

Test 1 answer key with extra explanations

Reading

Reading Passage 1

Questions 1–13

1 The correct answer is FALSE: The text refers to the layer of fat under polar bears' skin and the fact that 'Humans with comparative levels of adipose tissue would be considered obese and would be likely to suffer from diabetes and heart disease.' It then contrasts humans and polar bears, saying 'Yet the polar bear experiences no such consequences.' The phrase 'no such consequences' refers back to obesity, diabetes and heart disease in humans: this means that polar bears do not suffer these health problems as a result of their fat.

2 The correct answer is FALSE: The text says that the study by Liu and colleagues 'compared the genetic structure of polar bears with that of their closest relatives from a warmer climate, the brown bears.' In other words, they compared two different species of bear; they did not compare two different groups of polar bears.

3 The correct answer is NOT GIVEN: The text says that Liu and colleagues compared polar bears and brown bears genetically, but it does not say whether they were the first researchers to do this.

4 The correct answer is TRUE: The text says, 'Liu and his colleagues found the polar bears had a gene known as APoB, which reduces levels of low-density lipoproteins (LDLs) – a form of "bad" cholesterol.' Having a gene which reduces the levels of 'bad' cholesterol has the same meaning as controlling this by genetic means.

5 The correct answer is TRUE: The text describes how female polar bears remain in dens in the snow throughout the winter and then says, 'This process results in six months of fasting, where the female bears have to keep themselves and their cubs alive'. The word 'fasting' means living without food for a period.

6 The correct answer is FALSE: The text refers to the period which female polar bears spend in their den over the winter and then says, 'Despite this, their bones remain strong and dense'. It also refers to Lennox and Goodship's findings that 'six months later, when they finally emerged from the den with their cubs, there was no evidence of significant loss of bone density'.

7 The correct answer is TRUE: The text says, 'If the mechanism of bone remodelling in polar bears can be understood, many bedridden humans, and even astronauts, could potentially benefit.' These are two examples of groups of people who could benefit from scientific developments based on the polar bear's mechanism for increasing bone density.

8 The correct answer is 'violent': The text says, 'Bears ... seem to be perceived as stupid and in many cases violent.'

9 The correct answer is 'tool': The text says, 'A male bear called GoGo in Tennoji Zoo, Osaka, has even been observed making use of a tool to manipulate his environment. The bear used a tree branch on multiple occasions to dislodge a piece of meat hung out of his reach.' The second sentence adds information to the first, specifying what the tool was and how the bear manipulated his environment; it explains that the 'tool' mentioned in the first sentence was a 'tree branch'.

10 The correct answer is 'meat': The text says, 'A male bear called GoGo in Tennoji Zoo, Osaka, has even been observed making use of a tool to manipulate his environment. The bear used a tree branch on multiple occasions to dislodge a piece of meat hung out of his reach.' The word 'dislodge' has a similar meaning to 'knock down' in this context: the bear used the branch to reach upwards and knock the piece of meat out of the tree.

11 The correct answer is 'photographer': The text says, 'A calculated move by a male bear involved running and jumping onto barrels in an attempt to get to a photographer standing on a platform four metres high.'

12 The correct answer is 'game': The text refers to Ames's study and says that she 'observed bears putting objects in piles and then knocking them over in what appeared to be a game'.

13 The correct answer is 'frustration': The text says, 'many bears have been seen to hit out at ice and snow – seemingly out of frustration – when they have just missed out on a kill'.

Questions 14–26

14 The correct answer is iv, 'A single certainty among other less definite facts': The text mentions that 'The evolution of the pyramid form has been written and argued about for centuries.' This means that people do not agree about the evolution of the pyramid form. It then says, 'However, there is no question that, as far as Egypt is concerned, it began with one monument to one king designed by one brilliant architect: the Step Pyramid of Djoser at Saqqara.' The phrase 'there is no question' means that although there is a lack of certainty about other subjects, this one fact is certain. **ix is incorrect:** This paragraph refers to questions, but there is no mention of unexpected questions.

15 The correct answer is vii, 'An idea for changing the design of burial structures': The text describes the design of tombs before the reign of Djoser, then says that Djoser's main official, Imhotep, 'conceived of building a taller, more impressive tomb for his king by stacking stone slabs on top of one another, progressively making them smaller, to form the shape now known as the Step Pyramid'. A burial structure is a synonym for 'tomb', and if someone conceives of something, this means that they had an idea or invented something new. **iii is incorrect:** This paragraph tells us about a king, but it does not say that he saved his people.

16 The correct answer is ii, 'A difficult task for those involved': The text mentions that 'Much experimentation was involved', which suggests that the construction of the pyramid was not a simple task. It then says, 'The weight of the enormous mass was a challenge for the builders'. If something is a challenge, it means that it is not easy to do.

17 The correct answer is v, 'An overview of the external buildings and areas': The text refers to the size of the Step Pyramid and the area it occupied, as well as the purpose of certain buildings, such as the temple. It also describes the outer wall and trench surrounding the complex. This paragraph is therefore an overview – a general description – of the outside of the pyramid site. **i is incorrect:** This paragraph does not refer to anything inside the pyramid.

18 The correct answer is i, 'The areas and artefacts within the pyramid itself': This paragraph begins by describing how different sections inside the pyramid – the burial chamber, tunnels and rooms – were arranged. It then describes some artefacts: the stone vessels which were found inside the pyramid. **v is incorrect:** This paragraph describes the areas *inside* the pyramid, not the external areas.

19 The correct answer is viii, 'An incredible experience despite the few remains': The text refers to ancient robbers, saying that 'all archaeologists found were a small number of [Djoser's] valuables overlooked by the thieves'. This means that there were few objects left in the pyramid. But it then goes on to say, 'There was enough left throughout the pyramid and its complex, however, to astonish and amaze the archaeologists who excavated it.' This tells us that even though there were few remains, the archaeologists still thought the discovery of them was amazing.

20 The correct answer is vi, 'A pyramid design that others copied': The text says that the Step Pyramid 'became the archetype which all the other great pyramid builders of Egypt would follow'. This means that all the other great pyramid builders copied the design of the Step Pyramid.

21 The correct answer is 'city': In Paragraph D, the text refers to the Step Pyramid and then says, 'The complex in which it was built was the size of a city in ancient Egypt'.

22 The correct answer is 'priests': In Paragraph D, the text says that the complex 'included a temple, courtyards, shrines and living quarters for the priests'. The phrase 'living quarters' has the same meaning as accommodation.

23 The correct answer is 'trench': In Paragraph D, the text says, 'the entire wall was then ringed by a trench 750 meters long and 40 meters wide'. If something rings another thing, it means that it goes all around it or encircles it.

24 The correct answer is 'location': In Paragraph D, the text refers to the false doors and then says, 'If someone wished to enter, he or she would have needed to know in advance how to find the location of the true opening in the wall.' This means that if visitors did not know the location of the real door, they would not have been able to enter.

25 and 26 The correct answers are B and D (in either order): B is correct because in Paragraph B, the text says, 'Djoser is thought to have reigned for 19 years, but some historians and scholars attribute a much longer time for his rule, owing to the number and size of the monuments he built.' This means that not everyone agrees about how long Djoser's reign was: some people think it was 20 years, while others think that it was much longer. **D is correct** because in Paragraph F, the text says, 'Djoser's grave goods, and even his body, were stolen at some point in the past and all archaeologists found were a small number of his valuables overlooked by the thieves.' If the archaeologists found 'a small number of his valuables', this means that they found a few of his possessions in his tomb.

A is incorrect: In Paragraph B, the text says that the Step Pyramid was built in stone rather than clay, but it does not say whether King Djoser had to be persuaded to use stone.

B is incorrect: In Paragraph D, the text says that Djoser was very proud of Imhotep's accomplishment. **E is incorrect:** The text does not say anything about Djoser's attitude towards other pyramids.

Questions 27–40

27 The correct answer is B: The text says, ‘3–14% of the global workforce will need to switch to a different occupation within the next 10–15 years, and all workers will need to adapt as their occupations evolve alongside increasingly capable machines’. This sentence tells us how many people will have to change the job that they do or the way that they work. The text then refers to AI as ‘one aspect of the disruptive effects of technology on the labour market’, meaning that AI is one of the causes of this change. **A is incorrect:** This paragraph tells us about the proportion of the labour force who will have to change their jobs because of AI; it does not specify what kinds of jobs these will be. **C is incorrect:** This paragraph tells us about the proportion of the labour force who will have to change their jobs because of AI; it does not say how many will have jobs in AI. **D is incorrect:** This paragraph explains the distinction between embodied and disembodied AI but does not say anything about their different impacts on workers.

28 The correct answer is D: The text says that Stella Pachidi ‘believes that some of the most fundamental changes are happening as a result of the “algorithmication” of jobs that are dependent on data rather than on production – the so-called knowledge economy’. If something results in fundamental changes in a particular area, this means that it is a key factor in current developments there. **A is incorrect:** This paragraph gives examples of the tasks previously needing human judgement which algorithms can now do, but it doesn’t say whether Pachidi believes this is having an influence the number of jobs available. **B is incorrect:** This paragraph does not say anything about people’s attitudes towards their occupations. **C is incorrect:** The text makes no reference to a decline in the production sector.

29 The correct answer is C: The text says, ‘Pachidi and colleagues even observed people developing strategies to make the algorithm work to their own advantage,’ and then quotes Pachidi saying, ‘We are seeing cases where workers feed the algorithm with false data to reach their targets’. If workers are giving the algorithm false data in order to reach their targets, this is a way of making sure that it produces the results that they want. **A is incorrect:** The text does not say that staff disagreed with the recommendations of AI. **B is incorrect:** The text does not say what the staff’s attitude towards AI was. **D is incorrect:** The text does not say that staff allowed AI to carry out tasks that they ought to do themselves.

30 The correct answer is D: The text refers to Ewan McGaughey’s research and then quotes him saying, ‘History is clear that change can mean redundancies. But social policies can tackle this through retraining and redeployment.’ The word ‘tackle’ has a similar meaning to handle. McGaughey gives the examples of retraining and redeploying workers as illustrations of ways that social policies can successfully handle changes in the job market. **A is incorrect:** What McGaughey challenges is the idea that new technologies are entirely to blame for unemployment: he acknowledges that redundancy is a negative thing and gives his views on how to deal with it. **B is incorrect:** The text refers to unemployment but does not say anything about the effect of mass unemployment on society. **C is incorrect:** The text refers to past and future job losses but does not compare them.

31 The correct answer is G: In the second paragraph, the text quotes Stella Pachidi talking about ‘the “algorithmicization” of jobs that are dependent on data rather than on production’. Saying that jobs are ‘dependent on data’ is the same as saying that they rely on information.

32 The correct answer is E: In the sixth paragraph, the text refers to Pachidi’s observations that workers sometimes begin to ‘learn through the “algorithm’s eyes” and become dependent on its instructions’. Becoming ‘dependent’ on AI’s instructions means the same as having a growing reliance on its recommendations.

33 The correct answer is C: In the sixth paragraph, the text says, ‘Alternative explorations – where experimentation and human instinct lead to progress and new ideas – are effectively discouraged.’ ‘Instinct’ has a similar meaning to intuition, ‘progress and new ideas’ has a similar meaning to innovation, and ‘discouraged’ has a similar meaning to prevented. The text is therefore saying that using experimentation and human instinct is discouraged in the workplace.

34 The correct answer is F: In the eighth paragraph, the text refers to the researchers and says, ‘Their objective is to make AI technologies more trustworthy and transparent, so that organisations and individuals understand how AI decisions are made.’ Having trust in something is a synonym for having confidence in something, so trying to make AI technology ‘more trustworthy’ has the same meaning as trying to increase people’s confidence in it.

35 The correct answer is B: In the tenth paragraph, Hamish Low refers to the effect of automation in the future and says, ‘The number of jobs will increase’.

36 The correct answer is A: In the third paragraph, Stella Pachidi says, ‘Organisations are attracted to using algorithms because they want to make choices based on what they consider is “perfect information”, as well as to reduce costs and enhance productivity.’ The phrase ‘Organisations are attracted to using algorithms’ has the same meaning as AI is appealing to businesses. Pachidi then goes on to give three reasons for this.

37 The correct answer is C: In the final paragraph, Ewan McGaughey says, ‘Just as the industrial revolution brought people past subsistence agriculture, and the corporate revolution enabled mass production, a third revolution has been pronounced.’ The industrial revolution and the corporate revolution are two major cultural shifts that occurred in previous centuries, and McGaughey highlights the parallels between the impact of these events and that of the current AI-driven changes by using the phrase ‘Just as’.

38 The correct answer is A: In the fourth paragraph, Stella Pachidi says, ‘But these enhancements are not without consequences’. The word ‘enhancements’ refers back to the advantages of algorithms mentioned in the previous paragraph. Pachidi then goes on to mention several negative consequences of AI in the workplace.

39 The correct answer is B: In the ninth paragraph, Hamish Low says, ‘The traditional trajectory of full-time education followed by full-time work followed by a pensioned retirement is a thing of the past.’ A ‘traditional trajectory’ has a similar meaning to a conventional path, and the phrase ‘a thing of the past’ means that this no longer exists. Low is therefore saying that career paths are now different from the conventional ones that people used to follow.

40 The correct answer is C: In the 13th paragraph, the text says, ‘McGaughey’s findings are a call to arms to leaders of organisations, governments and banks to pre-empt the coming changes with bold new policies that guarantee full employment, fair incomes and a thriving economic democracy.’ If something is ‘a call to arms’, it is calling on people to take action or measures. McGaughey’s findings are therefore encouraging authorities such as governments to make sure that there will be full employment and fair incomes: in other words, adequately paid work for everyone.