

PROCESO SELECTIVO PARA INGRESO EN EL CUERPO DE OBSERVADORES DE METEOROLOGÍA DEL ESTADO

TERCER EJERCICIO - VOLUNTARIO

1. Encima de la mesa solo debe estar el **DNI** en lugar visible, el **cuestionario**, la hoja de respuestas con las instrucciones al dorso de la copia y el **bolígrafo negro o azul**.
2. Todos los **dispositivos electrónicos deben estar apagados y guardados**. Cualquier consulta de estos dispositivos o material adicional **supondrá la expulsión inmediata del ejercicio**.
3. El cuestionario está compuesto por **cuarenta preguntas** con cuatro posibles respuestas, siendo solo una de ellas correcta. **Todas las preguntas** tienen el **mismo valor (0.5)** y **las contestaciones erróneas serán penalizadas con ¼ del valor** de cada contestación acertada. Las preguntas no contestadas no penalizan.
4. Este examen se calificará sobre **20 puntos**. Los puntos por encima de 10 que obtuviera el aspirante se sumarán a la puntuación del primer y segundo ejercicio. Se trata de una **prueba voluntaria y NO eliminatoria de idioma**.
5. **El tiempo de realización de este ejercicio es de dos horas**. No se podrá abandonar el aula antes de haber transcurrido los **primeros treinta minutos** desde el inicio del ejercicio. Durante los **quince minutos finales** del tiempo de duración del ejercicio, los **oposidores permanecerán en su asiento** a la espera de que se les retire el ejercicio.
6. Los opositores que abandone el aula antes de la finalización del ejercicio solo podrán llevarse la copia de la hoja de respuestas.
7. El ejercicio se contesta en la hoja de respuestas, **no** en el cuestionario. Marque las respuestas con bolígrafo y compruebe siempre que la marca que va a señalar en la hoja de respuestas corresponde al número de pregunta del cuestionario. **Solo se calificarán las respuestas marcadas en la hoja de respuestas** y de acuerdo con las instrucciones que aparecen al dorso.
8. En la hoja de respuestas **no deberá anotar ninguna otra marca o señal** distinta de las necesarias para contestar el ejercicio.
9. **Durante la realización del ejercicio el Tribunal NO hará ninguna aclaración sobre las preguntas del cuestionario**.
10. En el plazo máximo de tres días, a contar desde la finalización de la prueba, se hará pública la plantilla de soluciones correctas utilizada por el Tribunal.



TRIBUNAL CALIFICADOR DEL PROCESO SELECTIVO PARA INGRESO EN EL CUERPO DE OBSERVADORES DE
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TERCER EJERCICIO



READING COMPREHENSION

Part I. Read the following newspaper headlines and indicate their meaning.

Temperatures across UK to plunge after sunniest May on record

1.

- a) Temperatures are expected to increase after the warmest of May in history.
- b) Temperatures are likely to fall after the warmest May documented.
- c) Temperatures will keep rising after the sunniest May reported.
- d) After May temperatures will suffer a sudden change as never registered before.

Why climate science deniers are running out of rope

2.

- a) The reasons why climate science deniers do not have any more excuses.
- b) The reasons why scientists do not accept some help offered.
- c) The reasons why climate scientists do not have more time to go running.
- d) Reasons for denying a scientific explanation on the use of rope for running.

The world must seize this opportunity to meet the climate challenge

3.

- a) Climate activists have confiscated documents to challenge governments.
- b) The world has finally understood what difficulties the climate is facing.
- c) The world must take advantage and try to achieve the climate challenge.
- d) World leaders are forced to meet again to talk about climate difficulties.



Climate worst-case scenarios may not go far enough, cloud data shows

4.

- a) According to cloud data, climate predictions have been quite accurate.
- b) According to cloud data, climate scientists have been too short on their predictions.
- c) Cloud data shows that scientists need further data to make better predictions.
- d) Scientists do not rely on cloud data which shows wrong-case scenarios.

An environmental disaster strikes in the Arctic Circle, as 21,000 tonnes of oil spills into the Arctic rivers, dying them red!

5.

- a) The Arctic Circle has suffered an environmental disaster when oil was spilled into the Arctic rivers, killing all the fish.
- b) 21,000 tonnes of red fish have died in the Arctic Circle because of oil spills, which is an environmental disaster.
- c) Several environmental disasters have caused the death of Arctic inhabitants because of oil spills.
- d) Arctic rivers have become red as a result of oil spills, which is an environmental disaster in the Arctic Circle.



Part II. Read the following text and answer the questions.

New International Sea Level Satellite Completes Testing

Once the state-of-the-art Sentinel-6 Michael Freilich satellite launches in November, it will collect the most accurate data yet on sea level—a key indicator of how Earth's warming climate is affecting the oceans, weather and coastlines. But first, engineers need to ensure that the spacecraft can survive the rigors of launch and of operating in the harsh environment of space. That's where meticulous testing comes in.

At the end of May, engineers finished putting the spacecraft—which is being built in Germany—through a battery of tests that began in November 2019. "If it can survive all the abuse, we deliberately put it through on the ground, then it's ready for space," said John Oswald, the mission's deputy project manager at NASA's Jet Propulsion Laboratory in Southern California.

The Sentinel-6 Michael Freilich spacecraft is a part of the Copernicus Sentinel-6/Jason-CS (Continuity of Service) mission, a joint U.S.-European effort in which two identical satellites will be launched five years apart. The spacecraft will join the Copernicus constellation of satellites that constitutes the European Union's Earth Observation Programme. Once in orbit, each satellite will collect sea level measurements down to the centimetre for 90% of the world's oceans. The data will add to almost 30 years of information gathered by an uninterrupted series of joint U.S.-European satellites, creating an unprecedented—and unbroken—40-year sea level dataset. The spacecraft will also measure the temperature and humidity of Earth's atmosphere, which can be used to help improve weather forecasts and hurricane predictions.

These measurements are important because the oceans and atmosphere are tightly connected. "We're changing our climate, and the clearest signal of that is the rising oceans," said Josh Willis, the mission's project scientist at JPL. "More than 90% of the heat trapped by greenhouse gases is going into the ocean." That heat causes seawater to expand, accounting for about one-third of the global average of modern-day sea level rise. Meltwater from glaciers and ice sheets account for the rest.

"For climate science, what we need to know is not just sea level today, but sea level compared to 20 years ago. We need long records to do climate science," said Willis.

Six scientific instruments are key to that task. Two of them will work in concert to measure the distance from the satellite to the ocean's surface. That information—combined with data from three other instruments that precisely establish the satellite's position in orbit and a



sixth that will measure vertical slices of the atmosphere for temperature and humidity—will help determine sea levels around the world.

To ensure that the scientific instruments will work once they get into space, engineers sent the Sentinel-6 Michael Freilich to a testing facility near Munich and ran the satellite through a gauntlet starting in November 2019.

First up: the vibration test, where the engineers subjected the Sentinel-6 Michael Freilich satellite to the kinds of shaking it will experience while attached to a SpaceX Falcon 9 rocket blasting into orbit. Then in December, engineers tested the spacecraft in a big vacuum chamber and exposed it to the extreme temperatures that it will encounter in space, ranging from 149 to minus 292 degrees Fahrenheit (65 to minus 180 degrees Celsius).

The next two trials took place in late April and May. The acoustics test, performed in April, made sure the satellite could withstand the loud noises that occur during launch. Engineers placed the spacecraft in a roughly 1,000-square-foot (100-square-meter) chamber outfitted with enormous speakers. Then they blasted the satellite with four 60-second bursts of sound, with the loudest peaking around 140 decibels. That's like standing next to a jet's engine as the plane takes off.

Finally, in the last week of May, engineers performed an electromagnetic compatibility test to ensure that the sensors and electronics on the satellite wouldn't interfere with one another, or with the data collection. The mission uses state-of-the-art instruments to make precise measurements, so the smallest interference could compromise that data.

Normally, JPL engineers would help to conduct these tests in person, but two of the trials took place after social-distancing safety measures had been established due to the coronavirus pandemic. So team members worked out a system to support their counterparts in Germany remotely.

To account for the nine-hour time-zone difference, engineers in California pulled shifts from midnight to 10 a.m. for several weeks, consulting with colleagues in Germany through phone calls, video conferences, chat rooms and text messages. "It was confusing sometimes, keeping all the channels and groups going at the same time in the middle of the night, but I was impressed with our team," said Oswald.

The upshot of all that effort? "The tests are complete and the preliminary results look good," Oswald said. Team members will spend the next several weeks completing the analysis of the test results and then preparing the satellite for shipment to Vandenberg Air Force Base in California for launch this fall.



6. Why are engineers putting the spacecraft through a battery of tests?

- a) Because they don't want it to fail in the launching.
- b) Because they need to learn how to operate it in space.
- c) Because they need to make sure the spacecraft is strong enough to overcome all the difficulties that may arise.
- d) Because manager engineers in Germany deliberately abused of the project on the ground.

7. What is the aim of the spacecraft?

- a) Its aim is to collect precise information regarding sea level and atmospheric humidity.
- b) Its aim is to orbit the earth every five years while taking measurements
- c) Its aim is to gather information from other satellites that are about to stop working.
- d) Its aim is to prevent that the gathering of information is interrupted

8. According to Josh Willis this information is highly important because

- a) It will help climate scientists to know the current sea level.
- b) It will help climate scientists how much heat is trapped in the sea.
- c) It will help climate scientists to build up long records needed.
- d) It will help climate scientists to be aware the average melting of glaciers.

9. Why was the spacecraft exposed in a big vacuum chamber?

- a) To make sure that sensors and electronics would not interfere with one another.
- b) To make sure the satellite could withstand the extreme temperatures that it will have to face in space.
- c) To make sure the satellite could withstand the loud noises that will occur during launch.
- d) To make sure the satellite could withstand the shaking it will experience while attached to the rocket.

10. How did they sort out the problem of social-distancing safety coronavirus pandemic forced to establish?

- a) They had to establish nine-hour shifts.
- b) They arranged everything through video conferences.
- c) They used chat rooms and text messages to communicate with their counterparts in Germany.
- d) They arranged different tools working timetables to enable groups work at the same time.



LANGUAGE IN USE

Part III: Vocabulary. Complete each sentence with the correct form:

11. Some scientists go so _____ as to assert that from now on, the world can no longer be called 'natural'.

- a) much b) deep c) long d) far

12. There are other equally influential scientists who argue that climate, for example, has changed many times over the centuries, and that what we are experiencing now may simply be part of an endless _____ of change.

- a) revolution b) circle c) round d) cycle

13. Last year this tree was struck by _____.

- a) lightning b) thunder c) a storm d) ray

14. Something must be done to protect _____.

- a) wild b) wilderness c) wildlife d) wildish

15. Suddenly we saw a ship appear on the _____. We were saved!

- a) atmosphere b) horizon c) sky d) sight

16. We got soaked to the skin in the torrential _____.

- a) drizzle b) downpour c) snow d) gale

17. The stronger the wind and the heavier the rain, the more soil they can _____.

- a) erosion b) erode c) erodent d) erosive

18. The match had to be cancelled because of the severe _____.

- a) ice b) frost c) snow d) freezing

19. Local people are concerned about pollution from _____ oil wells.

- a) maritime b) sea-going c) off-shore d) coastline

20. If you can't pick up the BBC in the summer, try a different _____.

- a) wavelength b) broadcast c) transmission d) satellite



Part IV: Grammar. Complete each sentence with the correct form:

21. _____ we get to the top of the hill, we'll be all right.

- a) Eventually b) Once c) Now d) At the time

22. I supported you at the time because I _____ that you were right.

- a) feel b) felt c) have felt d) would feel

23. Thanks very much! If you hadn't helped me, we _____ the work so quickly.

- a) won't finish b) wouldn't finish c) wouldn't have finished d) finished

24. No sooner had we started the picnic, _____ the rain began pouring down!

- a) than b) when c) that d) and

25. If the phone rings, it _____ be for me.

- a) can b) will c) would d) shall

26. _____ happens, I shall stand by you!

- a) Whatever b) What c) Which d) That

27. I would never have _____ Jim of being the culprit.

- a) accused b) convicted c) suspected d) reminded

28. Everyone tried to blame Janet _____ the mistake.

- a) on b) in c) to d) for

29. The minister stated that no real alternative _____ the plan existed.

- a) on b) in c) to d) for

30. _____ the obvious dangers, there was the weather to be considered.

- a) Also b) Not only c) In addition to d) Thus



Part V: USE OF ENGLISH. Fill in the blanks with the appropriate word/s.

Climate crisis: alarm at record-breaking heatwave in Siberia

A prolonged heatwave in Siberia is “undoubtedly alarming”, climate scientists have said. The freak temperatures have been linked to wildfires, a huge oil spill and a plague of tree-eating moths.

On a global scale, the Siberian heat is helping push the world towards its hottest year _____ (31) record in 2020, despite a temporary dip in carbon emissions owing to the coronavirus pandemic.

Temperatures in the Polar Regions are rising faster _____ (32) ocean currents carry heat towards the poles and reflective ice and snow is melting away.

Russian towns in the Arctic circle have recorded extraordinary temperatures, with Nizhnyaya Pesha hitting 30°C on 9 June and Khatanga, _____ (33) usually has daytime temperatures of around 0°C at this time of year, hitting 25°C on 22 May. The previous record was 12°C.

In May, surface temperatures in parts of Siberia were _____ (34) 10°C above average, according to the EU’s Copernicus Climate Change Service (C3S). Martin Stendel, of the Danish Meteorological Institute, said the abnormal May temperatures seen in north-west Siberia would be likely _____ (35) just once in 100,000 years without human-caused global heating.

Freja Vamborg, a senior scientist at C3S, said: “It is undoubtedly an alarming sign, but not only May was unusually warm in Siberia. The whole of winter and spring _____ (36) periods of higher-than-average surface air temperatures.

“Although the planet as a whole is warming, this isn’t happening evenly. Western Siberia stands out as a region that shows more of a warming trend with higher variations in temperature. So, to some extent large temperature anomalies are not unexpected. _____, (37) what is unusual is how long the warmer-than-average anomalies have persisted for.”

Marina Makarova, the chief meteorologist at Russia’s Rosgidromet weather service, said: “This winter was the hottest in Siberia since records began 130 years ago. Average temperatures were up to 6°C higher than the seasonal norms.”

Robert Rohde, the lead scientist at the Berkeley Earth project, said Russia _____ (38) a whole had experienced record high temperatures in 2020, with the average from January to May 5.3°C above the 1951-1980 average. “[This is a] new record by a massive 1.9°C,” he said.



In December, Russia's president, Vladimir Putin, commented on the unusual heat: "Some of our cities were built north of the Arctic Circle, on the permafrost. If it begins to thaw, you can imagine what consequences it would have. It's very serious."

Thawing permafrost was at least partly to blame for a spill of diesel fuel in Siberia this month that led Putin to declare a state of emergency. The supports of the storage tank suddenly sank _____ (39) to its operators; green groups said ageing and poorly maintained infrastructure was also to blame.

Wildfires have raged across hundreds of thousands of hectares of Siberia's forests. Farmers often light fires in the spring to clear vegetation, and a combination of high temperatures and strong winds has caused some fires to burn _____ (40) control.

Swarms of the Siberian silk moth, whose larvae eat at conifer trees, have grown rapidly in the rising temperatures. "In my entire long career, I've never seen moths so huge and growing so quickly," Vladimir Soldatov, a moth expert, told AFP.

He warned of "tragic consequences" for forests, with the larvae stripping trees of their needles and making them more susceptible to fires.

31. a) in b) by c) on d) to
32. a) on account of b) due to c) in spite of d) because
33. a) where b) which c) whose d) what
34. a) up to b) until c) before d) up
35. a) happen b) to happen c) happening d) happened
36. a) have repeated b) has repeated c) are repeated d) had repeated
37. a) Despite b) Although c) However d) Such
38. a) as b) so c) such d) in
39. a) according b) regarding c) in respect d) related
40. a) in b) beneath c) from d) out of