

I. Grammar and Vocabulary: find the best answer for each question.**PLEASE CIRCLE THE LETTER OF THE ANSWER THAT YOU HAVE CHOSEN**

- 1- How _____ do you brush your teeth? A- many B- often C- time D- regular
- 2- _____ have become essential in many companies.
A- The scientists B- Scientists C- Scientifics D- The scientifics
- 3- DNA-based technologies have increased our chances _____ many diseases.
A- to curing B- of curing C- for curing D- of cure
- 4- If you _____ near an oxygen tank, you may get severely burnt.
A- smoking B- smoke C- smoked D- have smoked
- 5- I don't know how _____ a car wheel! A- to replace B- replace C- replacing D- replaced
- 6- If they _____ you about it, you would have known how to react...
A- tell B- had told C- could told D- should have told
- 7- The children _____ for lying to their parents.
A- have punished B- will punished C- have been punished D- are punish
- 8- The component is _____ large to fit on this printed circuit board. A- to B- too C- so D- much
- 9- _____ tomorrow? A- Are you working B- Will you to work C- You work D- Are you going work
- 10- If Max did not live so far away, she _____ to give a hand for the house move.
A- rushed B- will rush C- had rushed D- would rush
- 11- How many times _____ London?
A- have you gone in B- did you go in C- were you to D- have you been to
- 12- _____ from Paris? A- What is the distance between London C- It is far, London
B- How far is London D- How much London is
- 13- "_____ is this pen?"
"One pound and twenty pence." A- How cost B- How many C- How much D- What
- 14- When you say 'you are exhausted' you mean _____.
A- you are thirsty C- you are very tired
B- you have no petrol left in your car D- your exhaust pipe has broken down
- 15- Last year I _____ the Eastern region and I loved it!
A- explored B- have explored C- has explored D- had explored
- 16- _____ politicians ever implement actions for the climate? A- Are B- Have C- Will D- When
- 17- They felt rather _____ in the report about vaccines.
A- interest B- interested C- interesting D- interessant
- 18- I need advice; _____ you get in touch with me? A- could B- must C- might D- mustn't
- 19- Try to avoid _____ late or you won't get any food and drink. A- be B- to be C- being D- ø
- 20- Stella is reading this article _____ more about data mining.
A- for to knows B- for know C- so to know D- to know
- 21- _____ you ever _____ about MOOC courses?
A- Did / hear B- Have / hear C- Had / hear D- Have / heard
- 22- Since our latest meeting I _____ thinking about your idea.
A- didn't stop B- haven't stopped C- am not stopping D- don't stop
- 23- Greg _____ his cousins next summer but he's not so sure yet.
A- might have visited B- may visit C- must be visiting D- could visited
- 24- This _____ be a lie, it sounds completely inconsistent and illogical! A- might B- can't C- may D- must

- 25- If I _____ to choose between these two towns, I don't know which one I would prefer living in.
A- had B- must C- will have D- am oblige
- 26- He was the best friend I _____ had in my life... until I met Matthew.
A- have already B- have never C- had still D- had ever
- 27- My neighbours usually _____ shopping when the supermarket opens at 8:30.
A- go B- goes C- went D- have gone
- 28- I haven't seen Mary _____ 2 weeks, I hope she is fine. A- since B- for C- during D- while
- 29- The whole group _____ part in the team-building exercise, believe me!
A- might taking B- may not take C- is bound to take D- will taken
- 30- This time next week they _____ their exams: they will be free at long last!
A- will have finished B- could finished C- may be finishing D- might finish
- 31- Hillary _____ promoted two years ago. A- get B- gets C- got D- has got
- 32- My car broke _____ on the motorway so I had to have it towed away.
A-away B- down C- up D- through
- 33- Brian cooks very well but he seems quite _____ make progress with learning how to play the guitar.
A- not be able to B- unable to C- to be not able D- not able
- 34- They _____ what to do at this very moment.
A- may wonder B- could be wondering C- must have wondered D- might to wonder
- 35- Steven _____ go out tonight, at least if his parents agree about it.
A- may B- mustn't C- can't D- ought
- 36- If pedestrians _____ bright yellow jackets at night, drivers would see them more easily.
A- wear B- worn C- wore D- will wear
- 37- They _____ walk such long distances but I doubt it... A- must B- are likely to C- will D- might
- 38- It's been a very long day. You _____ relax, or you'll waste your time trying to revise for your exam tonight!
A- would better B- had better C- would rather D- had rather
- 39- If I had heaps of money, I _____ some to charities.
A- had given B- would had given C- will give D- would give
- 40- He thanked me again and confirmed that he _____ last week's outing.
A- was enjoying B- had enjoyed C- enjoys D- will enjoy
- 41- _____ I speak to Tom, please? It's quite urgent. A- Am B- May C- Might D- Had
- 42- The shopkeeper _____ threatened with a knife when the alarm rang.
A- have been B- could have be C- is D- was being
- 43- Did you say you _____ to Amsterdam next month?
A- will drives B- would drive C- had driven D- drove
- 44- I haven't eaten cabbage _____ my visit at my parents' last summer. A- since B- ago C- for D- during
- 45- When I saw the stranger, I asked him why he _____ through the keyhole.
A- looks B- have looked C- was looking D- will look
- 46- I can't believe I _____ during my whole stay!
A- were monitored B- have been monitored C- monitored D- am monitoring
- 47- If you want to have a good time, I _____ you to watch that series.
A- advise B- advice C- council D- counsels
- 48- When _____ your first mobile phone? A- you got B- you get C- did you get D- had you
- 49- « Rucksacks and bags must _____ in the lockers », said the notice at the door of the museum.
A- be left B- be let C- leave D- live
- 50- You _____ film this top-secret area, it's strictly forbidden.
A- must have B- ought not C- may not D- will
- 51- People have to wear masks _____ avoid contamination. A- for B- for to C- so that D- in order to
- 52- Your pen is exactly the same _____ mine. A- of B- than C- that D- as

- 53- This article _____ the Chinese government. A- is critic on B- criticizes C- critics D- criticism
- 54- Some objects are malleable _____ others are so brittle they break easily.
A- which B- like C- whereas D- just as
- 55- The mayor _____ to make a speech tonight. A- is B- will C- is going to D- have
- 56- The engineer has just mentioned the information that _____ fundamental for the whole project.
A- were B- will been C- have been D- is
- 57- Did you stop _____ when you heard the fire alarm or did you think it was just a drill and stay in the office?
A- worked B- on working C- to work D- working
- 58- She heard that her nephew _____ his driving test soon.
A- would pass B- would take C- will take D- will pass
- 59- Grace _____ to arrive on time for the coming meeting, she has just texted me that her train was delayed.
A- was unable B- is bound C- is unlikely D- can't
- 60- If I _____ that they were traitors, I _____ to them!
A- have known / wouldn't talk C- didn't know / would have talk
B- knew / would have not talked D- had known / wouldn't have talked
- 61- _____ they agree about the deal? A- Did B- Have C- Are D- Was
- 62- The culprit was _____ tried for two robberies, not a murder; that makes quite a difference!
A- presently B- actually C- currently D- today
- 63- The whole town _____ by powerful torrents of water coming from the normally peaceful stream.
A- was flooded B- flooded C- have been inundated D- is inundate
- 64- If they _____, they would help more often. A- will B- can C- would D- could
- 65- Statistics _____ for a specific purpose. A- was gathered C- will gathered
B- are gather D- have been gathered
- 66- His aunt walks _____ the town hall every day. A- at B- out C- to D- over
- 67- They need a _____ in the warehouse so they have organized a series of job interviews.
A- worker B- salary C- employer D- executive
- 68- Did you _____ for two months? A- do you training period C- intern
B- have a placement work D- made a training course
- 69- I think that my parents _____ by their preconceptions.
A- have been biased B- have biased C- are biasing D- were bias
- 70- If Jasper _____ the grammar chapters, he _____ such a disastrous mark!
B- didn't revise / wouldn't have C- had revised / wouldn't have had A- revised / would have
D- revise / will not have
- 71- The elderly people _____ while we were cooking dinner.
A- were quietly chatting B- had chatted quietly C- are busily chatting D- had chatting busily
- 72- She moved to India, _____ was a surprise to her family. A- what B- which C- who D- whether
- 73- Please return the book _____ you borrowed it from. A- what B- who C- where D- that
- 74- Nathan is the student _____ mother is a surgeon. A- whom B- which C- who D- whose
- 75- My friends _____ a drink when they heard a knock on the door.
A- were having B- had C- haven't had D- didn't have
- 76- Come and have a look, the artist _____ to start a new caricature right now!
A- 'll B- is about C- should D- is unlikely to
- 77- The travelers have confirmed that those bags are _____. A- at them B- theirs C- their D- them
- 78- They've never asked _____ about the current situation. A- I B- his C- their D- us
- 79- First, we _____ to Denver, and next, we decided to visit the countryside for a change.
A- have driven B- drove C- had drive D- drive
- 80- Josh will tell me all about it when he _____ me tonight. A- call B- have called C- will call D- calls

II. READING COMPREHENSION: read the following texts carefully and choose the answer that best corresponds to each text/sentence.

Text 1: COP26: What was agreed at the Glasgow climate conference ?

Published on 15 November 2021 on bbc.com

A new global agreement - the Glasgow Climate Pact - was reached at the COP26 summit. It aims to reduce the ----- 101 ----- impacts of climate change - but some leaders and campaigners say it does not go ----- 102 ----- .

What was in the COP26 agreement?

The agreement – ----- 103 ----- not legally binding – will set the global agenda on climate change for the next decade:

Emissions

It was agreed countries will meet ----- 104 ----- year to pledge further cuts to emissions of carbon dioxide (CO2) - a greenhouse gas which causes climate change. This is to try to keep temperature rises within 1.5C -- which ----- 105 ----- say is required to prevent a "climate catastrophe". Current pledges, if met, will ----- 106 ----- limit global warming to about 2.4C.

Coal

For the first time at a COP conference, there was an explicit plan to reduce use of coal - which is responsible ----- 107 ----- -- 40% of annual CO2 emissions.

However, countries only agreed a weaker commitment to "phase down" ----- 108 ----- than "phase out" coal after a late intervention by China and India.

Developing countries

The agreement pledged to significantly increase money to help poor countries ----- 109 ----- with the effects of climate change and make the switch to clean energy. There's also the prospect of a trillion ----- 110 ----- a year fund from 2025. ----- 111 ----- some observers say the COP26 agreement represented the "start of a breakthrough", some ----- 112 ----- and Latin American countries felt not enough progress was ----- 113 -----.

Fossil fuel subsidies

World leaders agreed to phase-out subsidies that artificially lower the price of coal, oil, or natural gas. ----- 114 -----, no firm dates have been set.

- | | | | | |
|------|---------------|----------------|----------------|-----------------|
| 101) | a) best | b) worse | c) baddest | d) worst |
| 102) | a) enough far | b) far enough | c) too far | d) close enough |
| 103) | a) despite | b) because | c) although | d) furthermore |
| 104) | a) next | b) many | c) last | d) all the |
| 105) | a) scientific | b) scientifics | c) science | d) scientists |
| 106) | a) more | b) only | c) approximate | d) extremely |
| 107) | a) of | b) for | c) at least | d) about |
| 108) | a) bigger | b) instead | c) rather | d) more |
| 109) | a) face | b) fight | c) resist | d) cope |
| 110) | a) dollars | b) of dollar | d) of dollars | d) dollar |
| 111) | a) While | b) Because | c) Moreover | d) What's more |
| 112) | a) Africans | b) african | c) African | d) africans |
| 113) | a) done | b) making | c) made | d) maked |
| 114) | a) Despite | b) For sure | c) Indeed | d) However |

Text 2: Is there life on Mars? Not if we destroy it with poor space hygiene

As countries begin an age of Martian exploration, planetary protection advocates insist we must be careful of interplanetary contamination

On 18 February, around 8pm GMT, Nasa will attempt to land **the car-size rover Perseverance** in Jezero crater. It's got a long list of science objectives to work through. "We want to get a fuller understanding of how Mars formed as a planet," says Sanjeev Gupta of Imperial College London, who is part of the Perseverance science team.

On Earth, the constant **shifting** of the crust has mostly destroyed the very first surface rocks to form, but on Mars the oldest rocks are preserved, so there is an **unbroken** record stretching back more than four billion years. As well as telling us about the history of the planet's formation, those primeval rocks could also contain clues as to whether life ever began on the red planet.

Yet what makes Perseverance unique is that it is also the first part of an ambitious 10-year plan between Nasa and the European Space Agency (ESA) to bring Martian rocks to Earth in around 2031.

"Scientists really want rocks from Mars back on Earth," says Gupta. Samples can be analysed much more **thoroughly** on Earth than using even the most sophisticated Mars rover. And because laboratory techniques improve constantly, they can continue to be inspected year after year for new discoveries.

The value of sample return was demonstrated in the 1970s when the analysis of moon rocks brought back by the Apollo astronauts changed our understanding of the solar system's history and formation.

But whereas the lunar samples of the 1970s were from a **barren** world, Mars could once have been a habitable planet. So key investigations will involve looking for evidence of past – or possibly present – life and that is **a whole new ballgame**.

"If you discover signs of life on Mars, you want to know that's Martian life, right? You don't want to accidentally discover E coli bacteria that hung on to your spacecraft," says Casey Dreier, chief **advocate** and senior space policy adviser for the Planetary Society, a non-profit organisation for space advocacy based in Pasadena, California.

To keep the scientific results as pure as possible, spacecraft and equipment are cleaned with chemical solvents or by heating.

Such precautions are known as planetary protection, which is split into two components. Forward contamination is the introduction of Earth life on to other worlds; backwards contamination is concerned with the possibility, however **remote**, of extraterrestrial life brought back to Earth escaping into the biosphere.

It is now thought that Mars could have been habitable and that microbes may still **be clinging** on in areas of the planet where liquid water is present. Planetary protection concerns mean that spacecraft cannot go to these areas. So, life-detection experiments cannot investigate the areas most likely to support life and therefore most concentrate on looking for the evidence of past life on Mars.

Beyond these purely pragmatic scientific issues, however, a larger debate **is brewing** that brings in an ethical dimension. "It's something that is, I think, even more important in a sense," says Dreier. "It's **applying** the lessons of **horrendous** mistakes that humans have made in terms of exploration in the past."

Perhaps the most widely known of these mistakes is the European colonisation of Hawaii in the 18th century. Various diseases devastated the indigenous population because of the bacteria and viruses that were introduced. While there is no real chance of animal life on Mars, Dreier thinks the same consideration should be extended to bacteria. "If there's life there, we don't want to **inadvertently** introduce a competing form of life that could undermine or destroy that," he says.

115. "the car-size rover Perseverance" (§1) is closer in meaning to:

- a) the ex-carmaker Rover contributed to the design of Perseverance.
- b) Perseverance has been mounted on a car frame.
- c) Perseverance is a vehicle as big as a car and it will be used to explore rough ground.
- d) Perseverance was named after a rough sleeper famous for owning only a car.

116. "shifting" (§2) is closer in meaning to:

- a) immobile
- b) inconsistent
- c) always changing and moving
- d) swift

117. "unbroken" (§3) is closer in meaning to:

- a) that has never been interrupted
- b) that no one could ever beat
- c) that is so tough that it won't yield
- d) that is in very good condition

118. "thoroughly" (§4) is closer in meaning to:

- a) very greatly
- b) in a shallow manner
- c) superficially
- d) in a detailed and careful way

119. "barren" (§6) is closer in meaning to:

- a) lush
- b) hospitable
- c) infertile
- d) uncultivated

120. "a whole new ballgame" (§6) is closer in meaning to:

- a) a match the score of which is known in advance
- c) a breath of fresh air
- b) a completely different and unknown situation
- d) a fine line

121. "an advocate" (§7) is closer in meaning to:

- a) a lawyer
- b) someone who publicly supports an idea
- c) an advisor
- d) a policy-maker

122. "remote" (§9) is closer in meaning to:

- a) far away
- b) virtual
- c) air-borne
- d) isolated

123. "be clinging" (§10) is closer in meaning to:

- a) be sticking onto something tightly
- c) be deliberately distant from something
- b) set loose from something
- d) be releasing the pressure

124. "is brewing" (§11) is closer in meaning to:

- a) is ruined
- b) is being ignored
- c) is vanishing
- d) is about to start

125. "applying" (§11) is closer in meaning to:

- a) spreading
- b) using
- c) submitting a job application
- d) forgetting

126. "Horrendous" (§11) is closer in meaning to:

- a) helpless
- b) useless
- c) dreadful
- d) joyful

127. "inadvertently" (§12) is closer in meaning to:

- a) unknowingly
- b) intentionally
- c) interestingly
- d) increasingly

Text 3: AI Everywhere, All at Once. It's time to get serious about regulating artificial intelligence
by Harry Goldstein, May 2023, spectrum.ieee.org

It's been a frenetic six months since OpenAI introduced its large language model ChatGPT to the world at the end of last year. Every day since then, I've had at least one conversation about the consequences of the global AI experiment we find ourselves conducting. We aren't ready for this, and by we, I mean everyone—individuals, institutions, governments, and even the corporations deploying the technology today.

The sentiment that we're moving too fast for our own good is reflected in an open letter calling for a pause in AI research, which was posted by the Future of Life Institute and signed by many AI luminaries, including some prominent IEEE members. As News Manager Margo Anderson reports online in *The Institute*, signatories include Senior Member and IEEE's AI Ethics Maestro Eleanor "Nell" Watson and IEEE Fellow and chief scientist of software engineering at IBM, Grady Booch. He told Anderson, "These models are being unleashed into the wild by corporations who offer no transparency as to their corpus, their architecture, their guardrails, or the policies for handling data from users. My experience and my professional ethics tell me I must take a stand...."

But research and deployment haven't paused, and AI is becoming essential across a range of domains. For instance, Google has applied deep-reinforcement learning to optimize placement of logic and memory on chips, as Senior Editor Samuel K. Moore reports in the June issue's lead news story "Ending an Ugly Chapter in Chip Design." Deep in the June feature well, the cofounders of KoBold Metals explain how they use machine-learning models to search for minerals needed for electric-vehicle batteries in "This AI Hunts for Hidden Hoards of Battery Minerals."

Somewhere between the proposed pause and headlong adoption of AI lie the social, economic, and political challenges of creating the regulations that tech CEOs like OpenAI's Sam Altman and Google's Sundar Pichai have asked governments to create.

"These models are being unleashed into the wild by corporations who offer no transparency as to their corpus, their architecture, their guardrails, or the policies for handling data from users."

To help make sense of the current AI moment, I talked with *IEEE Spectrum* senior editor Eliza Strickland, who recently won a Jesse H. Neal Award for best range of work by an author for her biomedical, geoengineering, and AI coverage. Trustworthiness, we agreed, is probably the most pressing near-term concern. Addressing the provenance of information and its traceability is key. Otherwise people may be swamped by so much bad information that the fragile consensus among humans about what is and isn't real totally breaks down.

128) The reaction to OpenAI introducing ChatGPT to the world in the 6 months that followed its introduction was:

- a) not much of a reaction
- b) mixed feelings
- c) a very negative one
- d) lots of rather wild and uncontrolled energy

129) Harry Goldstein, *Spectrum's* editor and journalist, is convinced that:

- a) people were looking forward to it
- b) people are afraid of this
- c) people aren't prepared for this
- d) there are a variety of diverging opinions on this topic

130) An initiative from those who believe this is going too fast for our own good was taken in the form of an open letter calling for a pause in AI by :

- a) some university lecturers specialized in AI
- b) AI experts and IEEE members
- c) the American government
- d) AI Ethics Maestro Eleanor "Nell" Watson

131) According to Grady Booch, the main problem with AI is:

- a) the lack of hindsight in the use of AI
- b) the excessive use of AI by companies
- c) the use of the users' data by AI
- d) the non-transparent practices of some companies in the development of AI

132) Grady Booch feels he has to take a stand owing to his:

- a) being a father
- b) being experienced in the matter
- c) being a responsible American citizen
- d) being experienced and ethically aware

133) Today, when it comes to research and development, it is obvious that:

- a) research and development have not stopped
- b) the message of the open letter about AI has been heard
- c) Google only got the message
- d) the research goes on but the development is at a standstill

134) It looks like Sundar Pichai from Google:

- a) disagrees with Sam Altman
- b) has reached the government with an appeal for more regulations concerning AI
- c) couldn't care less about the deployment of AI
- d) has got a very personal opinion about AI which is not shared by other CEOs

135) According to the journalist, the main values at stake with AI are:

- a) trustworthiness and traceability
- b) trustworthiness
- c) trustworthiness and profitability
- d) regulating traceability