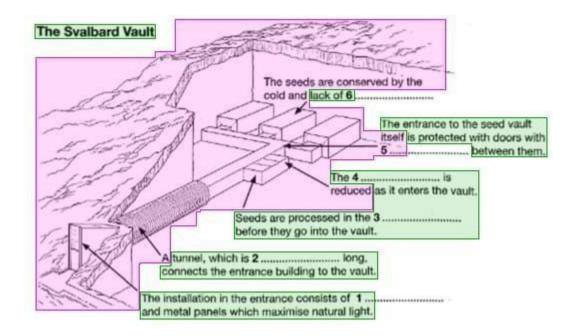
PASSAGE 1

Seed vault guards' resources for the future Fiona Harvey paid a visit to a building whose contents are very precious

- A. About 1,000 km from the North Pole, Svalbard is one of the most remote places on earth. For this reason, it is the site of a vault that will safeguard a priceless component of our common heritage the seeds of our staple crops. Here, seeds from the world's most vital food crops will be locked away for hundreds or even thousands of years. If something goes wrong in the world, the vault will provide the means to restore farming. We, or our descendants, will not have to retreat thousands of years of agriculture from scratch.
- B. Deep in the vault at the end of a long tunnel, are three storage vaults which are lined with insulated panels to help maintain the cold temperatures. Electronic transmitters linked to a satellite system monitor temperature, etc. and pass the information back to the appropriate authorities at Longycarbyen and the Nordic Gene Bank which provide the technical information for managing the seed vaults. The seeds are placed in sealed boxes and stored on shelves in the vaults. The minimal moisture level and low temperature ensure low metabolic activity. The remote location, as well as the rugged structure, provide unparalleled security for the world's agricultural heritage.
- c. The three vaults are buried deep in the hillside. To reach them, it is necessary to proceed down a long and surprisingly large corridor. At 93.3 metres in length, it connects the 26-metre long entrance building to the three vaults, each of which extends a further 27 metres into the mountain. Towards the end of this tunnel, after about 80 metres, there are several small rooms on the right-hand side. One is a transformer room to which only the power company officials have access this houses the equipment needed to transform the incoming electrical current down to 220 volts. A second is an electrical room housing control for the compressor and other equipment. The boiler room is an office which can be heated to provide comfortable working conditions for those who will make an inventory of the samples in and out of the vault.
- **D.** Anyone seeking access to the seeds has to pass through four locked doors: the heavy steel entrance doors, a second door approximately 90 metres down the tunnel and finally the two keyed doors separated by an airlock, from which it is possible to proceed directly into the seed vaults. Keys are coded to allow access to different levels of the facility. A work of art will make the vault visible for miles reflective sheets of steel and mirrors which form an installation acting as a beacon. It reflects polar light in the summer months, while in the winter, a network of 200 fibre-optic cables will give the piece a muted greenish-turquoise and white light. Cary Fowler, the mastermind behind the vault, stands inside the echoing cavern. For him, this is the culmination of nearly 30 years of work. 'It's an insurance policy,' he explains, 'very cheap insurance policy when you consider what we're ensuring the earth's biological diversity.'
- E. Seeds are being brought here from all over the world, from seed banks created by governments, universities and private institutions. Soon, there will be seed varieties from at least 100 crops in the Svalbard vault extending to examples of all of the 1.5 million known crop seed varieties in the world. If any more are unearthed, either in the wild or found in obscure collections, they can be added, too the vault has room for at least 4.5 million samples. Inside the entrance area, it is more than 10°C below freezing, but in the chambers where the seeds are kept, refrigerators push down the temperature even further, to -18°C. At this temperature, which will be kept constant to stop the seeds germinating or rotting, the wheat seeds will remain viable for an estimated 1,700 years.
- F. Svalbard's Arctic conditions will keep the seeds cold. In order to maintain the temperature at a constant -10° C to -20°C, the cold Arctic air will be drawn into the vault during the winter, automatically and without human intervention. The surrounding rock will maintain the temperature requirements during the extremely cold season and, during warmer periods, refrigeration equipment will engage. Looking out across the snow-covered mountains of Svalbard, it is hard not to feel respect for the 2,300 or so people who live here, mainly in Longyearbyen, a village a few miles away. There are three months without light in winter.
- G. Svalbard is intended 3s the seed bank of last resort. Each sample is made up of a few hundred seeds, sealed inside a watertight package which will never be tampered with while it is in the vault. The packages of seeds remain the property of the collections they have come from. Svalbard will disburse samples 'only if all the other seeds in other collections around the world are gone,' explains Fowler. If seeds do have to be given out, those who receive them are expected to germinate them and generate new samples, to be returned to the vault.

Questions 1-6

Label the diagram below. Choose **NO MORE THAN TWO WORDS OR A NUMBER** from the passage for each answer. Write your answers in boxes 1-6 on your answer sheet.



Question 7-13

Do the following statements agree with the information given in Reading Passage 1?

In boxes 7-13 on your answer sheet, write

TRUE, if the statement agrees with the information

FALSE, if the statement contradicts the information

NOT GIVEN, if there is no information given on this

- 7. The vault has the capacity to accommodate undiscovered types of seed at a later date.
- 8. There are different levels of refrigeration according to the kinds of seeds stored.
- 9. During winter, the flow of air entering the vault is regularly monitored by staff.
- 10. There is a back-up refrigeration system ready to be switched on if the present one fails.
- 11.. The people who work at Svalbard are mainly locals.
- **12** Once a seed package Is In the vault, it remains unopened.
- 13. If seeds are sent from Svalbard to other banks, there is an obligation for the recipient to send replacements back.

Reading Passage 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 below.

What cookbooks really teach us

- A. Shelves bend under the weight of cookery books. Even a medium-sized bookshop contains many more recipes than one person could hope to take in a lifetime. Although the recipes in one book are often similar to those in another, their presentation varies wildly, from an array of vegetarian cookbooks to instructions on cooking the food that historical figures might have eaten. The reason for this abundance is chat cookbooks promise to bring about a kind of domestic transformation for the user. The daily routine can be put on one side and they liberate the user, if only temporarily. To follow their instructions is to turn a task which has to be performed every day into an engaging, romantic process. Cookbooks also provide an opportunity to delve into distant cultures without having to turn up at an airport to get there.
- B. The first Western cookbook appeared just over 1,600 years ago. De re couquinara (it means 'concerning cookery') is attributed to Roman gourmet named Apicius. It is probably a compilation of Roman and Greek recipes, some or all of them drawn from manuscripts that were later loss. The editor was sloppy, allowing several duplicated recipes to sneak in. Yet Apicius's book set the tone of cookery advice in Europe for more than a thousand years. As a cookbook, it is unsatisfactory with very basic instructions. Joseph Vehling, a chef who translated Apicius in the 1930s, suggested the author had been obscure on purpose, in ease his secrets leaked out.
- c. But a more likely reason is that Apicius's recipes were written by and for professional cooks, who could follow their shorthand. This situation continued for hundreds of years. There was no order to cookbooks: a cake recipe might be followed by a mutton one. But then, they were not written for careful study. Before the 19* century few educated people cooked for themselves. The wealthiest employed literate chefs; others presumably read recipes to their servants. Such cooks would have been capable of creating dishes from the vaguest of instructions.
- **D.** The invention of printing might have been expected to lead to greater clarity but at first, the reverse was true. As words acquired commercial value, plagiarism exploded. Recipes were distorted through reproduction. A recipe for boiled capon in Vk Good Huswives Jewell, printed in 1596, advised the cook to add three or four dates. By 1653. when the recipe was given by a different author in A Book of Fruits & Flowers, the cook was told to see the dish aside for three or four days.

- E. The dominant theme in 16th and 17th-century cookbooks was ordered. Books combined recipes and household advice, on the assumption that a well-made dish, a well-ordered larder and well-disciplined children were equally important. Cookbooks thus became a symbol of dependability in chaotic times. They hardly seem to have been affected by the English civil war or the revolutions in America and France.
- F. In the 1850s, Isabella Becton published the Book of Household /Management. Like earlier cookery writers she plagiarized freely, lifting not just recipes bur philosophical observations from other books. If Becton's recipes were not wholly new. though, the way in which she presented them certainly was. She explains when the chief ingredients arc most likely to be in season, how long the dish will take to prepare and even how much it is likely to cost. Bee ton's recipes were well suited to her times. Two centuries earlier, an understanding of rural ways had been so widespread that one writer could advise cooks to heat water until it was a little hotter than milk comes from a cow. By the 1850s Britain was industrializing. The growing urban middle class needed details, and Becton provided them in the hill.
- G. In France, cookbooks were fast becoming even more systematic. Compare with Britain, France had produced few books written for the ordinary householder by the end of the 19th century. The most celebrated French cookbooks were written by superstar chefs who had a clear sense of codifying a unified approach to sophisticated French cooking. The 5.000 recipes in Auguste Escoffier's Le Guide Culinaire (The Culinary Guide), published in 1902, might as well have been written in stone, given the book's reparation among French chefs, many of whom still consider it the definitive reference book.
- H. What Escoffier did for French cooking. Fannie Farmer did for American home cooking. She not only synthesized American cuisine; she elevated it to the status of science. 'Progress in civilization has been accompanied by progress in cookery,' she breezily announced in The Boston Cooking-School Cook Book, before launching into a collection of recipes that sometimes resembles a book of chemistry experiments. She was occasionally over-fussy. She explained that currants should be picked between June 28th and July 3rd, but not when it is raining. But in the main, her book is reassuringly authoritative. Its recipes arc short, with no unnecessary chat and no unnecessary spices.
- In 1950, Mediterranean Food by Elizabeth David launched a revolution in cooking advice in Britain. In some ways, Mediterranean Food recalled even older cookbooks but the smells and noises that filled David's books were not mere decoration for her recipes. They were the point of her books. When she began to write, many ingredients were not widely available or affordable. She understood this, acknowledging in a later edition of one of her books that 'even if people could not very often make the dishes here described, it was stimulating to think about them.' David's books were not so much cooking manuals as guides to the kind of food people might well wish to eat.

Questions 14-16

Complete the summary below.

Choose NO MORE THAN TWO WORDS from the passage for each answer. Write your answers in boxes 14-16 on your answer sheet.

Why are there so many cookery books?

Questions 17-21 Reading Passage 2 has nine paragraphs, A-I.

Which paragraph contains the following information?

Write the correct letter, A-I, in boxes 17-21 on your answer sheet. NB You may use any letter more than once.

- 17. cookery books providing a sense of stability during periods of unrest
- 18. details in recipes being altered as they were passed on
- 19. knowledge which was in danger of disappearing
- 20. the negative effect on cookery books of a new development
- 21. a period when there was no need for cookery books to be precise

Questions 22-26

Look at the following statements (Questions 22-26) and list of books (A-E) below. Match each statement with the correct book A-E.

Write the correct letter A-E. In boxes 22-26 on your answer sheet.

- 22. Its recipes were easy to follow despite the writer's attention to detail.
- 23. Its writer may have deliberately avoided passing on details.
- 24. It appealed to ambitious ideas people have about cooking.

- 25. Its writer used ideas from other books but added additional related information.
- **26.** It put into print ideas which are still respected today.

List of cookery books

- A. De re couquinara
- B. The Book of Household Management
- **C.** Le Guide Culinaire
- D. The Boston Cooking-School Cook Book
- E. Mediterranean Food

Reading Passage 3

You should spend about 20 minutes on Questions 26-40

Is there more to video games than people realize?

- A. Many people who spend a lot of time playing video games insist that they have helped them in areas like confidence-building, presentation skills and debating. Yet this way of thinking about video games can be found almost nowhere within the mainstream media, which still tend to treat games as an odd mix of the slightly menacing and the alien. This lack of awareness has become increasingly inappropriate, as video games and the culture that surrounds them have become very big business indeed.
- **B.** Recently, the British government released the Byron report into the effects of electronic media on children. Its conclusions set out a clear, rational basis for exploring the regulation of video games. The ensuing debate, however, has descended into the same old squabbling between partisan factions: the preachers of mental and moral decline, and the innovative game designers. In between are the gamers, busily buying and playing while nonsense is talked over their heads.
- c. Susan Greenfield, a renowned neuroscientist, outlines her concerns in a new book. Every individual's mind is the product of a brain that has been personalized by the sum total of their experiences; with an increasing quantity of our experiences from very early childhood taking place 'on-screen' rather than in the world, there is potentially a profound shift in the way children's minds work. She suggests that the fast-paced, second-hand experiences created by video games and the Internet may inculcate a worldview that is less empathetic, more risk-taking and less contemplative than what we tend to think of as healthy.
- D. Greenfield's prose is full of mixed metaphors and self-contradictions and is perhaps the worst enemy of her attempts to persuade. This is unfortunate, because however many technophiles may snort, she is articulating widely held fears that have a basis in fact. Unlike even their immediate antecedents, the latest electronic media are at once domestic and work-related, their mobility blurring the boundaries between these spaces, and video games are at their forefront. A generational divide has opened that is in many ways more profound than the equivalent shifts associated with radio or television, more alienating for those unfamiliar with new' technologies, more absorbing for those who are. So how do our lawmakers regulate something that is too fluid to be fully comprehended or controlled?
- E. Adam Martin, a lead programmer for an online game's developer, says: 'Computer games teach and people don't even notice they're being taught.' But isn't the kind of learning that goes on in games rather narrow? 'A large part of the addictiveness of games does come from the fact that as you play you are mastering a set of challenges. But humanity's larger understanding of the world comes primarily through communication and experimentation, through answering the question "What if?' Games excel at teaching this too.'
- F. Steven Johnson's thesis is not that electronic games constitute a great, popular art, but that the mean level of mass culture has been demanding steadily more intellectual engagement from consumers. Games, he points out, generate satisfaction via the complexity of their virtual worlds, not by their robotic predictability. Testing the nature and limits of the laws of such imaginary worlds has more in common with scientific methods than with a pointless addiction, while the complexity of the problem's children encounter within games exceeds that of anything they might find at school.
- Greenfield argues that there are ways of thinking that playing video games simply cannot teach. She has a point. We should never forget, for instance, the unique ability of books to engage and expand the human imagination, and to give us the means of more fully expressing our situations in the world. Intriguingly, the video games industry is now growing in ways that have more in common with an old-fashioned world of companionable pastimes than with a cyber future of lonely, isolated obsessives. Games in which friends and relations gather round a console to compete at activities are growing in popularity. The agenda is increasingly being set by the concerns of mainstream consumers what they consider acceptable for their children, what they want to play at parties and across generations.
- H. These trends embody a familiar but important truth: games are human products and lie within our control. This doesn't mean we yet control or understand them fully, but it should remind us that there is nothing inevitable or incomprehensible about them. No matter how deeply it may be felt, instinctive fear is an inappropriate response to a technology of any kind. So far, the dire predictions many traditionalists have made about the 'death' of old-fashioned narratives and imaginative thought at the hands of video games cannot be upheld. Television and cinema may be suffering, economically, at the hands of interactive media. But literacy standards have failed to decline. Young people still enjoy sport, going out and listening to music and most research including a recent \$1.5m study funded by the US government suggests that even pre-teens are not in the habit of blurring game worlds and real worlds.
- **F.** The sheer pace and scale of the changes we face, however, leave little room for complacency. Richard Battle, a British writer and game researcher, says Times change: accept it; embrace it.' Just as, today, we have no living memories of a time before radio, we will soon live

in a world in which no one living experienced growing up without computers. It is for this reason that we must try to examine what we stand to lose and gain before it is too late.

Questions 27-32

Do the following statements agree with the views of the writer in Reading Passage 3? In the boxes on your answer sheet, write

- **YES,** if the statement agrees with the views of the writer
- NO, if the statement contradicts the views of the writer
- **NOT GIVEN**, if it is impossible to say what the writer thinks about this
- 27. Much media comment ignores the impact that video games can have on many people's lives.
- 28. The publication of the Byron Report was followed by a worthwhile discussion between those for and against video games.
- 29. Susan Greenfield's way of writing has become more complex over the years.
- 30. It is likely that video games will take over the role of certain kinds of books in the future.
- **31.** More sociable games are being brought out to satisfy the demands of the buying public.
- **32.** Being afraid of technological advances is a justifiable reaction.

Questions 33-37

Choose the correct letter A, B, C or D. Write the correct letter A-D in boxes on your answer sheet.

- 33. According to the writer, what view about video games does Susan Greenfield put forward in tier new book?
- A. They are exposing a child to an adult view of the world too soon.
- **B.** Children become easily frightened by some of the situations in them.
- **c.** They are changing the way children's view of the world develops.
- D. Children don't learn from them because they are too repetitive.
- 34. According to the writer, what problems are faced when regulating video games?
- A. The widespread and ever-changing use of games makes it difficult for lawmakers to control them.
- B. The appeal of the games to a younger generation isn't really understood by many lawmakers.
- c. The lawmakers try to apply the same rules to the games as they did to radio and television.
- **D.** Many lawmakers feel it is too late for the regulations to have much effect on the use of games.
- 35. What main point does Adam Martin make about video games?
- **A.** People are learning how to avoid becoming addicted to them.
- B. They enable people to learn without being aware of it happening.
- **c.** They satisfy a need for people to compete with each other.
- **D.** People learn a narrow range of skills but they are still useful.
- 36. Which of the following does Steven Johnson disagree with?
- A. the opinion that video games offer educational benefits to the user
- B. the attitude that video games are often labelled as predictable and undemanding
- c. the idea that children's logic is tested more by video games than at school
- D. the suggestion that video games can be compared to scientific procedures
- 37. Which of the following is the most suitable subtitle for Reading Passage 3?
- A. A debate about the effects of video games on other forms of technology.
- **B.** An examination of the opinions of young people about video games.
- **c.** A discussion of whether attitudes towards video games are outdated.
- **D.** An analysis of the principles behind the historical development of video games.

Questions 38-40

Complete each sentence with the correct ending, A-E, below.

Write the correct letter, A-E. on your answer sheet. **38.** There is little evidence for the traditionalists' prediction that important for people to accept the fact that **A.** young people have no problem separating their own lives from the ones they play on the screen.

- **B.** levels of reading ability will continue to drop significantly.
- **C.** new advances in technology have to be absorbed into our lives.
- **D.** games cannot provide preparation for the skills needed in real life.
- E. young people will continue to play video games despite warnings against doing so.