

**Questions 1–10**

26 Complete the form below.

Write **ONE WORD AND / OR A NUMBER** for each answer.**INSURANCE CLAIM FORM***Example***Client details**Name: **Greg** WilliamsPolicy reference: **1**Address: **2** 102 Street, NorthbridgePhone number: **3****Description of damage**Date of incident: Sunday, 17th JuneCause of incident: the house was damaged during a **4**

Items client is claiming for:

a pair of child's **5**a new **6**a torn **7**repairs to the door of the **8****Builder dealing with damage**Full name: Steven **9**Client to send in photographs of damaged **10** before building work starts

**Questions 11–12**

27 Which **TWO** opportunities does the Young Explorer Programme offer to participants?

Choose **TWO** letters, **A–E**.

- A Improving negotiation skills
- B Developing supportive relationships
- C Acquiring a new physical skill
- D Learning about environmental issues
- E Competing for an award

Questions 13–14

Which **TWO** subjects must groups study in their preliminary training?

Choose **TWO** letters, **A–E**.

- A Finding sources of water
- B Operating cooking equipment
- C Knowing how to follow a route
- D Searching for safe things to eat
- E Using wood to build shelters

Questions 15–20

What does the speaker say about each of the following tracks?

Write the correct letter A, B, C or D next to Questions 15–20.

Tracks

- 15** Northface
- 16** Blue River
- 17** Pioneer
- 18** Edgewater
- 19** Murray
- 20** Lakeside

- A** It is likely to be busy.
- B** It may be unsafe in places.
- C** It is currently closed to the public.
- D** It is divided into two sections.



Questions 21–26

28 Write the correct letter, **A**, **B** or **C**, next to **Questions 21–26**.

The Future of Work

- 21** Kiara and Finn agree that the articles they read on the future of work
- A mainly reflect the concerns of older employees.
 - B refer to the end of a traditional career path.
 - C tend to exaggerate the likely changes.
- 22** What point does Kiara make about the phrase ‘job title’?
- A It is no longer relevant in modern times.
 - B It shows colleagues how to interact with each other.
 - C It will only apply to people higher up in an organisation.
- 23** What issue affecting young employees is Finn most concerned about?
- A lack of job security
 - B income inequality
 - C poor chances of promotion
- 24** What is Kiara’s attitude towards the Richards-Greeves survey on work-life balance?
- A She thinks that the findings are predictable.
 - B She is curious about the kind of work the interviewees do.
 - C She believes it would be useful to know what the questions were.
- 25** Finn and Kiara agree that if employees are obliged to learn new skills,
- A they should learn ones which might be useful in another job.
 - B they should not be forced to learn them in their own time.
 - C they should receive better guidance from training departments.
- 26** When Finn talks about the impact of mobile technology, Kiara responds by
- A emphasising the possible disadvantages.
 - B describing her personal experience.
 - C mentioning groups who benefit most from devices.



Questions 27–30

28 What impact might Artificial Intelligence (AI) have on each of the following professions?

Choose **FOUR** answers from the box and write the correct letter, **A–F**, next to **Questions 27–30**.

Impact of Artificial Intelligence (AI)	
A	It will give them a greater sense of satisfaction.
B	It will encourage them to compete with one another.
C	It will reduce the level of stress they have.
D	It may eventually lead to their jobs disappearing.
E	It could prevent them from coming to harm.
F	It will enable them to do tasks they have not trained for.

- 27 Architects
- 28 Doctors
- 29 Lawyers
- 30 Sports referees



Questions 31–40

29 Complete the notes below.

Write **ONE WORD ONLY** for each answer.

The Klondike Gold Rush of Canada

The gold-seekers' journey to the Klondike river

- Many gold-seekers set off from Skagway in Alaska.
- The White Pass Trail was difficult because of rocks and **31** along the way.
- The Chilkoot Trail was very **32** so it could take three months.
- On both trails, gold-seekers gave up because of starvation, disease and the fear of **33**
- At Lake Bennet, gold-seekers stayed in a **34** until spring arrived.
- At Miles Canyon, it was necessary to hire an experienced **35** to continue the journey.
- Gold-seekers finally reached Dawson and the Klondike river.

The equipment gold-seekers had to take

- The **36** provided gold-seekers with a list.
- The list included
 - clothes, e.g. boots, thick coats
 - tea and food such as **37**
 - tools, e.g. rope and several **38**

People who became successful because of the gold rush

- Some business-minded people sold supplies or set up hotels.
- Jack London created a sense of **39** in his stories.
- Annie Hall Strong and Emma Kelly contributed to various **40** in Canada and the US.

You should spend about 20 minutes on **Questions 1–13**, which are based on Reading Passage 1 below.

Wooden Buildings

Using wood as a construction material for large buildings is an ancient practice. The 67-metre-high Sakyamuni Pagoda in China was constructed in 1056, while Japan's Hōryū-ji Temple is even older, dating from the 7th or 8th century. That these magnificent structures have survived for over a thousand years is evidence of wood's strength and durability as a building material. Still today, 80% of houses in the USA are built of wood. In Australia the proportion is slightly smaller since stone is also a popular choice, particularly in the southern states, while in New Zealand the figure is more like 85%. Certainly, there are problems associated with wooden constructions: wood can rot when exposed to water and is said to be a fire risk. However, with modern technology these issues can be eliminated, which has led to a dramatic renewal of interest in wood as a building material in recent years.

Today, architects and engineers recognise the potential of wood not only for private homes but also for larger multi-storey offices and apartment blocks. In 2015, a 52.8-metre wooden tower block was constructed in Norway, then a world record for an apartment block, but this was soon surpassed by a 53-metre student dormitory at the University of British Columbia in Canada. Then came the 84-metre HoHo building in Vienna, home to a hotel, offices and apartments. Although the HoHo building has a concrete core, most of the structure as well as the floors are built of wood. Many of these advances have been made possible by research at the Technical Institute in Graz, Austria, where new engineering systems based on wood construction have been pioneered.

A good example of these techniques is found at the Wood Innovation and Design Centre at the University of Northern British Columbia, Canada. The first stage in the construction of the building saw large planks of Douglas fir being fastened to one another with glue, which these days can be stronger than nails or screws. This produced large heavy sheets of wooden material; these became the basic structural components for the building. These sheets then had to be precision cut to create the thousands of columns and beams necessary – the team employed lasers for this purpose. Once the cutting work was complete, all the wooden components were taken to the site for assembly. The building was constructed one storey at a time, layer upon layer, not unlike the system used to make a large cake. Once the eighth and final storey was completed, the building reached a height of 30 metres and became a notable landmark in its neighbourhood. And, of course, one of the great advantages of wood comes at the end of a building's life, in around 100 years' time. When the Wood Innovation and Design Centre eventually has to be demolished, it will be possible for its principal building material to be recycled, which is not usually practical with steel or concrete.

Other significant wooden buildings are to be found in locations around the world. Perhaps not surprisingly, given that the Hōryū-ji Temple may be the oldest large wooden building in the world, Japanese engineers are at the forefront of this process. One thing that has been learned from maintaining the Hōryū-ji Temple over many centuries is that it is often simpler to make major repairs to wooden structures than to those made of concrete and steel. Until quite recently, regulations in Japan have made the construction of very large wooden structures difficult. However, in recognition of

new technologies, these are being relaxed by the government, with the result that ever more ambitious projects are being announced. Perhaps the most radical example is the proposed Sumitomo Tower, a skyscraper of 70 storeys to be built largely of wood in central Tokyo; its completion date is 2041.

Because wood is more flexible than steel, it has great potential in countries prone to earthquakes, such as Japan and New Zealand. Engineers in New Zealand believe that wood construction can significantly improve building safety in the event of a natural disaster, as has been demonstrated at the new Wynn Williams House. The wood has been left exposed inside the house to showcase how this type of construction provides attractive interiors as well. Another advantage of wood is that it is so light, particularly when compared to steel and concrete. In Australia, the benefits of light weight have been taken advantage of in the city of Melbourne, where a large wooden library has been constructed directly beside water, on land so soft that a heavier building would have been impossible. Furthermore, wood is advantageous even in extreme climates. In Finland, where winter temperatures can fall to -30°C , wood provides all the load-bearing structures for the Puukuokka Block, but also guarantees excellent heat insulation as well.

As wood construction technologies continue to develop, it seems probable that architects and engineers will dream up ever more uses for this practical, flexible and beautiful building material.

Questions 1–4

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

In boxes 1–4 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 on this*

- 1 More houses are built of wood in Australia than in the USA.
- 2 There are solutions to the problems of building with wood.
- 3 Several different species of tree were used to construct the HoHo building.
- 4 Research at the Technical Institute in Graz improved wooden building technology.

Questions 5–8

Complete the flow-chart below.

Write **ONE WORD ONLY** from the passage for each answer.

Write your answers in boxes 5–8 on your answer sheet.

Building the Wood Innovation and Design Centre

Wooden planks were joined together using **5**.....



6..... were then used to cut this material accurately.



The wood was taken to the site.



The building was constructed in the same way a **7**..... is put together.



In about 100 years' time, the wood can be **8**.....

Questions 9–13

Complete the notes below.

Write **NO MORE THAN TWO WORDS** for each answer.

Write your answers in boxes 9–13 on your answer sheet.

Other Significant Wooden Buildings

Japan

- Experience with the Hōryū-ji Temple proves that **9**..... are easier with wood.
- New technologies and new **10**..... make large buildings such as the Sumitomo Tower possible.

Other countries

- Wynn Williams House in New Zealand is earthquake-proof and is an example of how wooden buildings can have **11**.....
- Wood is so light that a new library in Australia was built right next to **12**.....
- Finland's Puukuokka Block illustrates that wood provides good **13**..... in addition to structural strength.

Exam Practice Test 5 Reading Passage 2

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

Questions 14–19

Reading Passage 2 has six paragraphs, **A–F**.

Choose the correct heading for each paragraph from the list of headings below.

Write the correct number, **i–viii**, in boxes 14–19 on your answer sheet.

List of Headings

- AI can improve the profitability of sporting businesses
- ii** Responses to criticisms of AI in sports coaching
- iii** A contrast between coaching today and in the past
- iv** An academic outlines some of the advantages of AI in sport
- v** The businesses responsible for creating AI software
- vi** The use of AI to decide the results of a competition
- vii** An academic study into a team sport in one country
- viii** The uses of AI in coaching a range of different sports

- 14** Paragraph A
- 15** Paragraph B
- 16** Paragraph C
- 17** Paragraph D
- 18** Paragraph E
- 19** Paragraph F

Artificial Intelligence in Sport

A

The first sports game was televised in the USA more than fifty years ago. Over the following decades television provided sports coaches with a wealth of information to analyse. By viewing recordings, they could study the number of passes received, tackles avoided, distances covered, speeds achieved and a host of other factors relating to the performance of their teams or athletes. Most of this data, though, consisted of bare statistics without any meaningful context. However, the use of artificial intelligence (AI) is now enabling an alternative approach to coaching. AI means the development of computer systems that can perform tasks usually associated with human intelligence, such as decision making. Increasingly, computers are being trained to understand the rules and objectives of sports so they can coach more directly. AI can analyse not only a player's actions, but also relate those actions to the wider context, including the directives of the coach and the actions of other players. Sports scientists believe that AI is revolutionising sports coaching by analysing patterns of behaviour in ways simply not possible before.

B

There may be limitless ways in which AI technology can be developed, but certain practical applications are already apparent. Recently, a research experiment was conducted into the Spanish football league using an AI algorithm to analyse the passing strategies of 20 teams. The research revealed that two teams, Barcelona and Real Madrid, had more than 150 recurring passing patterns. However, the algorithm detected just 31 passing patterns used by Atlético Madrid. All of Atlético's other plays were one-offs that were never repeated, and the team won the league that season. One conclusion seems to be that teams with a less predictable style of play win more games. What's more, according to Dr Johann Muller, a sports scientist who has studied the Spanish research findings, the number of injuries a team suffers increases when they play in a style that prioritises offence.

C

Since then, there has been a great deal of interest in the potential of AI. Professor of sports education Rebecca Graves believes that AI can provide coaches with invaluable insights. 'Tactics were once closely guarded secrets,' says Professor Graves, 'but now a coach with access to AI can identify how a rival team is likely to play a match based on historic form. Once this was largely guesswork but now it can be achieved with some confidence.' The expense of AI technology means it will probably remain beyond the reach of all but elite teams, but among this group the implications are enormous. Professor Graves argues that AI allows preparations for a match to be tailored to individual players with much greater precision. She identifies fitness work, skills development, diet and numerous other factors that can be minutely customised, based on an individual's particular strengths and weaknesses.

D

Part of the appeal of AI lies in its versatility. Ice hockey coaches in Finland are using AI to analyse the success of different plays. An Indian company has employed wearable technology developed in other fields to analyse stride patterns. This analysis has allowed its technicians to develop sneakers in various styles aimed at both long- and short-distance runners. Coaching practices in professional basketball, American football and tennis are also being transformed by AI. In addition, the technology has applications in highly technical sports such as car racing. Coaches involved in the National Association for Stock Car Auto Racing (NASCAR) believe that AI algorithms not only help drivers go faster but also enhance the safety of the sport because of their ability to monitor and predict potential problems.

E

AI doesn't get tired, has extraordinary powers of vision, particularly for objects moving at speed, and is capable of making complex calculations very quickly. For all these reasons AI is increasingly being used in the high-pressure world of judging gymnastics performances.

Research has shown that, particularly over a whole day's worth of events, computers are just as reliable as human judges when it comes to giving gymnasts a score. However, computer scientist Henri Simeonson has been quick to warn about some potential difficulties. In particular, Simeonson is concerned that AI is vulnerable to hackers, who might be able to influence the outcome of a tournament.

F

It should not be forgotten, either, that many sports stars and sports teams are commercially dependent on their fans. If sufficient supporters do not buy tickets to games or pay to view a recording, the

teams might struggle to survive. But now teams and stars are making increasing use of chatbots and other 'virtual assistants' to provide fans with statistics, news and background information about their favourite players. Another innovation is seen in Minor League Baseball in the USA, which is promoting the sport and seeking new fans with the use of AI-enhanced journalism. In this way baseball is keeping supporters informed with all the up-to-the-minute developments in ways not possible with more traditional approaches. Analysts believe these sorts of initiatives are crucial to increasing a player or team's revenue stream. It's just one more way that sports stand to benefit from AI technologies, on and off the field.

Questions 20 and 21

The list below gives some ways coaches could use AI.

Choose **TWO** letters, **A–E**.

Write the correct letters in boxes 20 and 21 on your answer sheet.

Which **TWO** of these are proposed by Professor Rebecca Graves?

- A** speeding up analysis of data
- B** personalising training programmes
- C** improving mental toughness
- D** reducing cost of sports coaching
- E** identifying opponents' game plans

Questions 22–26

Complete the sentences below.

Choose **ONE WORD ONLY** from the passage for each answer.

Write your answers in boxes 22–26 on your answer sheet.

- 22** Analysis of AI data by Dr Johann Muller suggests that teams which play defensively have fewer
- 23** An Indian company has designed new using AI technology.
- 24** The use of AI in NASCAR is believed to improve as well as driver performance.
- 25** Henri Simeonson says that might be able to disrupt AI and make competitions unfair.
- 26** In Minor League Baseball, a type of powered by AI is giving the sport greater publicity.

You should spend about 20 minutes on **Questions 27–40**, which are based on Reading Passage 3 below.

The Influence of the Crime Writer Agatha Christie

Crime fiction books, in which detectives hunt for the perpetrators of crimes, have been popular with readers for many decades – so popular, in fact, that at a recent London Book Fair sales of the genre overtook general fiction for the first time ever, a development that had been widely anticipated. Commercial success, of course, does not impress everyone and there are those who believe crime fiction should not be held in such high regard. Prominent in this group is Sebastian Franklin, who has argued that most crime fiction books better resemble crossword puzzles than literature. His view is shared by other literary critics. However, increasingly this is a minority opinion as crime fiction becomes recognised around the world as a rich and dynamic literary genre in its own right.

Crime writing really came to prominence in the 1920s and 30s with the books of the British author Agatha Christie, and to a slightly lesser extent the American James M. Cain. Agatha Christie was a prolific writer, publishing more than 60 detective novels over a 50-year period, beginning in 1920. However, the majority of the general public have never picked up one of her books and are more familiar with Christie from the numerous adaptations of her work for films. The colourful locations around the world where Christie set many of her stories were not fictional depictions, but were informed by her extensive travels, on the Orient Express train, to Cairo and the River Nile, and elsewhere. Her memoir, *Come, Tell Me How You Live*, published in 1946, is a non-fiction account of these real-life travels, so is unique among Christie's publications. Success brought Christie considerable wealth and international fame, though she never lost her appetite for work, continuing writing and publishing until shortly before her death in 1976.

Without doubt there are certain elements that tend to be repeated in Christie's books. The stories generally revolve around a well-off if not aristocratic circle of people, whose privileged lives are thrown into chaos by an unexplained crime. What's more, the location is often a confined space of some sort: a train, an island, a boat, an isolated house or a village. This is quite different, for example, to the world of the fictional detective Sherlock Holmes, who often has as his hunting ground the entire city of London. But the influence of Christie's sheltered, secluded locations has been immense, for they have been used in countless television series ever since.

The writer Michael Utley argues that Christie's characters lack depth and are not convincing people we can believe in. This is a not infrequent complaint, but it is quite untrue. Christie was a perceptive observer of human nature and psychology and she put the traits of people she knew into many of her fictional characters. Part of the reason her appeal has been so widespread is that she wrote about human relationships in a way so many of us can relate to. Her very first book, *The Mysterious Affair at Styles*, features the amateur detective Hercule Poirot. Poirot and Miss Marple are Christie's two best known and most frequently imitated characters precisely because they are so well drawn and believable. Further evidence of Christie's ability at characterisation was provided by a recent survey. The survey asked readers to identify the villain revealed in the final pages of Christie's sixteenth book, *Murder on the Orient Express*. Most readers could not recall, because for them the really important aspect of the book had been the interplay between the characters, not the outcome. The truth is that Christie's characters were one of her greatest achievements as a writer.

The books are also action-packed, no less so than today's most popular thrillers. Christie mastered the art of the page-turner: events unfold so quickly and unpredictably that we keep reading to find out what happens next. The most significant consequence is that it is so simple to overlook vital clues. It is worth reading a Christie book a second time just to notice how carefully she hides crucial information about the criminal's identity. It was there all along, but we just fail to see it because she has created such tension and so many exciting distractions.

Attempts to retell Christie's stories in contemporary times have largely been unsuccessful; they work best in their original early twentieth-century settings and cannot accommodate mobile phones, computers and DNA analysis. But that does not mean her influence has come to an end. Indeed, a new generation of global crime writers is emerging in nations as diverse as Brazil, Singapore, South Korea, India and Nigeria, to name but five. And though each new writer adds something of their own, they all employ conventions first established by Christie. If we take just one of her books, *The Murder of Roger Ackroyd*, we find near perfect examples of conventions that are still used today: tight plotting, clever sub-plots, unexpected twists, perceptive characterisation. Perhaps this is why Christie herself is believed to have ranked *The Murder of Roger Ackroyd* above all her other work. Certainly, the digital revolution has transformed crime fighting. But a survey of contemporary crime writing shows that Agatha Christie's legacy is more important now than at any time previously, at the very point when crime writing has become the most popular of all book genres.

Questions 27–32

Do the following statements agree with the claims of the writer in Reading Passage 3?

In boxes 27–32 on your answer sheet, write

- YES** *if the statement agrees with the claims of the writer*
NO *if the statement contradicts the claims of the writer*
NOT GIVEN *if it is impossible to say what the writer thinks about this*

- 27** Sales of crime fiction were surprisingly high at a recent London Book Fair.
28 Literary critics such as Sebastian Franklin think that crime fiction is overrated.
29 Agatha Christie and James M. Cain admired each other's writing.
30 Most people know about Christie from films rather than books.
31 Christie's descriptions of international locations were based on her own experience.
32 Christie enjoyed the wealth and fame she achieved through writing.

Questions 33–36

Choose the correct answer, A, B, C or D.

Write the correct letter in boxes 33–36 on your answer sheet.

- 33** What is the writer doing in the third paragraph?
A discussing one weakness of Christie's style
B identifying a writer who influenced Christie
C contrasting different techniques Christie used
D listing some features of a typical Christie story
- 34** The writer refers to Michael Utley in order to
A reject a common criticism of Christie's books.
B compare two of Christie's better-known books.
C explain the conclusion of one of Christie's books.
D suggest that each of Christie's books was different.
- 35** What point does the writer make about Christie's writing style in the fifth paragraph?
A Occasionally, the stories do not make sense.
B Little happens compared to modern stories.
C Important evidence is very easy to miss.
D Some unnecessary details are included.
- 36** What does the writer conclude about Christie in the final paragraph?
A Her influence is slowly beginning to decrease.
B She is more influential today than ever before.
C One book was more influential than the others.
D She has only influenced writers in certain countries.

Questions 37–40

Complete each sentence with the correct ending, **A–F**, below.

Write the correct letter, **A–F**, in boxes 37–40 on your answer sheet.

- 37** Christie's book *Come, Tell Me How You Live*,
38 Christie's first book, *The Mysterious Affair at Styles*
39 Christie's sixteenth book, *Murder on the Orient Express*
40 *The Murder of Roger Ackroyd*, published in 1926,

- A** is an example of a book disliked by many critics.
B has sold more copies than her other books.
C has illustrated the fact that readers cannot remember the ending.
D was Christie's own favourite from among her books for good reasons.
E is different from all of her other books.
F introduced one of her most famous and most often copied characters.