officials, weekly losses of about €200 million ($288 million) are predicted. There are also concerns about the long-term impact this will have on Spain's fruit and vegetable market, last year worth €8.6 billion. Producers have already reported that seeded fruit exports are being affected, despite being unrelated to the scare. In addition to Germany, a number of European countries including Russia and Belgium have banned vegetable imports from Spain. Germany has reportedly also drastically reduced imports from the Netherlands. The cucumber alert could also have diplomatic fallout, with producers urging Spain's prime minister to step in, complaining German authorities have condemned Spanish produce without proof.

Leire Pajin, the Spanish Health Minister, has discussed the outbreak on Twitter, saying: "In the absence of proof, we're not ruling out using all necessary measures to make sure there's compensation for the (economic) damage," she wrote. "From the first day, the government launched a diplomatic offensive to prevent the linking of this health crisis with our products." While Germany accounts for much of Spain's vegetable export market, the country does export further afield to countries including Russia and the United States. There is also the risk of so-called "secondary clusters" of infection caused by person-to-person transmission by anyone who had become contaminated during a visit to Germany.

Text 2: Questions 15-22

15. What is the meaning of the word ‘fallout’ in the first paragraph?

A. What effects the infection will have on the infected people.
B. What the causes of the infection are.
C. What effects the breakout will have.
D. What the causes of eating too many cucumbers are.

16. The source of the E. Coli outbreak is thought to be caused by_____ 

A. cucumbers exported from Germany.
B. infected cattle.
C. contaminated food or water and contact with animals.
D. cucumbers exported from Spain to Germany.

17. Which one of the following statements is not true?
A. Cucumbers from Almeria and Malaga are thought to be infected.
B. Tomatoes and lettuce from Spain may be affected.
C. A suspect batch of cucumbers sold in Denmark or the Netherlands is under investigation.
D. A suspect batch of cucumbers imported to Germany is under investigation.

18. What do the statistics published on May 27 show?

A. That women are less likely to be infected.
B. That children are more likely to be infected.
C. That adults are more likely to be infected.
D. That men are more likely to be infected.

19. Which of the following statements is correct?

A. A Hospital in Hamburg reported 276 cases of E.coli.
B. 700 cases have been reported worldwide.
C. Sweden has reported the most cases of E. coli.
D. 85 people are at risk of renal failure in a hospital in Hamburg.

20. How is E. coli transmitted?

A. From person to person.
B. Through contaminated water or food.
C. Through eating the kidney’s of animal products.
D. From young children to older adults.

21. Why is this strain of E.Coli so deadly?

A. It is particularly virulent and resistant to antibiotics.
B. It leads to haemolytic-uremic syndrome.
C. It is a bacteria linked to contaminated cucumbers.
D. Because 30% of people with E.Coli have died.

22. Which of the following is not true?
Infections have been reported in people who ______

A. live in Australia and Spain.
B. have returned from traveling in Germany.
C. live in Austria, Britain, Denmark, France, Netherlands, Sweden and Switzerland.
D. have eaten cucumbers which were from Spain and packaged in Germany.
Sample Test 1

READING SUB-TEST – ANSWER KEY

PART A: QUESTIONS 1-20

1. B
2. D
3. C
4. D
5. A
6. A
7. C
8. 0%
9. DDT
10. skin reactions
11. 95%
12. iron deficiency
13. international travel
14. 40
15. allergens
16. DDT
17. human immunodeficiency virus
18. vision
19. bullous eruptions
20. pseudoscent

PART B: QUESTIONS 1-6

1. C get a flu vaccination from an appropriate place that offer a valid substantiation.
2. A in pediatric patients with a limited life expectancy.
4. C necessity of wearing proper respirators
5. C support and elaborate retrospect will help in fulfilling targets of HOCC program review.
6. A could significantly affect the biocompatibility of the medical devices.

PART C: QUESTIONS 7-14

7. B a gene which could affect the process of ageing in humans.
8. C has rekindled debate about a perpetual dilemma for doctors.
9. C a gene which monitors and determines the ageing process.
10. A of the steadily ageing population in North America.
11. C the majority of us will inherit two Apo E3s from both parents.
12. D are more likely to develop heart disease.
13. B 2 E4s are more likely to be protected by it.
14. C agreed that it was insufficient to determine extent of risks using Apo E information.

PART C: QUESTIONS 15-22

15. C What effects the breakout will have.
16. D cucumbers exported from Spain to Germany.
17. C A suspect batch of cucumbers sold in Denmark or the Netherlands is under investigation.
18. C That adults are more likely to be infected.
19. D 85 people are at risk of renal failure in a hospital in Hamburg.
20. B Through contaminated water or food.
21. A It is particularly virulent and resistant to antibiotics.
**Text A**

An ultrasound scan, also referred to as sonography, uses high frequency sound waves to create an image of some part of the inside of the body, such as the stomach or muscles, by bouncing sound energy off tissue and translating the returning sound information into a visual representation. The word “ultrasound”, in physics, refers to all sound with a frequency humans cannot hear; in diagnostic ultrasound this is usually between 2 and 10 MHz. Higher frequencies provide better quality images, but are more readily absorbed by the skin and other tissue, so they cannot penetrate as deeply as lower frequencies. Lower frequencies can penetrate deeper, but the image quality is inferior. Obstetric ultrasound is performed routinely in most U.S. medical communities at about 20 weeks of gestation. Benefits include accurate dating, placental location, the diagnosis of multiple gestation or congenital abnormalities and the possible detection of maternal health risks.

**Text B**

**Abstract:** Implementing an obstetric ultrasound training program in rural Africa

**Objective:** To evaluate the feasibility and sustainability of basic obstetric ultrasound training in rural Africa.

**Methods:** An 8-week training course, led by UK-based sonographers, was supported by training videos and followed by 10 months of remotely supported scanning in Mandimba, Mozambique. Data were collected using an Android tablet and the EpiCollect web application.

**Results:** The study group included 1744 pregnant women: 804 scanned by trainees under direct supervision and 940 scanned by trainees alone. Ultrasound identified 36 (2.1%) twin pregnancies, 230 (13.2%) breech presentations, 83 (4.8%) transverse presentations, and 22 (1.3%) cases of placenta previa. The detection rates for the above features were similar in the 2 groups. A subgroup of 230 (13.2%) women had a follow-up scan and 62 (3.6%) were referred to a doctor; 21 of these women required cesarean delivery.

**Conclusion:** Ultrasound training in a rural setting supported remotely is feasible and sustainable. It can help local healthcare workers to screen their prenatal populations for obstetric and neonatal risks, and therefore has the potential to improve outcomes at delivery and provide site specific epidemiologic data that can be used to develop new healthcare provision strategies.

**Text C**

**The Role of Obstetric Ultrasound in Low Resource Settings**

Poor maternal and child health (MCH) outcomes are a global, yet highly preventable problem. Evidence informs that the developing world accounts for the majority of the maternal mortality burden. Half a million women died of complications related to pregnancy in 2005, half of these in Africa and another third in South East Asia. Infant mortality is closely related and the trend is similar. About 3.1 million babies died before 28 days of age with 99% of these deaths occurring in middle and low income countries. Maternal mortality is the health indicator that shows the widest gap between rich and poor, both between and within countries. In Africa the maternal mortality ratio is 620 per 100,000 live births compared to 14 per 100,000 live births in developed countries. Within countries there are also disparities between urban and rural populations, with rural areas suffering worse...
outcomes. The potential to reduce maternal and neonatal deaths through the use of ultrasound is significant and addresses two of the millennium development goals (MDGs) including (i) MDG 4 which aims to reduce child mortality and (ii) MDG 5 which aims to improve maternal health. Improving the level of obstetric care is critical to address MCH outcomes and to accelerate progress toward achieving MDG 4 and 5 targets.

"Entertainment" Ultrasound Examinations

It has been proposed that natural-appearing 3-D ultrasound images of the fetus could improve parent fetal bonding. Given the recognized importance of maternal-child bonding immediately postpartum, it seems reasonable that extending this bonding experience into the fetal period could be beneficial. However, a psychological benefit of viewing fetal photos has not been proven, and obtaining such images largely remains in the realm of "entertainment". In some countries, parents are able to enter a photography studio with ultrasound facilities and leave with pictures suitable for framing: no physician involvement is needed for this event. The use of ultrasound for non-diagnostic purposes has been condemned by the American Institute of Ultrasound in Medicine and the American College of Obstetricians and Gynecologists. Concerns that were raised in their policy statements include possible adverse bio-effects of ultrasound energy, the possibility that an examination could give false reassurance to women, and the fact that abnormalities may be detected in settings where personnel are not prepared to discuss and provide follow-up for concerning findings.

END OF PART A
THIS TEXT BOOKLET WILL BE COLLECTED

Obstetric Ultrasound: Questions

Questions 1-7
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. alternative name for professionals who do ultrasound scan?
   ________

2. benefits of obstetric ultrasound scan?
   ________

3. benefits of three dimensional ultrasound images?
   ________

4. places which recorded high maternal mortality?
   ________

5. who condemned non-diagnostic uses of ultrasound?
   ________

6. who conducted the study in rural Africa?
   ________

7. differences among countries regarding maternal mortality?
   ________

Questions 8-15

Answer each of the questions, 8-15, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

8. What is the maximum frequency limit of diagnostic ultrasound?
   ________

9. What does ‘MDG’ stand for based on the information given in the texts?
   ________

10. How many participants were there in the study conducted in rural Africa?
    ________

11. What type of frequencies travel more into human body?
    ________

12. Which millennium development goal aim to reduce maternal mortality?
13. What is the alternate term for ultrasound scan?

14. What is the maternal mortality ratio in comparison with live births in developed nations?

15. How many transverse presentations were identified in the study conducted in rural Africa?

Questions 16-20

Complete each of the sentences, 16-20, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

16. ______________________________ in a hinterland backdrop, which is assisted remotely is very practical.

17. The adverse bio-effects of ultrasound energy is a major ________________ brought up by the American Institute of Ultrasound in Medicine.

18. Advancements in ____________________________ is vital to eliminate the adverse outcomes of MCH globally.

19. ____________________________ can penetrate through skin and provide superior image quality.

20. The significance of ____________________________ is identified as essential, soon after the fetal period.
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. This extract informs us that multidisciplinary care is

A. essential to tackle the increasing complexity of the residents care needs.

B. enhancing the residents quality of life to meet the needs of residents.

C. providing an integrated team approach by addressing the problems.

### Multidisciplinary Care

Given the increasing complexity of the residents care needs combined with the call for a palliative approach to care delivery suggests that the adoption of a multi-disciplinary team approach to care planning and delivery is required. Multidisciplinary care is the vehicle for providing an integrated team approach to the provision of health care and this occurs when medical, nursing and allied health professionals consider all treatment options, including all of the potential benefits and disadvantages of treatment decisions, personal preferences of the resident and collaboratively develop an individual care plan that best meets the needs of each resident and their family. There is compelling evidence to suggest that a multi-disciplinary approach to care helps to enhance the residents quality of life by addressing the problems that are of most concern to the resident are addressed, reduces ambiguity around treatment and the goals of care, ensures that care decisions are based on best evidence based practice.

2. What is being described in this section of the guidelines?

A. changes in protocols.

B. best practice protocols.

C. exceptions to the protocols.

### Protected Health Information

Employees access our office via main entrance or employee entrance. Main entrance is locked after hours and is unlocked each morning at 8:00. The Office Manager has the key to both entrances and is responsible for unlocking main entrance each AM. Employee entrance is accessed only via key. Employees or service personal may gain entrance through the employee entrance by knocking on the door. All patients’ protected health information (PHI) regardless of its form, mechanism of transmission, or storage is to be kept confidential. Only
individuals with a business need to know are allowed to view, read, or discuss any part of a patient’s PHI. An employee who violates this confidentiality policy will be subject to sanctions up to immediate termination. All employees are required to verify in writing that they have read and will comply with our policy regarding confidentiality of all forms of PHI. Employees whose job functions require access to our computer system will be given a secure, unique password to access the system.

3. The carcinogenicity potential should be assessed for

A. all medical devices with direct human contact.
B. reviewing the carcinogenicity of novel materials.
C. all medical devices with lasting human contact.

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity potential should be evaluated for devices with permanent contact. This includes devices in contact with breached or compromised surfaces, as well as externally communicating and implanted devices. If novel materials are used to manufacture devices in contact with breached or compromised surfaces, externally communicating devices, or implant devices, we also recommend a review of the carcinogenicity literature. In the absence of experimentally derived carcinogenicity information, structure activity relationship modeling for these materials may be needed regardless of the duration of contact, to better understand the carcinogenicity potential for these materials. Because there are carcinogens that are not genotoxins and carcinogenesis is multifactorial, the assessment of carcinogenicity should not rely solely on genotoxicity information.</td>
</tr>
</tbody>
</table>

4. According to the extract, the best way to address the biocompatibility of a device is through

A. clinical testing
B. clinical studies
C. clinical experience

<table>
<thead>
<tr>
<th>Clinical experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical experience should be considered in the overall benefit-risk profile for the device where the totality of the data available for the device may inform whether more testing is needed, or if any testing is needed at all. For example, clinical experience may be useful to mitigate problematic findings in an in vitro biocompatibility. In other cases, testing to address long-term biocompatibility endpoints may not be necessary if the patient’s life expectancy in the intended use population is limited. Generally, clinical studies are not sufficiently sensitive to</td>
</tr>
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</table>
identify biocompatibility concerns. Clinical or sub-clinical symptoms that result from the presence of a non-biocompatible material may not be identifiable, or may result in symptoms that are indistinguishable from the disease state such that the clinical data may not be informative to the biocompatibility evaluation. For example, blood vessel occlusion at the site of an implanted stent could be indicative of a toxic response to the stent materials or be related to damage to the stent during implantation.

5. Which is not an alternate term for a medical committee?

A. drug and medicine committee.

B. pharmacy and therapeutics committee.

C. medicine and therapeutics committee.

Drugs in Hospital

A hospital exists to provide diagnostic and curative services to patients. Pharmaceuticals are an integral part of patient care. Appropriate use of medicines in the hospital is a multidisciplinary responsibility shared by physicians, nurses, pharmacists, administrators, support personnel, and patients. A medical committee, sometimes called the drug and therapeutics committee, pharmacy and therapeutics committee, or the medicine and therapeutics committee, is responsible for approving policies and procedures and monitoring practices to promote safe and effective medicine use. The pharmacy department, under the direction of a qualified pharmacist, should be responsible for controlling the distribution of medicines and promoting their safe use. This task is challenging because medicines are prescribed by physicians, administered by nurses, and stored throughout the hospital. The control of narcotics is of particular concern in the hospital setting and requires a systematic approach for the prevention and detection of abuse.

6. What point does the extract make about known genotoxins?

A. can assume a positive result for the devices containing genotoxic materials.

B. cannot absolutely negate the negative results for other device components.

C. overall benefit-risk determined by device indication and human exposure.

Genotoxicity

Genotoxicity testing may be waived if chemical characterization of device extracts and literature references indicate that all components have been adequately tested for genotoxicity. Genotoxicity testing may not be informative for devices containing materials already known to be genotoxic, because a positive result will be
assumed to be due to the known genotoxin. Thus a second genotoxin from another source may be overlooked. If genotoxicity testing is performed, a negative result should be interpreted as a negative for the other device components or interaction products, but does not necessarily negate the risk of the known genotoxin. Chemical characterization may be needed to demonstrate to what extent the genotoxin is released from the device. For known genotoxins, the overall benefit-risk determination will depend on the device indication and human exposure. Genotoxicity testing is requested when the genotoxicity profile has not been adequately established.

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: Eye Damages in Divers

An investigation of the circulation of blood in the eyes of divers has produced the strongest evidence yet that tissue damage is caused by diving is more common and more severe than previously thought. Researchers from Moorefield’s Eye Hospital in London and Maurice Cross of the Diving Diseases Research Centre in Plymouth examined the retinas of 80 divers of varying experience. The researchers found evidence of damage in nearly half the divers. Although the damage tended to increase with diving experience some of the divers developed it within two years of diving. The study is the first evidence of damage to the eye tissue in amateur divers and it suggests for the first time that a career in diving almost inevitably leads to damage. Of the 26 professional divers studied all had abnormal retinas. None of the divers taking part in the study had visual problems as a result of their damaged retinas but Bird said that he "would not be surprised to find divers whose damage has progressed far enough to affect their vision".

Evidence has mounted during recent years to show that exposure to pressure during diving subtly damages the central nervous system. Doctors believe that the damage is due to obstruction in the flow of blood through the tissues. People who take up diving as a sport know they are at risk of getting "the bends" or an air embolism, but if they follow the correct procedures the risk is very low. All professional divers know they also run the risk of bone necrosis. About 5 per cent of them develop small dead patches in their bones. Active professional divers have the bones of their thighs and upper arms x-rayed as part of their annual medical examination. Doctors have been concerned that if diving caused dead patches to appear on bones, other tissues may be suffering a similar fate. Their concern increased in the early 2000s, when detailed neurological examinations and tests of the memory and reactions of experienced professional divers suggested that some of them might have slight damage to the brain and spinal cord.

Then, in 2006, nuclear magnetic resonance imaging revealed small areas of damage in the brains of apparently healthy North Sea divers. The following year Ian Calder, a pathologist at the London Hospital in the city’s East End, published the results of a postmortem study of eleven professional divers. Seven of them had areas of damage in the spinal cord that had not been detected while the divers were alive. The samples were too small for researchers in the studies to draw conclusions as to how common such damage might be. The fact that few divers are currently complaining of neurological symptoms does not mean that they will not experience problems later in life. There is a great deal of extra capacity in the nervous system of young people that begins to diminish in middle age. Most people who have dived deeper than 50 metres are still relatively young. Deeper diving did not become common until the mid-1970s when drilling for offshore oil began in the deeper water of the North Sea. Over the same
In order to determine the size of the problem, the researchers needed a method of looking for the damage in a large sample of divers that did not involve surgery. The damage which occurs in the tissue of both the bones and the nerves of divers is similar. Minute areas of tissue had died, probably because they had been starved of blood, suggesting that capillaries that supplied blood to the areas had been blocked. The bone necrosis of divers closely resembles that seen in victims of sickle-cell anemia whose capillaries are temporarily blocked during a sickle-cell "crisis" when their red blood cells become too rigid to pass through. Sickle-cell disease damages the retina which doctors can see using the technique known as retinal angiography. The process involves injecting Fluorescein dye into the blood stream and photographing the back of the eye through the pupil. The technique can provide a detailed photograph of the two vascular systems supplying blood to their retina without causing too much discomfort to the patient.

The researchers used retinal angiography to assess the tissue damage in divers. The abnormalities that they detected in the angiograms of divers were very similar to those seen in sickle-cell disease. There was clear evidence of obstruction to the capillaries. The researchers suggested three mechanisms to explain how diving causes this obstruction. When divers come back to the surface air bubbles sometimes form in their veins and their lungs. If bubbles also form in the arteries, they would block the capillaries. Bubbles forming in the lungs trigger changes in the body's clotting mechanism which could result in minute clots becoming trapped in the capillaries.

The third suggestion is that the mechanism might also be similar to that of sickle-cell disease. The pressure that divers experience at 30 meters causes their white blood cells to become rigid just as red blood cells do during a sickle-cell crisis. The researchers hope that clues to the cause of the obstruction will come from investigations into the individual differences between divers. Some of the divers studied had relatively little damage even though they had been diving for many years and done a great deal of deep diving. On the other hand, a few inexperienced divers had quite extensive damage.

**Text 1: Questions 7-14**

7. According to the article, _____

A. low blood pressure can cause eye problems in divers.

B. diving is becoming more and more dangerous.

C. eyes can be severely harmed as a result of diving.

D. many divers experience approximately 50% vision loss.

8. The study suggests that _____

A. divers should have at least two years of experience..

B. experienced divers can avoid the risk of eye damage.
C. professional divers are more careful than amateur divers.
D. none of the above.

9. Damage to the retina is caused by ______
A. obstructions to blood circulation.
B. loss of pigment in the epithelium.
C. pressure on the central nervous system.
D. all of the above.

10. Approximately 5 per cent of professional divers ______
A. develop bone necrosis.
B. have annual bone x-rays.
C. get the 'bends'.
D. are nervous when diving.

11. All of the following were used by doctors to examine the health of practicing divers except _____
A. nuclear magnetic resonance imaging.
B. post-mortem examinations.
C. memory tests and reaction tests.
D. neurological examinations.

12. Which of the following statements is true according to the article?
A. Small dead patches always develop in divers' bones.
B. Brain damage is common among North Sea divers.
C. Neurological problems may not be immediately apparent.
D. Spinal cord damage in divers is easily detected.
13. Which of the following is not true according to the article?

A. Sickle-cell anemia is a common disease among divers.
B. Neurological and bone tissue damage are similar.
C. Tissue damage of divers results from blockage of blood.
D. Researchers avoided the use of surgery in their investigations.

14. Retinal angiography ______

A. involves the injection of fluoroscein dye into the pupil.
B. provides graphic information about blood supply to retinas.
C. causes considerable discomfort to the patient.
D. none of the above.

Text 2: Plumbism

Paragraph 1
Plumbism is the technical term for lead poisoning, which represent a diseased condition, produced by the absorption of lead, common among workers in this metal or in its compounds, as among painters, typesetters, etc. Lead is a metal which is toxic to humans when ingested or inhaled. When lead enters the bloodstream, whether the route of entry is the lungs or the gastrointestinal tract, it is distributed to the tissues and organs of the body, including the brain, liver and kidneys. In the long term, lead is stored in the teeth and bones. Although it is excreted gradually (mostly in the urine, but also in feces, sweat, hair and nails), repeated exposure and absorption results in an accumulation of lead in the body. Cumulative doses of lead over time can result in chronic lead poisoning, while acute lead toxicity may be observed in cases of short-term, high-dose exposures.

Paragraph 2
A naturally occurring element, lead may be dispersed by natural processes such as erosion, volcanic eruptions and forest fires. Overwhelmingly, however, hazardous human exposure to lead is due to its release into the environment through industrial processes, and to the widespread use of lead-containing products, most notoriously petrol, paints, and plumbing and building materials. Many everyday household items including adhesives, batteries, ceramics, glassware and children's toys may also contain lead, particularly if manufactured in the twentieth century. Other items that have traditionally contained lead include bullets and radiation shields. Industrial sources of lead contamination of soil, water and air include mining and smelting of lead and lead-containing ore, car manufacture and combustion of large quantities of fuels such as coal in the generation of electricity. The leading cause of lead poisoning among adults is occupational exposure, particularly for those working in the industries previously mentioned.
To alleviate the incidence of environmental exposure due to contact with building materials and other products containing lead, industry guidelines and government legislation have been introduced in many countries: drinking water is no longer prone to lead contamination where alternatives to lead pipes and lead-soldered fittings, roofs and water tanks are required in new houses; maximum allowable lead content in domestic paint is now specified in a growing number of jurisdictions; and the last two decades or so have seen leaded petrol banned in most countries around the world. However, exposure to lead particles is still a significant health risk due to the lingering contamination of soil and dust from past fuel emissions, from continuing industrial exposure, and from contact with older lead-based products still in use.

Even small quantities of lead taken into the body are considered hazardous to human health. Adverse systemic effects can extend to the neurological, cardiovascular, gastrointestinal and renal. Damage caused by lead poisoning is known to be irreversible in some cases, such as severe neuro-behavioral impairment resulting from acute intoxication. However, health outcomes are influenced by the timing, duration and amount of exposure (or dosage), and by how much accumulation has occurred. Among the available biological markers of lead dose, blood lead levels provide a more accurate measure if there has been recent exposure to lead, while levels of lead in bone, measuring stored lead, are more accurate indicators of accumulation.

Among the most vulnerable to lead exposure and its effects are children under the age of six. Where lead is present in soil, dust, paint or toys, young children are at an increased risk of ingesting lead, as they may touch lead-based or contaminated materials with their fingers and mouths. A child’s body is also more susceptible to lead absorption -it has been estimated that a child's body can absorb 50% of lead particles on exposure compared with only 10% for an adult’s. The likely health effects for young children are even more dire considering the vulnerability of the developing brain to permanent disadvantage as a result of the neurotoxicity of lead. Intelligence quota (IQ) deficit has been linked to neuro-toxic effects in children with lead blood levels as low as five micrograms per deciliter (5µg/dL). Less research has been conducted on the effects of lead exposure during prenatal development but, because lead is able to cross the blood brain barrier and the placenta, the risk of significant harm to the brain and to the developing fetus is a key concern. One study in Mexico led researchers to conclude that fetal neurodevelopment is adversely affected by lead exposure and particularly so during the first trimester of pregnancy.

Studies suggest that chronic lead toxicity in individuals could change behavior and cognitive function and even trigger psychosocial disturbances that contribute to aggressive behavior. One study observed a significant decline in rates of violent crime throughout the 1990s in the United States, a country where the use of leaded petrol was phased out during the 1970s. The researchers hypothesized that this change in crime rate is attributable to a reduction of childhood exposure to lead in the decades prior to the 1990s. Studies like this one, which documents an association between childhood lead exposure and criminal behavior in adults, are supported by findings that some adolescent criminals have blood lead levels quadrupling the average among teenagers. Despite these alarming health effects, the World Health Organization has described lead poisoning as a completely preventable disease.

15. Based on the first paragraph, lead _____
A. is excreted completely from the human body.
B. accumulates mainly in the lungs and intestines.
C. can be taken into the body through the skin.
D. moves about the body via blood circulation.

16. Which is the most likely source of lead poisoning in humans?

A. Exposure in the workplace.
B. A contaminated water supply.
C. Common household items.
D. Medical imaging procedures.

17. Legislation in many countries has resulted in _____

A. lead pipes being replaced in all housing.
B. petrol being produced without added lead.
C. the use of leaded paint being made illegal.
D. drinking water being guaranteed lead free.

18. The third paragraph describes _____

A. measures taken to reduce levels of lead in the environment.
B. the elimination of lead contamination in some countries.
C. twenty years of legislation restricting the use of lead.
D. difficulties in removing lead from construction sites.

19. The effects of lead in a person’s body _____

A. are not easy to observe.
B. cannot be reversed.
C. sometimes cause death.
D. depend on several factors.

20. The preferred method for measuring lead levels in the body depends on _____
A. how old the person is.
B. how sick the person is.
C. how intense the exposure was.
D. how long ago the exposure was.

21. Young children are at greater risk of lead poisoning than adults due to _____
A. the continuing presence of lead in children's toys.
B. their more frequent exposure to contaminated materials.
C. a higher capacity for lead absorption into their bodies.
D. the increased retention of lead in developing brains.

22. In sixth paragraph research links a fall in incidents of violent crime to _____
A. environmental changes during the 1990s.
B. reduced exposure to lead in the workplace.
C. behavioral changes from lead poisoning.
D. the widespread use of unleaded petrol.
Sample Test 2

READING SUB-TEST – ANSWER KEY

PART A: QUESTIONS 1-20

1. B
2. A
3. D
4. C
5. D
6. B
7. C
8. 10 MHz
9. millennium development goals
10. 1744
11. lower frequencies
12. MDG 5
13. sonography
14. 620 per 100,000
15. 83
16. Ultrasound training
17. concern
18. obstetric care
19. Higher frequencies
20. maternal-child bonding

PART B: QUESTIONS 1-6

1. A essential to tackle the increasing complexity of the residents care needs.
3. C all medical devices with lasting human contact.
4. C clinical experience
5. A drug and medicine committee.

PART C: QUESTIONS 7-14

7. B a gene which could affect the process of ageing in humans.
8. C has rekindled debate about a perpetual dilemma for doctors.
9. C a gene which monitors and determines the ageing process.
10. A of the steadily ageing population in North America.
11. C the majority of us will inherit two Apo E3s from both parents.
12. D are more likely to develop heart disease.
13. B 2 E4s are more likely to be protected by it.
14. C agreed that it was insufficient to determine extent of risks using Apo E information.

PART C: QUESTIONS 15-22
15. D moves about the body via blood circulation.
17. D drinking water being guaranteed lead free.
18. A measures taken to reduce levels of lead in the environment.
19. D depend on several factors.
20. D how long ago the exposure was.
21. B their more frequent exposure to contaminated materials.
22. D the widespread use of unleaded petrol.
A British Skin Foundation survey found that fifteen per cent of dermatologists believe lightening creams are 'completely unsafe' and four in five feel they are only safe when prescribed by a dermatologist. "Many skin-lightening creams contain illegal compounds that can damage your health," says Indy Rihal of the British Skin Foundation. "The most common compounds are high-dose steroids." Although steroids can be useful in treating some skin diseases, such as psoriasis and eczema, this must take place under the supervision of a skin specialist. "Unmonitored use of high-dose steroids can lead to many problems," says Rihal. If you've used a skin-lightening cream and are worried about the effect it has had, see a G P. "Medically approved preparations prescribed by a GP or a dermatologist are not dangerous, within reason," says Rihal. A cream that you buy over the counter is not necessarily medically approved and could permanently damage your skin.

Many women of childbearing age from sub-Saharan Africa use topical skin lighteners, some of which present a risk of toxic systemic effects. The goals of this study were to evaluate, in this environment, the frequency of this practice during pregnancy, as well as eventual consequences on pregnancy. Ninety nine women from 6 to 9 months pregnant were randomly selected among those attending a standard maternal centre in Dakar for a prenatal visit. Investigations consisted of questions about the use of skin lighteners, a standard clinical examination, follow-up until delivery and a morning blood sample for plasma cortisol levels. Sixty-eight of the 99 selected women used skin lighteners during their current pregnancy, the main active ingredients being hydroquinone and highly potent steroids (used by 44 and 24 women, respectively). No difference in the main outcomes of pregnancy were found between skin lightener users and the others; however, women using highly potent steroids, when compared with those who did not, had a statistically significant lower plasma cortisol level and a smaller placenta, and presented a higher rate of low-birth-weight infants. Skin lightening is a common practice during pregnancy in Dakar, and the use of steroids may result in consequences in the mother and her child.

Tanning is the skin's response to ultraviolet (UV) radiation, a type of light exposure. As skin cells are exposed to UV radiation, they produce a brown pigment (melanin) to protect themselves from further UV exposure. This results in a darkening of the skin (tanning), which is the body's natural defense mechanism and attempt to prevent further damage from UV radiation. Sunlight and artificial tanning methods, such as tanning booths or salons, are sources of UV exposure. Sufficient amounts of UV exposure are known to cause adverse health effects in humans and are a public health concern. Tanning and burning play a role in health effects, including skin cancer. UV radiation damage to DNA in skin cells can result in mutations that promote or cause cancer, and
recurring UV exposures may result in aging (wrinkles, loss of elasticity, and sun spots). Other short-term effects on skin are sunburns, fragility, and scarring. Cataracts are a known health effect from UV radiation exposure and eye protection is essential when tanning.

Text D

Banned Sunbeds

Unsupervised sunbeds have "no redeeming features", says Wales' chief medical officer. Dr Tony Jewell spoke as the facilities are being banned in Wales: laws to clamp down on sunbed use are extended. From Monday, businesses with unstaffed coin-operated sunbeds could be fined £5,000. Welsh cancer charity Tenovus said the ban was important as skin cancer is the most common cancer in 15 to 24-year-olds in the UK, and south Wales has one of the highest incidences in the country. "Skin cancer incidence is very strongly linked to over-exposure to ultra-violet radiation through sunbeds, levels of which can be six times stronger than the Australian midday sun," said Tenovus head of research Dr Ian Lewis. "Wales alone has 500 cases of malignant melanoma a year, the most dangerous and potentially fatal form of skin cancer, resulting in nearly 100 deaths annually. "The rise in incidence of this type of skin cancer is truly alarming; between 2006 and 2016, Wales saw the rate of malignant melanoma in men and women double."

END OF PART A
THIS TEXT BOOKLET WILL BE COLLECTED

Part A

INSTRUCTIONS TO CANDIDATES:

DO NOT open this Question Paper or the Text Booklet until you are told to do so. Write your answers on the spaces provided on this Question Paper. You must answer the questions within the 15-minute time limit. One mark will be granted for each correct answer. Answer ALL questions. Marks are NOT deducted for incorrect answers. At the end of the 15 minutes, hand in this Question Paper and the Text Booklet. DO NOT remove OET material from the test room.

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.

Survey On Skin-Lightening Creams: Questions

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. the contents of skin lightening creams?

2. the risks of over-exposure to UV radiation?

3. the sources of ultra-violet exposure?

4. who use topical skin lighteners?

5. reason for increase in rate of malignant melanoma?

6. the risks of repeated UV exposures?

7. the usual practice during pregnancy?

Questions 8-15

Answer each of the questions, 8-15, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

8. Which kind of skin lighteners are used by women in sub-Saharan Africa?

9. What type of sunbeds are subjected to penalties in Wales?

10. How many death cases of malignant melanoma were reported annually in Wales?

11. Which is the common eye disease related to damage from UV radiation exposure?

12. What was the main active ingredient in the skin lighteners used by majority of women in Dakar?

13. What are the most common sources of UV exposure other than sunlight?

14. Which skin cell pigment offers guard against UV exposure?
15. Which type of UV exposures could accelerate the aging processes?

Questions 16-20

Complete each of the sentences, 16-20, with a word or short phrase from one of the texts. Each answer may include words, numbers or both.

16. ________________ are proven to be effective in the treatment of some dermal conditions.

17. The soaring prevalence of ________________ is genuinely appalling.

18. Darkening of the skin plays a role in ________________, including skin cancer.

19. Women who used ________________ had comparatively small placenta.

20. ________________ is vital when the skin is darkened.

END OF PART A
THIS QUESTION PAPER WILL BE COLLECTED

READING SUB-TEST – QUESTION PAPER: PARTS B & C

TIME: 45 MINUTES

INSTRUCTIONS TO CANDIDATES:

DO NOT open this Question Paper until you are told to do so.
One mark will be granted for each correct answer.
Answer ALL questions. Marks are NOT deducted for incorrect answers.
At the end of the test, hand in this Question Paper.
DO NOT remove OET material from the test room.

HOW TO ANSWER THE QUESTIONS:

Mark your answers on this Question Paper by filling in the circle using a 2B pencil.

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. As explained in the extract, material standards are
A. absolutely helpful to inform a risk assessment.

B. insufficient to find biocompatibility risks.

C. used to find the biocompatibility evaluation.

Medical device standards

Standards specific to a particular device type or material may be helpful to inform a risk assessment; however, the extent to which the standard could be utilized may be dependent on the specificity of the standard and/or the specific material. Ideally, a standard would have sufficient specificity to provide useful information regarding material risks. For example, standards that outline both mechanical and chemical properties of a device type with pass/fail criteria may be particularly informative because of the specificity of such a standard. Standards that address bulk material composition can also be informative as a starting point for incorporating material characterization into a risk assessment. For example, it may be appropriate to use material standards to support the biocompatibility evaluation of stainless steel surgical vascular clamps, as long as any risks associated with manufacturing are appropriately considered and mitigated. Given the effects that manufacturing and processing may have on a polymer as incorporated into the final finished medical device, use of material standards may not be sufficient to identify biocompatibility risks for devices made from polymers.

2. The results of the studies described in the memo may explain why the relationship between

A. enough RN staffing and lower hospital related morbidity.

B. nurse patient ratios interpret gastrointestinal bleeding.

C. RN staffing for post-surgical patients and pulmonary compromise.

Failure To Rescue

The number of patients a Registered Nurse (RN) cares for can directly and indirectly impact patient safety during their hospitalization. “Safety” in this case refers to infection rates, patient falls, hospital-acquired pressure ulcers, and even death. Multiple studies using different methodology and from a variety of disciplines consistently show associations between adequate RN staffing and lower hospital related morbidity, mortality and adverse patient events. RN staffing levels for post-surgical patients have been shown to have an inverse relationship with urinary tract infections, pneumonia, thrombosis and pulmonary compromise; in medical patients, higher nurse patient ratios translated into a reduction in gastrointestinal bleeding, shortened length of stay, and lower rates of ‘failure to rescue’. Failure to rescue is the term used when early warning signs of upper gastrointestinal bleeding, sepsis, deep venous thrombosis, shock or cardiac arrest are not detected and acted upon.

3. What is the most recommended implantation testing?
A. clinically relevant implantation study.
B. in vivo animal study.
C. toxicology implantation study

<table>
<thead>
<tr>
<th>Implantation</th>
</tr>
</thead>
<tbody>
<tr>
<td>For implantation testing, if there are characteristics of the device geometry that may confound interpretation of this test, it may be acceptable to use device sub-components or coupons instead of the device in its final finished form, with appropriate justification. For example, it may be acceptable to use a coupon instead of a stent, if information is provided to demonstrate that the manufacturing and resulting surface properties are comparable. Instead of a traditional toxicology implantation study in subcutaneous, muscle, or bone tissues, a clinically relevant implantation assessment may be more appropriate for certain implant devices with relatively high safety risks. Clinically relevant implantation studies are critical to determine the systemic and local tissue responses to the implant in a relevant anatomical environment under simulated clinical conditions. In some cases, the toxicity outcomes that would be obtained from a clinically relevant implantation study can be assessed as part of in vivo animal studies that are performed to assess overall device safety.</td>
</tr>
</tbody>
</table>

4. The term ‘mass immunizer’ refers to a

A. Medicare-enrolled provider offering either influenza vaccinations or pneumococcal vaccinations
B. traditional Medicare provider offering neither influenza vaccinations nor pneumococcal vaccinations
C. non-traditional provider offering influenza vaccinations, pneumococcal vaccinations, or both

<table>
<thead>
<tr>
<th>Mass Immunization Providers</th>
</tr>
</thead>
</table>
| To increase vaccination availability to Medicare beneficiaries, the Centers for Medicare & Medicaid Services (CMS) created the mass immunizer program and simplified the influenza and pneumococcal vaccination claims process by creating roster billing for mass immunizers. CMS defines a ‘mass immunizer’ as a Medicare-enrolled provider offering influenza vaccinations, pneumococcal vaccinations, or both to a group of individuals (e.g., the public, senior center participants, retirement community or retirement housing residents). A mass immunizer can be either:  
  • A traditional Medicare provider or supplier, such as a hospital outpatient department; or  
  • A non-traditional provider that is usually ineligible to enroll in the Medicare Program, such as a supermarket, senior citizen home, public health clinic or an individual practitioner. |
5. The guidelines inform us that device materials should not

A. cause any exposure to the body.
B. have benefits that outweigh any potential risks.
C. have any potential risks that outweigh benefits

### Evaluation of Local and Systemic Risks

Biological evaluation of medical devices is performed to determine the acceptability of any potential adverse biological response resulting from contact of the component materials of the device with the body. The device materials should not, either directly or through the release of their material constituents: (i) produce adverse local or systemic effects; (ii) be carcinogenic; or (iii) produce adverse reproductive and/or developmental effects, unless it can be determined that the benefits of the use of that material outweigh the risks associated with an adverse biological response. Therefore, evaluation of any new device intended for human use requires information from a systematic analysis to ensure that the benefits provided by the device in its final finished form will outweigh any potential risks produced by device materials over the intended duration and use of the device in or on the exposed tissues. When selecting the appropriate endpoints for biological evaluation of a medical device, one should consider the chemical characteristics of the device materials and the nature, degree, frequency, and duration of exposure to the body.

6. What point does the extract make about designated nursing units?

A. have a team of nurses, mental health technician and behavioral counselor.
B. have specially trained nurses for work exclusively using different strategies.
C. a place where medically stabilized behavioral health patients seeking care are placed.

### Behavioral Health Response Plan

A robust Behavioral Health Response Plan has been established to support staff and patients for the growing number of behavioral health patients seeking care. When patients are medically stabilized, up to 11 patients may be cohorted in a specially designed unit to promote patient and staff safety while patients await placement at behavioral health specialized facilities. For patients who require medical treatment, whenever possible they are placed on designated nursing units. Nurses working on these units have received special training and are adept at various communication techniques and strategies. This specialized unit team also consists of a mental health technician and a behavioral counselor.
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: Birth Control Pill and Sexual Problems

In the January issue of The Journal of Sexual Medicine, researchers have published a new investigation measuring sex hormone binding globulin (SHBG) before and after discontinuation of the oral contraceptive pill. The research concluded that women who used the oral contraceptive pill may be exposed to long-term problems from low values of "unbound" testosterone potentially leading to continuing sexual, metabolic, and mental health consequences. Sex hormone binding globulin (SHBG) is the protein that binds testosterone, rendering it unavailable for a woman’s physiologic needs. The study showed that in women with sexual dysfunction, elevated SHBG in "Oral Contraceptive Discontinued-Users" did not decrease to values consistent with those of "Never-Users of Oral Contraceptive". Thus, as a consequence of the chronic elevation in sex hormone binding globulin levels, pill users may be at risk for long-standing health problems, including sexual dysfunction.

Oral contraceptives have been the preferred method of birth control because of their ease of use and high rate of effectiveness. However, in some women oral contraceptives have ironically been associated with women’s sexual health problems and testosterone hormonal problems. Now there are data that oral contraceptive pills may have lasting adverse effects on the hormone testosterone. The research, in an article entitled: "Impact of Oral Contraceptives on Sex Hormone Binding Globulin and Androgen Levels: A Retrospective Study in Women with Sexual Dysfunction" published in The Journal of Sexual Medicine, involved 124 premenopausal women with sexual health complaints for more than 6 months. Three groups of women were defined: i) 62 "Oral Contraceptive Continued-Users" had been on oral contraceptives for more than 6 months and continued taking them, ii) 39 "Oral Contraceptive Discontinued-Users" had been on oral contraceptives for more than 6 months and discontinued them, and iii) 23 "Never-Users of Oral Contraceptives" had never taken oral contraceptives. SHBG values were compared at baseline (groups i, ii and iii), while on the oral contraceptive (groups i and ii), and well beyond the 7 day half-life of sex hormone binding globulin at 49-120 (mean 80) days and more than 120 (mean 196) days after discontinuation of oral contraceptives (group ii).

The researchers concluded that SHBG values in the "Oral Contraceptive Continued-Users" were 4 times higher than those in the "Never-Users of Oral Contraceptives". Despite a decrease in SHBG values after discontinuation of oral contraceptive pill use, SHBG levels in "Oral Contraceptive Discontinued-Users" remained elevated when compared to "Never-Users of Oral Contraceptives". This led to the question of whether prolonged exposure to the synthetic estrogens of oral contraceptives induces gene imprinting and increased gene expression of SHBG in the liver in some women who have used the oral contraceptives. Dr. Claudia Panzer, an endocrinologist in Denver, CO and lead author of the study, noted that "it is important for physicians prescribing oral contraceptives to point out to their patients potential sexual side effects, such as decreased desire, arousal, decreased lubrication and increased sexual pain. Also if women present with these complaints, it is crucial to recognize the link between sexual dysfunction and the oral contraceptive and not to attribute these complaints solely to psychological causes."

"An interesting observation was that the use of oral contraceptives led to changes in the synthesis of SHBG which were not completely reversible in our time frame of observation. This can lead to lower levels of 'unbound' testosterone, which is thought to play a major role in female sexual health. It would be important to conduct long-term studies to see if these increased SHBG changes are permanent," added Dr. Panzer. Dr. Andre Guay, study co-author and Director of the Center for Sexual Function/Endocrinology in Peabody, MA affirmed that this study is a revelation and that the results have been remarkable. "For years we have known that a subset of women using
oral contraceptive agents suffer from decreased sex drive," states Dr. Guay. "We know that the birth control pill suppresses both ovulation and also the male hormones that the ovaries make in larger amounts during the middle third of the menstrual cycle. SHBG binds the testosterone, therefore, these pills decrease a woman's male hormone availability by two separate mechanisms. No wonder so many women have had symptoms."

"This work is the culmination of 7 years of observational research in which we noted in our practice many women with sexual dysfunction who had used the oral contraceptive but whose sexual and hormonal problems persisted despite stopping the birth control pill," said Dr. Irwin Goldstein, a urologist and senior author of the research. "There are approximately 100 million women worldwide who currently use oral contraceptives, so it is obvious that more extensive research investigations are needed. The oral contraceptive has been around for over 40 years, but no one had previously looked at the long-term effects of SHBG in these women. The larger problem is that there have been limited research efforts in women's sexual health problems in contrast to investigatory efforts in other areas of women's health or even in male sexual dysfunction." To better appreciate the scope of the problem, oral contraceptives were introduced in the USA in 1960 and are currently used for reversible pharmacologic birth control by over 10 million women in the US, including 80% of all American women born since 1945 and, more specifically, 27% of women ages 15-44 and 53% of women age 20-24 years. By providing a potent synthetic estrogen (ethinyl estradiol) and a potent synthetic progesterone (for example, norethindrone), highly effective contraception is achieved by diminishing the levels of FSH and LH, thereby reducing metabolic activity of the ovary including the suppression of ovulation.

Several studies over the last 30 years reported negative effects of oral contraceptives on sexual function, including diminished sexual interest and arousal, suppression of female initiated sexual activity, decreased frequency of sexual intercourse and sexual enjoyment. Androgens such as testosterone are important modulators of sexual function. Oral contraceptives decrease circulating levels of androgens by direct inhibition of androgen production in the ovaries and by a marked increase in the hepatic synthesis of sex hormone binding globulin, the major binding protein for gonadal steroids in the circulation. The combination of these two mechanisms leads to low circulating levels of "unbound" or "free" testosterone.

Text 1: Questions 7-14

7. Which statement is the most accurate summary of the method of the study?

A. Levels of SHBG were monitored over a period of time in women who were using the pill.

B. Levels of SHBG were measured in women using pill and women who had stopped using pill, and these were compared to women who had never used pill.

C. Levels of SHBG were compared in women who were using the pill, women who had stopped using the pill, and women who had never used the pill.

D. Medical complications were compared between women using the pill and those who had stopped using the pill.

8. What is the role of SHBG?

A. To prevent sexual dysfunction in human females..
B. To prevent testosterone from being used in the female body.
C. To prevent women from needing to take traditional contraceptive pills.
D. To prevent oncological complications.

9. Which group had the highest level of unbound testosterone?
A. Women with a genetic predisposition for higher testosterone levels.
B. Women who had never taken the pill.
C. Women who had previously taken the pill but since stopped.
D. Women who were taking the pill during the study.

10. Which of the following reasons is given in the study for popularity of oral contraceptive pill?
A. Less interference with sexual routine than other contraceptives.
B. High percentage of contraceptive success.
C. Favorable aesthetic effects on women’s physiques due to reduced testosterone.
D. Low cost.

11. Which is the most accurate description of the study discussed in the article?
A. It involved one hundred and twenty four pre-pubescent girls.
B. It involved 124 premenstrual women who had sexual health issues for 6 months or more.
C. SHBG levels were monitored at different times in three groups of adult women with various status regarding contraceptive pill usage.
D. SHBG levels were compared at regular intervals in each of three groups of women who had different status regarding contraceptive pill usage.

12. Levels of SHBG decreased in women who had stopped using the contraceptive pill ______
A. due to increased gene expression of SHBG in the livers of these women.
B. in spite of lengthened exposure to artificial estrogen found in pills.
C. because of psychological factors associated with taking the pill.
D. but their levels remained elevated compared to women who had never used pill.

13. Which of the following is an opinion of Dr. Panzer?

A. SHBG levels remained higher in women who discontinued pill use for the duration of the study.
B. The use of oral contraceptives led to changes in SHBG levels which were not reversible within the timeframe of the study.
C. Physicians usually mention the sexual side effects of the pill to their patients.
D. Further studies should determine whether SHBG levels ultimately return to normal over longer periods.

14. Which of the following statements has the same meaning as a statement in the text?

A. The contraceptive pill was invented in the USA in 1960.
B. The pill has been used by over 100 million women globally.
C. Dr. Goldstein monitored women with a history of pill use and sexual dysfunction in his clinic for seven years.
D. Lower levels of unbound testosterone is a result of both higher SHBG and accelerated metabolism in the ovaries.

**Text 2: Bovine Spongiform Encephalopathy**

Vets at the Ministry of Agriculture have identified a new disease in cows that is causing dairy farmers some consternation. The fatal disease, which they have called bovine spongiform encephalopathy, causes degeneration of the brain. Afflicted cows eventually become uncoordinated and difficult to handle. The first case was reported in 1985. Now there are 92 suspected cases in 53 herds, mostly in the south of England. So far 21 cases in 18 herds have been confirmed. All are Friesian/Holstein dairy animals. Gerald Wells and his colleagues at the Central Veterinary Laboratory in Weybridge, Surrey, describe the symptoms and pathology in the current issue of The Veterinary Record. No one yet knows the cause of the disease but there are some similarities with a group of neurological diseases caused by the so called "unconventional slow viruses".

This group of progressive diseases includes scrapie in sheep and goats, chronic wasting disease in mule deer and transmissible mink encephalopathy. In humans Kuru and Creutzfeldt-Jakob disease, both fatal neurological diseases, come into the same category. The precise nature of the agents causing this group of diseases is a matter of intense debate but all are infectious. Like scrapie and the other diseases, bovine spongiform encephalopathy is insidious and progressive. A farmer is unlikely to suspect that a cow has the disease until it has almost run its
course. Previously healthy animals become highly sensitive to normal stimuli, they grow apprehensive and their movements uncoordinated. In the final stages the cows may be frenzied and unpredictable and have to be slaughtered. At autopsy, Wells and his colleagues found that some areas of the brain were full of holes, giving it a spongy appearance. The pattern of holes shows some similarity with that in the other unconventional encephalopathies.

In all these diseases an important diagnostic feature is the presence of proteinaceous fibrils seen in brain extracts in the electron microscope. No one knows for certain what the fibrils are – whether they are the agents of the disease, a type of subviral particle, as some researchers suggest, or are a product of the disease. The veterinary researchers analyzed the brain tissue from cows that died from the disease and found similar fibrils. Brain tissue from healthy cows did not contain fibrils. At the moment researchers at the Central Veterinary Laboratory are keeping an open mind on the cause of the disease. If it is not a scrapie-like agent it might be something to do with the genetics of Friesian cows. Another suggestion is that contaminated food might be to blame. "It is too early to come to conclusions," said a spokesman at the Ministry of Agriculture. "It might be caused by toxic products, or food, or it might be genetic."

According to Richard Kimberlin, of the AFRC/MRC Neuropathogenesis Unit in Edinburgh: "The similarities are enough to make us think that it's in the scrapie family, but without evidence of transmission it's impossible to say anything more certain". Scientists at the Neuropathogenesis Unit will look for evidence of transmission in experiments on mice, while Wells and his colleagues try to transmit the disease in cows. It will take at least two years of experiments before transmission can be proved. What is certain is that the number of reported cases is increasing rapidly. Not all reports will turn out to be bovine spongiform encephalopathy. Farmers and vets might just be getting better at recognizing symptoms. In the past farmers probably got rid of nutty middle-aged cows without thinking too much about it. If the disease turns out to be transmissible then it might spread to other breeds of cows. Many countries ban the import of sheep from areas where scrapie occurs.

In the US, consumer rights groups won a ban on the purchase of meat from scrapie flocks because no one could rule out absolutely the possibility of transmission to humans. If bovine spongiform encephalopathy turns out to be infectious, it could cause problems out of proportion to the number of cases. Vacuoles in the brain prevent the passage of nerve impulses (left). Fibrils in brain tissue resemble those that are diagnostic of scrapie.

**Text 2: Questions 15-22**

15. Bovine spongiform encephalopathy is a disease which is currently found in _____

A. all dairy cows.
B. some beef cows.
C. beef and dairy cows.
D. Freisian/Holstein dairy cows.

16. When bovine spongiform encephalopathy is confirmed in cows, which of the following symptoms do they not exhibit?
A. chronic wasting.
B. ungainly action.
C. frantic and agitated behavior.
D. sensitivity to usual stimuli.

17. Bovine spongiform encephalopathy is similar to other neurological diseases caused by 'unconventional slow viruses', which

A. is transmitted rapidly.
B. develops inconspicuously.
C. is caused by the same agents.
D. can be treated when detected early.

18. Pathology tests conducted on brains of cows which died of bovine spongiform encephalopathy show the presence of

A. fibrils which cause the disease.
B. fibrils which are caused by the disease.
C. fibrils which are also found in other animals infected with unconventional encephalopathies.
D. fibrils similar to those found in healthy cows.

19. Which of the following is not being considered as a cause of bovine spongiform encephalopathy?

A. the intake of contaminated food.
B. a genetic deficiency peculiar to Freisian cows.
C. parasite-produced vacuoles in the brain.
D. exposure to toxic products.

20. Bovine spongiform encephalopathy in cows appears similar to scrapie in sheep because
A. it is transmitted in a similar way.
B. the fibrils in diseased brains are similar.
C. it occurs in animals of a similar age.
D. of the rate at which the disease is transmitted.

21. Vets in Surrey are conducting experiments which will attempt to _____

A. infect healthy mice with bovine spongiform encephalopathy.
B. infect healthy sheep with bovine spongiform encephalopathy.
C. infect healthy humans through milk from bovine spongiform encephalopathy infected cows.
D. infect healthy cows with bovine spongiform encephalopathy.

22. The purchase of meat from scrapie infected flocks is banned in some countries because ______

A. the disease may then be transmitted to humans.
B. the disease will then be transmitted to humans.
C. it may lead to the spread of scrapie to other sheep.
D. it will lead to the spread of scrapie to other sheep.
Sample Test 3

READING SUB-TEST – ANSWER KEY

PART A: QUESTIONS 1-20

1. A
2. D
3. C
4. B
5. D
6. C
7. B
8. topical
9. unstaffed coin-operated
10. 100
11. Cataract
12. hydroquinone
13. artificial tanning methods
14. melanin
15. recurring
16. Steroids
17. malignant melanoma
18. health effects
19. highly potent steroids
20. Eye protection

PART B: QUESTIONS 1-6

1. B insufficient to find biocompatibility risks.
2. B nurse patient ratios interpret gastrointestinal bleeding.
3. A clinically relevant implantation study.
4. C non-traditional provider offering influenza vaccinations, pneumococcal vaccinations, or both
5. C have any potential risks that outweigh benefits.
6. A have a team of nurses, mental health technician and behavioral counselor.

PART C: QUESTIONS 7-14

7. C Levels of SHBG were compared in women who were using the pill, women who had stopped using the pill, and women who had never used the pill.
8. B To prevent testosterone from being used in the female body.
9. B Women who had never taken the pill.
11. C SHBG levels were monitored at different times in three groups of adult women with various status regarding contraceptive pill usage.
12. D but their levels remained elevated compared to women who had never used pill.
13. D Further studies should determine whether SHBG levels ultimately return to normal over longer periods.
14. C Dr. Goldstein monitored women with a history of pill use and sexual dysfunction in his clinic for seven years.
15. D Freisian/Holstein dairy cows.
16. A chronic wasting.
17. B develops inconspicuously.
18. C fibrils which are also found in other animals infected with unconventional encephalopathies.
20. B the fibrils in diseased brains are similar.
22. A the disease may then be transmitted to humans.
Temporomandibular disorder: Texts

**Text A**

The temporomandibular joint (TMJ) is one of the most frequently used joints of the human body. It is used when speaking, chewing, yawning, swallowing and other activities during the day and even in sleep. The frequency of movement is assessed as about 1500-2000 times a day. The term 'temporomandibular disorder' (TMD) stands for a number of disorders related to the masticatory muscles or the TMJs and related structures. In the greatest number of cases, the cause of temporomandibular disorder is a disturbance of function in the form of increased muscular tonus and myofascial trigger points. It is essential to start treatment at the stage of mere dysfunction, i.e. at the stage when the changes are still reversible, in order to prevent irreversible structural changes. According to epidemiological statistics, 70% of the randomized population suffers from at least one symptom or sign of TMD, but only one fourth of this number is aware of it and only 5% seeks medical treatment.

**Text B**

Symptoms

Dull aching pain, which varies in strength from mild to severe, is the most common symptom associated with TMJ disorders. The pain is usually felt in the jaw, but can also be felt in the surrounding areas, including the face, ear, and even the teeth. The pain may also radiate to the neck or shoulders, and is usually made worse by chewing and moving your jaw. Other signs and symptoms associated with TMJ disorders include:
- jaw tenderness;
- jaw clicking, or popping, when you open and close your mouth or chew;
- a grating sensation when chewing;
- an uncomfortable or uneven bite; and
- jaw locking (an inability to open or close the mouth completely).

TMJ disorders can be temporary or chronic, but only a small proportion of people develop significant, long-term problems. Women tend to be affected by TMJ disorders more often than men.

**Text C**

Diagnosis and treatment

A dentist can help identify the source of the pain with a thorough exam and appropriate X-rays. However, for some types of pain, the cause is not easily diagnosed. The pain may be related to the facial muscles, the jaw or the TM joint. Some TMJ problems result from arthritis, dislocation or injury. All of these conditions can cause pain and dysfunction. Muscles that move the joints are also subject to injury and disease. Injuries to the jaw, head or neck might cause some TMJ problems. Other factors relating to the way the upper and lower teeth fit together (the bite) may cause some types of TM disorders. Stress and teeth grinding are also considered as possible factors. There are several treatments for TMJ disorders. They may include stress-reducing exercises, wearing a mouth protector to prevent teeth grinding, orthodontic treatment, medication or surgery. Treatment may involve
a series of steps beginning with the most conservative options. In many cases, only minor, non-invasive treatment may be needed to help reduce symptoms.

**Text D**

**ABSTRACT: Effectiveness of specific physiotherapy in treatment of TMD**

The aim of this study was to evaluate the effect of individual specific physiotherapy in the treatment of temporomandibular disorders, its immediate effect and its effect after two months. The research sample was comprised of 23 subjects, 17 women and 6 men, with an average age of 36.5 years. They complained of pain, sound phenomena and restricted mandibular movements. The patients were first examined by a stomatologist who recommended physiotherapy. The effect of treatment was assessed according to the intensity of pain, the occurrence of reflex changes in soft tissues in the region of the masticatory muscles and digastricus muscle, the range of mouth opening and the intensity of sounds produced by mandibular movements. It was found that after treatment pain was significantly reduced (p<0.001) at the temporomandibular joint (from 4.2 points to 0.7 point on the VAS [Visual Analogue Scale]). There were also fewer reflex changes in the muscles and fascias. The range of mouth opening increased significantly (from 37.3 mm to 41.3 mm, p<0.001) and the intensity of sounds was reduced from 100% to 43% (p<0.001). This state was maintained two months later: intensity of pain (p<0.001), mouth opening (p<0.003) and reduction of sound phenomena (p<0.001). Pain was ameliorated, the intensity of sounds reduced, and the range of movement significantly improved after specific physiotherapy.

**END OF PART A**

**THIS TEXT BOOKLET WILL BE COLLECTED**

**Part A**

**INSTRUCTIONS TO CANDIDATES:**

DO NOT open this Question Paper or the Text Booklet until you are told to do so.
Write your answers on the spaces provided on this Question Paper.
You must answer the questions within the 15-minute time limit.
One mark will be granted for each correct answer.
Answer ALL questions. Marks are NOT deducted for incorrect answers.
At the end of the 15 minutes, hand in this Question Paper and the Text Booklet.
DO NOT remove OET material from the test room.

**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.

**Temporomandibular disorder:** Questions

**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. frequently found symptom regarding TMJ disorders?
   __________

2. improvements noted after treatment?
   __________

3. right time to begin the treatment?
   __________

4. ratio of patients to the ones who get medical care?
   __________

5. gender-wise prevalence of TMJ disorders?
   __________

6. how to reduce the symptoms?
   __________

7. role of physiotherapy in the treatment?
   __________

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 healthcare professional normally does the diagnosis of TMJ disorders?
   __________

9. What is the very common symptom exhibited by TMJ disorders?
   __________

10. What does 'VAS' stand for based on the information given in the texts?
    __________

11. What was the average age of the subjects in the research study?
    __________

12. What is the term for the inability to open or close the mouth completely?
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. TMJ is one among the more regularly used ___________________________ in our body.
16. Apart from the pain and sound phenomena, the subjects also complained about ___________________________.
17. An oral guard is used to avoid ___________________________.
18. Small, ____________________________ may be required to reduce symptoms of TMJ in most cases.
19. TMJ disorders can be ____________________________ or non-permanent.
20. The aching caused by TMJ disorders may also emanate to the ____________________________.

END OF PART A
THIS QUESTION PAPER WILL BE COLLECTED

READING SUB-TEST – QUESTION PAPER: PARTS B & C

TIME: 45 MINUTES

INSTRUCTIONS TO CANDIDATES:

DO NOT open this Question Paper until you are told to do so.
One mark will be granted for each correct answer.
Answer ALL questions. Marks are NOT deducted for incorrect answers.
At the end of the test, hand in this Question Paper.
DO NOT remove OET material from the test room.

HOW TO ANSWER THE QUESTIONS:
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 extract, the nursing facilities require more physicians, who

A. increase the demand of quality long-term care.
B. lead the clinical decision-making for patients after care.
C. can offer care on-site to nursing facility residents.

Nursing Facility Care

Nationwide, nursing facility care is changing to include not only long-term care of frail residents but also complicated and resource-intensive post-hospital care. The population of people receiving care in nursing facilities is more medically complex as patients are discharged ‘sicker and quicker’ from the hospital to skilled nursing facilities and the hospitals focus on decreasing readmission rates. However, the majority of patients are still long term stay patients who themselves have increased in medical complexity and acuity. Both of these imperatives have resulted in an increased need for highly trained and committed health care practitioners willing to provide care on-site to nursing facility residents. Physician involvement in nursing facilities is essential to the delivery of quality long-term care. Attending physicians should lead the clinical decision-making for patients under their care. They can provide a high level of knowledge, skill, and experience needed in caring for a medically complex population in a climate of high public expectations and stringent regulatory requirements.

2. Material-mediated pyrogenicity is not assessed using

A. traditional non biocompatibility extraction method.
B. pyrogenicity test equivalent validated method.
C. material-mediated pyrogenicity testing.

Pyrogenicity

Implants as well as sterile devices having direct or indirect contact with the cardiovascular system, the lymphatic
system, or cerebrospinal fluid and devices labeled as “non-pyrogenic,” should meet pyrogen limit specifications. Pyrogenicity information is used to help protect patients from the risk of febrile reaction. There are two sources of pyrogens that should be considered when addressing pyrogenicity. The first, material - mediated pyrogens, are chemicals that can leach from a medical device during device use. Pyrogens from bacterial endotoxins can also produce a febrile reaction similar to that mediated by some materials. Material-mediated pyrogenicity testing is not needed if chemical characterization of the device extract and previous information indicate that all patient-contacting components have been adequately assessed for pyrogenicity. Otherwise, we recommend that you assess material-mediated pyrogenicity using traditional biocompatibility extraction methods, using a pyrogenicity test or an equivalent validated method.

3. What is the purpose of the Staffing Reallocation Plan?

A. reallocate RNs from home unit to another unit to provide needed patient care.

B. balance patient census and care needs with RN competencies and availability.

C. flex RNs who match patient census with patient care needs according to their specialty.

**Staffing Reallocation Plan**

The Staffing Reallocation policy was revised to ensure a consistent system-wide approach that correlates patient census and patient care needs with RN competencies and availability. The newly standardized process may include reallocating RNs from their home unit to another like unit to provide needed patient care. The policy was reviewed and vetted by nurses at all levels of the organization. A standard icon was created in scheduling and productivity system to easily identify RNs who sign-up for additional shifts to support patient care needs. This allows the nursing division to utilize the most cost-effective staffing resources at the appropriate time for the specific patients requiring care. The Clinical Administrators work collaboratively with the Staffing Resources Office and nursing leadership to reallocate and/or flex RN staff matching patient census with patient care needs and the specialty RNs needed to provide care.

4. If a patient request for a assisted death, nurses must

A. explore the reasons and understand them to seem helpful

B. ensure every opportunity to relieve suffering is offered

C. talk to their superior and team for a formal request

**Assisted Death**
Every question from a patient about assisted death signifies that the patient is, or is worried about, suffering and is an opening for a dialogue with that individual. It is important for us, as nurses, to explore the reasons for the request in order to understand what supports might be helpful, and whether the patient has unmet needs. Whether or not, a nurse is prepared to be involved in any way in assisting someone to die, they remain a part of the team caring for the patient. Nurses should advocate for their patients, including the pursuit of aggressive symptom management strategies, to ensure every opportunity to relieve suffering is offered. Nurses should also understand the process for medical assistance in dying, and their professional role in the process. Any nurse could be asked by a patient or family member about assisted death. For some, it might be an exploration of options, or simple information seeking. For others, their questions may indicate intent to pursue an assisted death. Please talk to your supervisor and team if a patient would like to proceed with a formal request.

5. The policy document tells us that the potential toxicity of a component is evaluated by

A. testing the component exclusively.

B. testing the exposure separately.

C. adequate assessment of the material.

**Inclusion of Multiple Components**

For devices that include components with different lengths of contact, we recommend that any extract-based biocompatibility testing be conducted separately. If the components are combined into a single test article, this will dilute the amount of component materials being presented to the test system and may not accurately identify potentially toxic agents that would have been found if the components were tested separately. For example, we recommend testing implants separately from delivery systems or other kit components. For devices or device components that contain multiple materials with differing surface areas or differing exposure to the body, if one or more materials is new, it may also be necessary to test the new material components separately as well, to further understand the potential toxicity of this component. For example, for a catheter-based delivery system that contains a new balloon material, tests of the delivery system separate from the balloon may be necessary to ensure adequate assessment of each of the materials.

6. What is being described in this extract?

A. detailed information about medical records.

B. purpose of medical records in patient care.

C. how to avoid errors in medical records

**Medical records**
Medical records is a broad term, encompassing a range of data and information storage mediums containing patient information. Whether paper based or electronic, the term “medical records” applies to clinical notes, investigations, letters from other doctors and healthcare providers, photographs and video footage. However, information exchanges (such as correspondence, email and file notes of discussions) between a medical practitioner and their medical indemnity insurer or solicitor should not be stored in the medical record. For this reason, it is recommended that you keep a separate medico-legal file in which to store these documents. Medical records are an integral part of good quality patient care. The primary purpose of the medical record is to facilitate patient care and allow you or another practitioner to continue the management of the patient. Clinical observations, decision making and treatment recommendations or plans should be recorded contemporaneously. This reduces the possibility of an error occurring and is an important risk management tool.

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: Good Looks

Paragraph 1
Attempts to find out what makes a person physically attractive date back at least to the Ancient Greeks. Plato wrote that the ideal face should have a width two-thirds of its length, and that a nose should be no longer than the distance between the eyes. His theory of 'golden proportions', while not necessarily accepted by researchers today, nevertheless represented an attempt to define a fundamental preference for symmetry that scientists say is a highly evolved trait seen in both humans and animals. Human babies, for example, spend more time staring at pictures of symmetric faces than they do at photos of asymmetric ones. In the bird kingdom, female swallows prefer males with longer and more symmetric tails, while female zebra finches mate with males with symmetrically colored leg bands.

Paragraph 2
The rationale behind symmetry preference in both humans and animals is' that symmetric individuals have a higher mate-value. Scientists also believe that symmetry is equated with a strong immune system. Thus, beauty is indicative of more robust genes, improving the likelihood that an individual's offspring will survive. This evolutionary theory is supported by research showing that standards of attractiveness are similar across cultures. John Manning of the University of Liverpool does not agree entirely, however, and cautions against such over-generalization, especially by Western scientists. Darwin thought that there were few universals of physical beauty because there was much variance in appearance and preference across human groups,' he says.

Paragraph 3
Research overwhelmingly shows that beauty matters. It pervades society, it affects how people choose partners, and it influences how people are seen and how they see others. One of the chief beneficiaries of this focus on physical attractiveness is the cosmetic medicine and cosmetic surgery industry. Once only for the rich and privileged, cosmetic procedures nowadays are mainstream and affordable . For a fraction of the cost and time required even a decade ago, practitioners these days can remove wrinkles and blemishes, straighten teeth and noses, and sculpt bodies into works of art.
Paragraph 4
In most countries, due to the range of procedures available and of practitioners performing them, from plastic surgeons to cosmetic doctors and dermatologists, statistics for cosmetic surgery are either not collected or not reliable. In the United States, however, statistics released by the American Society for Aesthetic Plastic Surgery show that nearly 11.7 million cosmetic surgical and nonsurgical procedures were performed in 2007. The Aesthetic Society, which has been collecting multi-specialty procedural statistics since 1997, says the overall number of cosmetic procedures in the US has increased 457% since the collection of the statistics first began.

Paragraph 5
It is important to bear in mind that there are potential pitfalls, both physical and emotional, associated with this growing cultural phenomenon. While people have the right to maximize their attractiveness, there is the danger that, for some, cosmetic medicine may become an unhealthy obsession or be mistaken as the answer to life’s problems. Studies spanning four decades have reported that most people undergoing cosmetic interventions are satisfied with the result; however, there is a particular subgroup of people who appear to respond poorly to cosmetic procedures. These are people with the psychiatric condition known as ‘body dysmorphic disorder’ (BDD), which is characterized by a preoccupation with an objectively absent or minimal deformity that causes clinically significant distress or impairment in social, occupational, or other areas of functioning.

Paragraph 6
While few methodologically robust studies have been done, some clinicians and researchers have attempted to evaluate whether improvement in psychosocial wellbeing following cosmetic enhancement can be objectively verified at all. Overall, studies suggest that those patients who were pleased with the outcome showed improvements in ‘self worth’, ‘self esteem’, ‘distress and shyness’ and ‘quality of life’. What does appear to be an important factor in assessments of satisfaction is the patient’s expectation of the outcome of the procedure. Research suggests that the more extensive ‘type change’ procedures (e.g., rhinoplasty, breast augmentation) appear to require greater psychological adjustment by the patient than ‘restorative’ procedures (e.g., facelift, botulinum toxin A injection).

Paragraph 7
Given the range of possible reactions to cosmetic procedures, it is important for the practitioner to evaluate the patient’s motivations for surgery before the procedure is undertaken. First, the individual’s attitude towards the cosmetic problem, and the distress and disability associated with it, should be assessed. Patients should be advised of what the cosmetic outcome is likely to be and fully informed of potential side effects and complications. It is also useful to review past cosmetic interventions, including the number of previous procedures and their cosmetic and psychosocial outcome as perceived by the patient as well as family and friends. The cosmetic specialist should probably be most concerned about people who have had numerous procedures performed by many practitioners, and particularly those who report the outcome of such procedures to have been unsatisfactory.

Text 1: Questions 7-14

7. In the first paragraph, babies are mentioned because they _____

A. prefer faces with symmetric features.
B. have highly evolved symmetric traits.
C. react negatively to asymmetric images.
D. display the same preferences as birds.

8. In the second paragraph, the phrase 'is equated with' indicates that symmetry and immunity are ______

A. linked to each other.
B. equal to each other.
C. dependent on each other.
D. opposite to each other.

9. Which one of the following statements according to John Manning's opinion, is NOT supported by information given in second paragraph?

A. Western scientists take a Darwinist approach to attractiveness.
B. Darwin's theories go against some current views of attractiveness.
C. Western scientists tend to take a simplistic view of attractiveness.
D. there is no definitive basis for symmetry's role in attractiveness.

10. Scientists believe that humans and animals are instinctively attracted by symmetry in potential partners ______

A. because they want a good-looking mate.
B. in the interests of survival of the species.
C. to strengthen their own immune systems.
D. because symmetrical bodies are noticeable.

11. The cosmetic surgery industry is popular because ______

A. society is preoccupied with beauty.
B. it is considered an art form.
C. so many people feel unattractive.
D. it promotes wealth and glamour.

12. Aside from the United States, country-specific statistics on cosmetic surgery are unreliable because _____

A. the United States dominates the market.
B. of the number of different professions involved.
C. there are too many instances to count.
D. of the rapid increase in demand.

13. In the fifth paragraph, the phrase 'potential pitfalls' refers to _____

A. life's problems.
B. maximum attractiveness.
C. unhealthy obsessions.
D. dangerous outcomes.

14. Based on the seventh paragraph, the doctor should tell patients about _____

A. the different attitudes of patients to cosmetic surgery.
B. how distress influences the outcome of surgery.
C. what the result might be and what could go wrong.
D. the success rate of his/her previous procedures.

Text 2: Rabbit Calicivirus Disease

David Lord's family arrived in western New South Wales in 1870. The first rabbit plague came 10 years later. In the 1940s rabbits would flock in thousands to waterholes, kicking up storms of dust. In the 1950s they disappeared, and were thought to be gone. But they came back. Last year Mr. Lord's property, 40 kilometers west of Broken Hill, had 25,000 warrens and about a million rabbits. Then in early November he found a dead one near his home, and felt pretty sure his problem was solved. Within a week, 600,000 more were dead. Few carcasses were seen above ground but the stench was overpowering as the rabbits just crawled into their burrows and died. The killer is rabbit
calicivirus disease (RCD). Transmitted primarily by rabbits themselves, the naturally occurring virus scythes through populations of the European rabbit yet is not known to infect any other species. Proponents of the virus as a biological control say it could save up to $1 billion a year in lost primary production and degraded land, as well as priceless native flora and fauna.

Mr. Lord born in the 1950s, when another imported disease, myxomatosis, killed 99 per cent of the country's rabbits—called it "the best thing to happen to inland Australia in 40 years." But it wasn't meant to happen now. The virus was not due for release for another two years. Its escape from a South Australian testing station in October severely embarrassed the government and the CSIRO and threatened a nine-year program of testing and hearings to win public support. As the virus is now out, scientists and farmers want to ensure its effectiveness with a controlled release in the next two months. Autumn is believed to be the best time for release as young rabbits, whose underdeveloped immune system makes them less susceptible to the disease, are less common. Yet while the Minister for Primary Industry, John Anderson, said this week that he favored early release, he doubted bureaucratic and legislative approvals could be granted in time. In Western Australia a defense coalition against RCD, including animal rights groups and the fledgling rabbit farming industry, is demanding a public inquiry into the disease. Any virus is hard to sell.

"We recognized years ago that virus-dread, as we call it, would need to be managed," says Nicholas Newland, the coordinator of the RCD program. Although the CSIRO never guaranteed it could contain the virus on Wardang Island, it had taken great precautions to ensure an escape never happened. The calicivirus – so called because under a microscope its surface resembles a set of inverted chalices—was found in China in 1984. It reached Europe two years later, killing about 64 million farmed rabbits in two months in Italy alone. Scientists here watched with interest. Rabbits had developed some immunity to myxomatosis, and no other control had been as successful. The rabbit count was steadily increasing, to about one-fifth of pre-myxomatosis numbers. In 1991 quarantine authorities allowed the CSIRO to import the virus. At the Animal Health Laboratory in Geelong, scientists injected 28 species with a virus dose 1000 times greater than one lethal to a rabbit. None of these species which included dogs, cats, native mammals and birds, were infected.

Testing moved to Wardang Island in 1994. A direct flight transported the virus, packed into containers so secure that a plane crash would not destroy them. In a scene from science fiction, the quarantine station had an electric fence, double fenced pens and high security shacks that required researchers to change cloths three times before leaving. Rabbits wore radio collar so scientists would know instantly if one had died. Yet the virus escaped-from the shacks to rabbits elsewhere on the island, then across a four kilometer strait. Researchers blame an insect, perhaps a fly. Once on the mainland, the virus jumped 380 kilometers almost overnight, probably through insects floating on air currents. By Christmas it covered one-third of South Australia. In the Flinders Ranges, where 95 per cent of rabbits are thought to have died, flora such as the bullock bush and mulga tree showed new shoots for the first time in decades, says Ron Sinclair of the Animal and Plant Control Commission. Since Christmas, perhaps because of a hot summer and poor conditions for insects, the spread has slowed.

The first sign of the virus in Victoria appeared only recently with dead rabbits near Castlemaine, Maryborough and Marong. Again, insects on air currents may be responsible. The untimely escape has forced authorities to concertina an approval process of years into months. In December, two American scientists wrote to Australia's Biological Control Authority and he then Prime Minister, warning that the calicivirus could jump species barriers. Dr. Alvin Smith, professor of veterinary medicine at Oregon State University, wrote that if the virus mutated—and it was far too early to be sure that it wouldn't or it could endanger livestock and even humans. Australian scientists say there is no evidence the rabbit calicivirus can jump species. Only one virus-feline panleukopaenia, or cat flu—has been documented to have increased its host range (to dogs), says Tony Robinson, a senior CSIRO virologist. He says that after 10 years of contact with diseased rabbits in Europe, no human has been infected.
Nevertheless, the debate has bothered Hugh Wirth. "Two lots of scientists are arguing, so the jury is still out," says the head of the RSPCA. Yet conservation groups such as the Wildlife Preservation Society favor release. "Calicivirus is a blessing to all who care for Australia's plants and animals," society president Vincent Serventy has written. One thing is sure: the virus will not eradicate all rabbits. "We made that mistake with myxomatosis – apathy crept in," says lan Lobban, spokesman on rabbit control for the Victorian Farmers' Federation. In Canberra, CSIRO scientists have already begun to try to engineer a new strain of myxomatosis that causes rabbit sterility. In Europe the rabbit poses a different problem. Worried about the animal's decline because of calicivirus, Spain is stocking a national park with inoculated rabbits to ensure prey for species such as the lynx and imperial eagle. In its birthplace, the rabbit is struggling. Here it is not wanted, and has thrived. The effects of the Australian and Spanish programs are opposite but the intent is the same: to help to balance an unbalanced world.

**Text 2: Questions 15-22**

15. Australian farmers like David Lord consider the release of the virus to be

A. a dangerous mistake.
B. an embarrassing incident.
C. a fortunate accident.
D. a bureaucratic error.

16. Scientists prefer to release the virus in autumn because

A. there are fewer young rabbits in autumn.
B. rabbits have weaker immune systems in autumn.
C. young rabbits catch the disease more easily in autumn.
D. rabbits are more plentiful in autumn.

17. Official early release of the virus is unlikely because

A. the Minster for Primary Industry supports it.
B. rabbit farmers disagree with animal rights groups.
C. the general public refuses to pay for the program.
D. groups opposing RCD are demanding an inquiry.
18. The number of rabbits in Australia prior to the release of RCD was

A. 20% more than in the period before myxomatosis.
B. 20% less than in the period before myxomatosis.
C. remaining stable.
D. seems to be rising.

19. How did the virus enter Australia?

A. carried by insects.
B. brought by dogs and cats.
C. imported by scientists.
D. found in European rabbits.

20. From the article, we can infer that the virus was being tested on Wardang Island for what reason?

A. to prevent its uncontrolled spread.
B. to eliminate rabbits from the island.
C. to protect the researcher.
D. to keep the tests a secret.

21. Because of the escape of the virus, authorities are trying to:

A. delay the approval process for several months.
B. modify the approval process.
C. speed up the approval process.
D. extend the approval process.
22. Which of the following was not a concern of the American scientists who contacted the Biological Control Authority?

A. that humans could catch the disease.
B. that sheep and cattle could die.
C. that insufficient research had been done before the release.
D. that the virus had already mutated.
Sample Test 1

READING SUB-TEST – ANSWER KEY

PART A: QUESTIONS 1-20

1. B
2. D
3. A
4. A
5. B
6. C
7. D
8. dentist
9. dull aching pain
10. Visual Analogue Scale
11. 36.5 years
12. jaw locking
13. individual specific physiotherapy
14. jaw
15. joints
16. restricted mandibular movements
17. teeth grinding
18. non-invasive treatment
19. chronic
20. neck or shoulders

PART B: QUESTIONS 1-6

1. C can offer care on-site to nursing facility residents.
2. A traditional non biocompatibility extraction method.
3. B balance patient census and care needs with RN competencies and availability.
4. B ensure every opportunity to relieve suffering is offered
5. A testing the component exclusively.
6. C detailed information about medical records.

PART C: QUESTIONS 7-14

7. D display the same preferences as birds.
8. A linked to each other.
9. A Western scientists take a Darwinist approach to attractiveness.
11. A society is preoccupied with beauty.
12. B of the number of different professions involved.
14. C what the result might be and what could go wrong.

PART C: QUESTIONS 15-22

15. C a fortunate accident.
16. A there are fewer young rabbits in autumn.
17. D groups opposing RCD are demanding an inquiry.
18. D seems to be rising.
20. A to prevent its uncontrolled spread.
21. C speed up the approval process.
22. D that the virus had already mutated.
There are positive and negative health impacts from alcohol consumption. When consumed at low levels, there is evidence, albeit debated, that alcohol can provide some health benefits for certain age and gender groups. The physical benefits include reducing the risk of cardiovascular disease from middle age onwards. The social benefits include assisting in relaxation, enhancing social interactions, and contributing to traditions and cultural festivities. When used to excess alcohol can produce profoundly negative health and social outcomes. The adverse health outcomes from alcohol consumption range from short-term problems, such as injuries from road accidents and violence, to long-term health problems, such as liver disease, cancers and alcohol dependence. One in ten Australians consume alcohol at levels that are risky or a high risk to health in the long term. Those aged in their twenties are the most at risk – 14.4 percent of males and 15.1 percent of females in the 20-29 year age group consume alcohol at levels that are risky or a high risk for harm in the long term.

**Resveratrol, a phytoestrogen found in red wine**

Certain populations, e.g. the French and the Greek, suffer little heart disease despite a diet which is relatively high in fat. It has been proposed that regular consumption of red wine in moderate amounts may explain this phenomenon, which has been dubbed the 'French paradox'. Resveratrol, a compound found in grapes and wine in significant amounts, was implicated in this beneficial action of red wine because of its ability to act as an antioxidant and an inhibitor of platelet aggregation. It is produced by the action of the enzyme, resveratrol synthase. In addition, resveratrol has been reported to have anti-carcinogenic effects in mouse mammary cultures. The soil bacterium, Bacillus cereus can be used to transform resveratrol into piceid (resveratrol 3-O-beta-D-glucoside)

**ABSTRACT:** A study of drinking in young Danish adults

**Background:** Findings from a recent series of Danish studies suggest that moderate wine drinkers are healthier than those who drink other alcoholic beverages or those who abstain.

**Objective:** To identify possible explanatory factors associated with the health benefits of wine consumption through the examination of a wide spectrum of social, cognitive, and personality characteristics related to both beverage choice and health in young Danish adults.

**Methods:** Descriptive cross-sectional study of characteristics associated with beverage choice in a sample of 363 men and 330 women between the ages of 29 and 34 years, selected from the Copenhagen Perinatal Cohort on the basis of perinatal records.
Measures: Socioeconomic status, education, IQ, personality, psychiatric symptoms, and health related behaviors, including alcohol consumption, were analyzed. The outcome variables were subjected to linear and logistic regression analyses with 2 factors (beer and wine), each with 2 levels (drinking or not drinking a certain beverage type).

Results: Wine drinking was significantly associated with higher IQ, higher parental educational level, and higher socioeconomic status. Beer drinking was significantly associated with lower scores on the same variables. On scales concerning personality, psychiatric symptoms, and health-related behaviors, wine drinking was associated with optimal functioning and beer drinking with suboptimal functioning.

Conclusions: Our data demonstrate that wine drinking is a general indicator of optimal social, cognitive, and personality development in Denmark. Similar social, cognitive, and personality factors have also been associated with better health in many populations. Consequently, the association between drinking habits and social and psychological characteristics, in large part, may explain the apparent health benefits of wine.

Text D

Red wine and blood vessel cells

Researchers from the Israel Institute of Technology, Haifa, found that red wine enhanced the health of the endothelial cells in blood vessels. The research team studied 15 healthy adults with a mean age of 29 years who agreed to consume 250 ml of red wine every day for three consecutive weeks. The participants provided blood samples at the beginning and end of the three-week study period so that researchers could evaluate blood vessel function. The researchers wrote that "daily red wine consumption for 21 consecutive days significantly enhanced vascular endothelial function," which means it improved the health of the cells lining the blood vessels, which then improves blood flow and heart health. Drunk in red wine every day also helped reduce cell death or what is known as apoptosis. "The prevalence of cardiovascular disease is low in populations that consume large amounts of red wine," they wrote. "Moderate consumption of red wine provides cardiovascular protection, but the mechanisms that underlie this protection are unclear."
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.

Wine and Health: Questions

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. comparison between beer drinking and wine drinking?
   ________

2. benefits of drinking red wine moderately at regular intervals?
   ________

3. which is the antioxidant in red wine?
   ________

4. how the study in Denmark was conducted?
   ________

5. the relevance of alcohol consumption in cultures?
   ________

6. what is responsible for cardiovascular protection?
   ________

7. impacts that red wine had over blood vessels?
   ________

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 compound acts as an inhibitor for platelet aggregation?
   ________

9. What is the medical term for cell death?
   ________

10. How many subjects were there in the study conducted among young Danish adults?
   ________
11. What is responsible for the production of piceid from resveratrol?

12. Which kind of cells showed improved health conditions after drinking red wine?

13. What did the researchers from Haifa intend to measure?

14. What are the common short-term adverse effects of excess alcohol consumption?

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. The ____________________________ is commonly exhibited by the French and the Greek.

16. Regular consumption of red wine on a everyday basis, can enhance the blood flow and ____________________________.

17. The interrelation of social and psychological characteristics with __________ can be considered as evident health benefits of wine.

18. ____________________________ reflected inferior outcomes for parental educational level and socioeconomic status.

19. Resveratrol has found to have ____________________________ effects in mouse mammary cultures.

20. Starting from the ____________________________, alcohol consumption can minimize the prevalence of heart diseases.

END OF PART A
THIS QUESTION PAPER WILL BE COLLECTED

READING SUB-TEST – QUESTION PAPER: PARTS B & C

TIME: 45 MINUTES

INSTRUCTIONS TO CANDIDATES:

DO NOT open this Question Paper until you are told to do so.
One mark will be granted for each correct answer.
Answer ALL questions. Marks are NOT deducted for incorrect answers.
At the end of the test, hand in this Question Paper.
DO NOT remove OET material from the test room.

HOW TO ANSWER THE QUESTIONS:
Mark your answers on this Question Paper by filling in the circle using a 2B pencil.

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. The guidelines inform us that hemolysis testing and thrombogenicity testing

A. are generally not needed for the indirect blood- contacting devices.
B. can be waived through comparison to a similar legally marketed device.
C. are always redundant for the direct blood- contacting devices.

Hemocompatibility

For devices having direct contact with circulating blood, it is recommended that you consider hemolysis, complement activation, and thrombogenicity testing, if not otherwise addressed during the risk assessment process. For devices having indirect contact with circulating blood (regardless of contact duration), we recommend that you consider only hemolysis testing, as complement activation and in vivo thrombogenicity testing are generally not needed for indirect blood- contacting devices. Where a risk assessment has determined that hemocompatibility testing is not necessary, we recommend that you provide a summary of the assessment that supports waiving these specific tests. For example, to support waiving thrombogenicity testing, the materials used in formulation and processing, as well as the geometry of the device, should be compared to a legally marketed device with similar blood contacting duration and an acceptable history of use.

2. According to the extract, prior disclosing information for TPO purposes, local health departments must

A. use a form which exclusively contains acknowledgment of receipt of the Notice.
B. continue using their forms and may discontinue using acknowledgment logs.
C. use a DPH Form 3096 or a similar locally developed two-part form.

Information for TPO Purposes
Some local health departments have been using DPH Form 3096 or a similar locally developed two-part form. The bottom part of Form 3096 obtains permission to disclose the patient’s information for treatment, payment, or health care operations (TPO) purposes—this is the signature that is no longer needed. The top part of Form 3096 obtains acknowledgment of receipt of the Notice of Privacy Practices—this is the signature that local health departments still must make a good faith effort to obtain. We recommend that departments that have been using DPH Form 3096 replace it with a form that contains only the acknowledgment of receipt of the Notice. The Institute of Government has developed a sample form that can be used for that purpose. Other local health departments have been obtaining the signature acknowledging receipt of the Notice of Privacy Practices on a log rather than a form, and have been obtaining consent to disclose information for TPO purposes on a separate form. Those departments can continue to use their acknowledgment logs and may discontinue using forms that obtain consent to disclose information for TPO purposes.

3. What is being described in this section of the guidelines?

A. changes in procedures.
B. best practice procedures.
C. exceptions to the procedures.

### Maintenance and Inspection

Management of maintenance and inspection of medical equipment should be implemented by the user. In case the user does not implement such management, it is permitted that such management is outsourced to a qualified entity such as a medical equipment repair company. For safe use of this product, it is necessary that inspection should be conducted within the specified intervals for the specific parts described in the instruction manual. Some parts and components of the products are degraded or deteriorated depending on the frequency of use. Annual check-up and maintenance, as well as replacement of consumable parts, are required. It may be different from the following list depending on the option of the unit. For check-up and repair, call a technician of our authorized dealer. Execute the maintenance in accordance with the instruction manual and operating manual attached to each individual equipment. Failure to maintain this product may lead to physical injury or property damage.

4. What is being described in this section of the memo?

A. how to organize the health care system
B. how the ministry is being reorganized
C. structural changes introduced in patient care
Revised Structural Changes

We are all committed to a patient-centered health care system that is effective and efficient and delivers high quality care for patients. Many of you are rethinking your care pathways and processes to put the patient at the centre of your organization. I believe there is great value in the ministry also organizing itself in a way that better reflects how the health system is organized, making it easier for you and patients to interact with us. I want you to be aware of some structural changes announced today that will clarify and simplify lines of accountability and allow our organization to be more nimble and outcome focused by:

• Aligning acute and emergency services
• Bringing together community and mental health and addictions services
• Ensuring end-to-end planning and implementation for long-term care homes
• Integrating capital, workforce and system capacity planning
• Combining public drug programs and assistive devices.

5. The factor of a medical device which does not affect complement activation is

A. chemical combustion.

B. total surface area.

C. surface architecture.

Complement Activation

Medical device-mediated complement activation is a complex process and is a function of physical and chemical properties of the device. Many factors such as device surface area, surface architecture, and chemical composition may affect complement activation. If complement activation testing is performed for devices having direct contact with blood, we recommend that you perform this testing with the device instead of with an extract of the device. For in vitro complement activation testing, we recommend assessment of SC5b-9 fragment activation using an established ELISA test method. Functionally intact serum is preferred for in vitro “static” complement activation testing. If whole blood or plasma is used, the type of anticoagulant should be carefully selected to ensure that it does not inhibit or potentiate complement activation caused by the test device itself. If whole blood or plasma is used, test validation information should be provided to confirm that the testing is capable of detecting differences between negative and positive reference controls.

6. The guidelines tell us that additional information is necessary
Using Medical Devices

When biocompatibility testing is necessary, it is recommended to test medical devices in the condition that they will be used, whenever possible. This could include final, packaged devices, or as sterilized by an end user, if appropriate. If the medical device in its final finished form cannot be used for biocompatibility testing, a test article may be considered. The representative test article should undergo the same manufacturing and sterilization processes, have the same chemical, physical, and surface properties, and have the same ratio of component materials as the medical device in its final finished form. In situations where differences exist between the medical device in its final finished form and the test article, additional information describing how these differences could impact study findings should be provided. For example, when testing an individual device component, a low-level tissue response could be observed, but when all of the components are tested within a medical device in its final finished form, a more robust tissue response could occur. If there are differences between the medical device in its final finished form and the representative test article, additional information may aid in determining the appropriateness of the selected test article.

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: Relation Between Alcohol and Cancer

Mounting evidence shows that drinking any amount of alcohol will increase your risk of developing cancer. What does this really mean for those of us who like a drink? Stress, air pollution, just sitting at your desk – it seems that every time we look at the news, researchers have found yet another aspect of our lives that could be killing us. This month, the Cancer Council Australia stirred the debate when it highlighted the risks of one item many of us regularly consume – alcohol. Based on an international review of the latest evidence, the Cancer Council says it is now irrefutable that alcohol use causes cancer. Estimates suggest that roughly 5% of all cancers in Australia are linked to long-term, chronic use of alcohol use – that is more than 5000 cases each year. Over the last few years, global bodies including the International Agency for Research in Cancer have sat down and looked carefully at the role of alcohol in cancer, based on scientific and clinical studies done over many years. So while this isn't the first time that researchers have issued warnings about alcohol and cancer, as the research piles up, so does the strength of the link and the types of cancers involved.

Professor Ian Oliver, Cancer Council CEO, says the evidence shows that alcohol has a strong association with various cancers. The Cancer Council cites cancers of the mouth, larynx (voice box), pharynx (a section of the throat), oesophagus, bowel (in men) and breast. And the relationship is "definitely causative", Oliver says. "Just as certain as for tobacco or asbestos."."In particular, the strength of evidence linking alcohol consumption with 22%
of all breast cancers diagnosed each year in Australia really makes it a modifiable risk factor that needs to be taken into account," Oliver says. In addition, it’s now probable that alcohol causes bowel cancer in women and liver cancer in both sexes. For health researchers to be confident that drinking alcohol causes cancer, they have to identify 'causative mechanisms', Oliver explains, which simply means ways that alcohol can trigger cancer. With alcohol there are several easy ones to identify. As our body breaks down a chemical called ethanol in alcoholic beverages, the process creates a substance called acetaldehyde. This is a known cancer-causing agent that can negatively affect the health of our cells. The ethanol itself may also damage our tissues directly.

Alcohol increases levels of sex hormones which have been linked to the occurrence of some cancers. For instance, oestrogen is strongly linked to breast cancer. There are a lot of calories in alcohol so its consumption can contribute to obesity, which is a known risk factor for several types of cancer including breast and bowel. At present, it’s hard for researchers to say exactly how much a glass of wine a night would increase your individual risk of developing cancer. What they do know is that the more we drink, the greater our risk of cancer. And it doesn’t matter whether you drink spirits, wine or beer – all alcohol is equal when it comes to cancer risk. The quality or cost of the beverage is also irrelevant as it’s the alcohol content that is the key. So drinking only expensive wine won’t reduce the negative health effects.

But what about the heart health benefits of alcohol? Well the evidence is inconclusive, and potentially flawed at present, the Cancer Council says, adding that the National Heart Foundation advises against drinking red wine or any type of alcohol to prevent or treat heart disease. The message to consumers is that there is no evidence to suggest there is a safe level of drinking when it comes to cancer. However, given that the risk increases with amount, the Cancer Council suggests that anyone who wants to drink should stick to the National Health and Medical Research Council guidelines – no more than two standard drinks a day for healthy men and women. A standard drink is usually described as the equivalent of 100 ml of wine or 285 ml of beer, but it can vary depending on the alcohol content of the beverage.

If you would like to cut down the amount that you drink, the Australian Drug Foundation has the following advice:

• Have a non-alcoholic drink to quench your thirst before you start drinking alcohol.
• Eat before or while you are drinking.
• Don’t let people top up your drinks.
• Try having a "spacer", a non-alcoholic drink every second or third drink.
• Try a low-alcohol alternative or a non-alcoholic cocktail
• Write down how much you drink each day. This can make you more aware of exactly how much you drink.
• Don’t be pressured into drinking more than you want or intend to.

It's likely not everyone will welcome the new advice from the Cancer Council. But Oliver strongly believes that the links between alcohol and cancer should be raised publicly so people can make informed decisions. "The important thing is informing the public about what is a clear risk factor. People then have to factor this information into the whole context of their lifestyle and risk factors," he says. "So people who have other risk factors for cancer, such as a strong family history, would be able to look at this data and say 'well I can't do much about my genes, but I can limit my drink intake'. So for different people this information will have different impacts." So rather than bemoaning the latest news about alcohol, we could see it as a chance to empower ourselves, adding alcohol to sun exposure, obesity and smoking – all cancer risk factors we can do something about. After all it's thought a third of cancer deaths could be prevented by lifestyle changes alone. A sobering thought, indeed.

Text 1: Questions 7-14
7. Stress, air pollution and sitting at your desk as examples of _____

A. aspects of our lives that increase our risk of cancer.
B. aspects of our lives that researchers believe could be killing us.
C. ways to decrease your risk of developing cancer.
D. things that people often do when they are consuming alcohol.

8. The Cancer Council Australia now believes that _____

A. it is undeniable that alcohol use causes cancer.
B. it is very possible that alcohol use causes cancer.
C. consumption of any amount of alcohol have a 5% chance of developing cancer.
D. 5000 people die of alcohol related cancers each year in Australia.

9. Which one of the following statement is not true?

A. It is not the first time that researchers have issued warnings about alcohol and cancer.
B. Alcohol consumption can cause cancer of the mouth, larynx, pharynx, oesophagus, bowel and breast.
C. There is evidence that alcohol consumption causes 22% of breast cancers in Australia.
D. Tobacco and asbestos are less likely to cause cancer than alcohol consumption.

10. What are causative mechanisms?

A. Substances which cause cancer.
B. Ways that alcohol can trigger cancer.
C. Ethanol, which is substance.
D. Acetyladehyde, a cancer-causing agent.

11. Which of the following have not been linked with cancer?
A. Alcohol increases levels of sex hormones.
B. Calories in alcohol contributing to obesity.
C. Oestrogen levels in the body.
D. Beer consumption.

12. Which statement best describes the belief of the researchers?

A. A glass of wine a night increases your individual risk of developing cancer.
B. The type of alcohol you drink may affect your risk of cancer.
C. The more you drink, the greater the risk of cancer.
D. The quality and cost of the beverage is also relevant.

13. The Cancer Council advises that _____

A. there are many health benefits of alcohol.
B. the benefits of drinking red wine to prevent or treat heart disease is conclusive.
C. the evidence that alcohol can prevent or treat heart disease is inconclusive.
D. there is a safe level of drinking one or two standard drinks a day, when it comes to cancer.

14. The national Health and Medical Research Council guidelines suggests ______

A. drinking more than two standard drinks a day.
B. drinking 100 ml of wine or 285 ml of beer a day.
C. drinking at least two standard drinks a day.
D. drinking two standard drinks a day or less.

Text 2: New AIDS Vaccine Hope

For decades, scientists have vigorously searched for a cure for the AIDS virus. Recent research just may have
uncovered a significant key to developing that long-awaited vaccine. Scientists have discovered two key antibodies that seem to prevent the AIDS virus from mutating and spreading throughout the body. The AIDS virus has claimed millions of lives around the world. According to the World Health Organization, 33 million people currently are infected with HIV. While search efforts for an AIDS cure are abundant, several previous stabs at developing a vaccine proved to be non-effective. The International AIDS Vaccine Initiative, a non-profit organization, is funding the efforts to develop a vaccine and kicked off their effort in 2006, called Protocol G.

Protocol G utilizes blood gathered from HIV patients in developing countries, to help pinpoint antibodies that could neutralize strains of the AIDS virus. Through this initiative, the Scripps Research Institute discovered two critical antibodies which naturally fight against the spread of the AIDS virus. During the study, released recently in the journal Science, researchers not only discovered two vital antibodies, but also discovered a new part of the virus the antibodies attack. This discovery may lead to a new technique for the creation of a vaccine. For the study, researchers gathered blood from 1,800 HIV patients who had suffered from the virus, without exhibiting symptoms for at least three years. The participants were mainly from Africa, but also involved HIV patients from Thailand, Australia, the United States and the United Kingdom.

The team pinpointed those who had not exhibited HIV signs, though suffering from the virus for at least three years, because these patients produce large amounts of natural antibodies in their blood, which fight against almost all strains of HIV around the world. Dennis Button, a scientist at the Scripps Research Institute, the key player in the new research said, “We said if we want broadly neutralizing antibodies, we should look for people, infected individuals, who are making them,” He added, “The key thing about the antibodies we’ve found is that they’re more potent than previous ones and that’s great for a vaccine.”

Once the blood was gathered from the HIV patients, the samples were shipped back to a team with the Monogram Bioscience laboratories in San Francisco, where researchers studied the samples to determine which antibodies lead to more resistance to the virus. The team had developed a process that caused the enzyme embedded in the virus to glow when it entered a cell. If the researchers did not see a glow when performing the process, it was a signal the patient’s natural antibodies had fought off the virus.

Once the samples containing antibodies that fought off the HIV virus were identified, they were shipped to Theraclone Sciences, in order to isolate the antibodies. Burton said “If you want to make a vaccine that works, it has to protect against not just one, but most of the strains that are out there.” The team at Theraclone Sciences isolated two antibodies, which were able to block against three-quarters of the different strains of HIV tested against the antibodies. The two antibodies were recognized in the blood of an African HIV patient. While the new findings do not create an overnight cure for AIDS, they do help scientists with new options for treatment and a potential vaccine. The hope is for a vaccine that will encourage a person’s immune system to fight the virus more vigorously by producing its own antibodies.

Text 2: Questions 15-22

15. In the first paragraph, how do scientists hope their new discovery can help fight AIDS?

A. By stopping the virus from proliferating inside the patient’s system.
B. By preventing the virus from transmitting from patient to patient.
C. By preventing the patient from suffering secondary illnesses.
D. By keeping patients away for longer.

16. How many people have HIV?
A. 30 million Africans.
B. 3 million homosexual men.
C. 33 million people globally.
D. 3,000,000 people.

17. Which of the following statements is not false?
A. Previous viral strains, while abundant, have not been effective when stabbing patients.
B. Although patients are abundant, most have been unaffected by the virus.
C. Not many scientists have attempted to create an AIDS vaccine so far.
D. Masses of research has been done into curing AIDS but none has been successful.

18. Which is the most accurate description of Protocol G?
A. It is a viral antibody transmitted into blood of AIDS patients in poor countries via pin prick.
B. It is a procedure for searching for AIDS-combating antibodies in the blood of AIDS victims.
C. It is a new part of the virus attacked by antibodies discovered in the study.
D. It is a group made up of International AIDS Vaccine Initiative and Scripps Research Institute.

19. What could be a possible result of the scientists’ findings?
A. A new technique to create vacillation.
B. A new viral antibody discovery.
C. A new method to build a vaccine.
D. A new part of the virus the antibodies attack.

20. Which is the most accurate description of the participants in the study?

A. From person to person.
B. Scientists involved in the Protocol D Project.
C. Asymptomatic HIV patients, mostly from the third world.
D. HIV positive people with no symptoms from all over the world.

21. Why did the scientists decide to examine blood from these people?

A. Because the majority of AIDS cases are in these countries.
B. Because these people are making AIDS neutralizing antibodies.
C. Because they have large amounts of virus after at least three years of infection.
D. Because their bodies contain enzymes that glow when the virus enters a cell.

22. Which statement is the most appropriate summary of the article?

A. Scientists have found a vaccine, they hope to encourage a person’s immunity to fight virus.
B. Scientists have found two antibodies which can fight most strains of HIV and may lead to a vaccine.
C. Researchers have studied blood samples to determine which antibodies lead to more resistance to the virus.
D. Scientists have found a new strain of HIV they hope will lead to a new vaccine.
Sample Test 1

READING SUB-TEST – ANSWER KEY

PART A: QUESTIONS 1-20

1. C
2. B
3. B
4. C
5. A
6. D
7. D
8. Resveratrol
9. apoptosis
10. 693
11. Bacillus cereus
12. endothelial cells
13. blood vessel function
14. injuries
15. French paradox
16. heart health
17. drinking habits
18. Beer drinking
19. anti-carcinogenic
20. middle age

PART B: QUESTIONS 1-6

1. B can be waived through comparison to a similar legally marketed device.
2. A use a form which exclusively contains acknowledgment of receipt of the Notice.
4. B how the ministry is being reorganized
5. A chemical combustion.
6. B for describing how the differences could impact the study findings.

PART C: QUESTIONS 7-14

7. B aspects of our lives that researchers believe could be killing us.
8. A it is undeniable that alcohol use causes cancer.
9. D Tobacco and asbestos are less likely to cause cancer than alcohol consumption.
10. B Ways that alcohol can trigger cancer.
12. C The more you drink, the greater the risk of cancer.
13. C the evidence that alcohol can prevent or treat heart disease is inconclusive.
14. D drinking two standard drinks a day or less.

PART C: QUESTIONS 15-22

15. A By stopping the virus from proliferating inside the patient’s system.
16. C 33 million people globally.
17. D Masses of research has been done into curing AIDS but none has been successful.
18. B It is a procedure for searching for AIDS-combating antibodies in the blood of AIDS victims.
20. C Asymptomatic HIV patients, mostly from the third world.
21. B Because these people are making AIDS neutralizing antibodies.
22. B Scientists have found two antibodies which can fight most strains of HIV and may lead to a vaccine.