Prova di ammissione al corso di laurea in

SCIENZE E TECNICHE
DI PSICOLOGIA COGNITIVA

13 Aprile 2018

ANNO ACCADEMICO 2018/2019
01. Che cos’è la rodopsina?
   A) Una proteina che si trova prevalentemente nelle cellule della retina umana
   B) Una delle 4 basi azotate che compongono il DNA
   C) Un enzima responsabile della regolazione del ciclo sonno-veglia
   D) Un ormone steroideo

Risposta corretta: A

02. Quali delle seguenti strutture non appartiene al sistema limbico dell’uomo?
   A) Cervelletto
   B) Amigdala
   C) Ippocampo
   D) Lobo limbico

Risposta corretta: A

03. Quante sono le aree cerebrali secondo la classificazione di Brodmann?
   A) circa 50
   B) 4
   C) 12
   D) oltre 120

Risposta corretta: A

04. Tra le seguenti coppie di ormoni solo una è composta da ormoni antagonisti. Quale?
   A) Calcitonina-Paratormone
   B) Insulina-Estradiolo
   C) Glucagone-Progesterone
   D) FSH-Testosterone

Risposta corretta: A

05. A quale classe di macromolecole appartiene l’RNA?
   A) Acidi nucleici
   B) Proteine
   C) Carboidrati
   D) Lipidi

Risposta corretta: A

06. Nel cervello umano, in quale lobo è situato l’ippocampo?
   A) Lobo Temporale
   B) Lobo Parietale
   C) Lobo Frontale
   D) Lobo Occipitale

Risposta corretta: A

07. Il daltonismo è una malattia recessiva legata al cromosoma sessuale X. Se un uomo daltonico sposa una donna non-daltonica, qual è la probabilità che i figli maschi siano daltonici?
   A) 0%
   B) 25%
   C) 50%
   D) 100%

Risposta corretta: A

08. Quale dei seguenti organuli citoplasmatici è coinvolto nella sintesi proteica?
   A) Ribosomi
B) Mitochondri
C) Cloroplasti
D) Lisosomi
Risposta corretta: A

09. In quale fase del ciclo cellulare avviene la duplicazione del DNA?
A) Fase S
B) Mitosi
C) Fase G1
D) Telofase
Risposta corretta: A

10. Il sistema simpatico fa parte:
A) Del sistema nervoso autonomo
B) Del sistema nervoso centrale
C) Del sistema immunitario
D) Del sistema linfatico
Risposta corretta: A

11. Come viene definita una sequenza di DNA che codifica per una specifica proteina?
A) Gene
B) Cromosoma
C) Genoma
D) Genotipo
Risposta corretta: A

12. Che cosa si intende per eritropoiesi?
A) Il processo di formazione dei globuli rossi
B) Il mantenimento delle condizioni omeostatiche
C) Il processo di differenziazione dei neuroni
D) Il processo di formazione delle ossa
Risposta corretta: A

13. Dove si trova la corteccia motoria nel cervello umano?
A) Nella parte posteriore del lobo frontale
B) All'interno del cervelletto
C) Nel lobo occipitale
D) Sotto il talamo
Risposta corretta: A

14. Che cos'è un antigeno?
A) Una sostanza in grado di essere riconosciuta dal sistema immunitario
B) Un'immunoglobulina
C) Una proteina del sistema immunitario con funzioni difensive
D) Una cellula del sistema immunitario
Risposta corretta: A

15. Come si chiama il processo mediante il quale l'informazione genetica viene trasferita dal DNA all' RNA?
A) Trascrizione
B) Traduzione
C) RNA-transfer
D) Sintesi proteica
Risposta corretta: A
La comprensione del testo in inglese

Leggete con attenzione il seguente brano quindi rispondete ai prossimi 15 quesiti. Fra questi, alcuni si riferiscono alle parole mancanti indicate nel testo con i numeri da I a VII - altri riguardano il suo contenuto.

An unforgettable president

If you had to sum up George Washington's life in one word, that word would have to be unforgettable. Washington's story is one of travel and adventure, full of risks and full of glory. After all, in 1789, he was elected the first president of the United States, a country that was to become the [I] powerful in the world. At the end of his life, in 1799, he was an international hero.

But, if you look back into George Washington's early years, you will see that things were not always so rosy. He was [II] into the Army as a very young man. This experience [III] him an opportunity to make a living, and at the same time see the country. It was a tough life, but an interesting one. A lover of nature, Washington became a surveyor with the Army, a job [IV] led him further and further into the wild, unknown country. All in all, his young years were full of carefree wandering in a new, virgin land.

Yet suddenly one day, the threatening news came: Virginia scouts had found French soldiers on the other side of the Appalachians. It was said that the French claimed all land west of the mountains for New France. This was bad news for the governor of Virginia, who wanted the same land — at all costs. In his quest to get the land beyond the mountains, the governor called upon his best soldier to [V] the situation: it was young George Washington, barely 22 years old at the time. The governor told Washington [VI] and find the French, and give them a simple message: leave the region immediately, or get ready for battle.

Wanting to serve and please his authorities, Washington did as he was told. He went over the mountains with a small army, found the French, and passed on the governor's message. But, of course, the French did not wish to leave. Inevitably, the conflict developed into a war, known as the French and Indian War. For Washington it was a difficult time. His army was surrounded by the French and Indians, badly outnumbered, so he had to surrender the fort. Luckily for him, the French [followed] him and his army to leave with their horses and guns. The battle had been lost, but the English, who were more numerous, eventually won the war.

The French and Indian War was a learning experience for Washington, one that he would later exploit in the War for American Independence. Indeed, twenty years later, he was dressed in an American uniform, and fighting not against the French, but against the British. In this war, it is said that Washington's fiery leadership inspired his American troops when they were starving and cold, and he emerged from the war as the greatest general.

It was no surprise that the victorious Americans chose him as their first president. As for getting his picture on the dollar bill, that didn't come [VII] after George was long dead and gone, proving that his spirit was truly an unforgettable one.

16. According to the text, Washington's life was

A) full of glory and adventure.  
B) uninteresting  
C) anonymous  
D) very sad

Risposta corretta: A

17. Which of the following statements about Washington is true?

A) He was the first American president  
B) He was the president of the USA since 1799  
C) He became president of the USA when he was 22  
D) He never became an American president

Risposta corretta: A

18. In the Army, Washington had the opportunity to

A) earn some money  
B) build a house  
C) have a comfortable life  
D) travel to France

Risposta corretta: A

19. According to the text, the French wanted to take control of

A) some land which was also claimed by the governor of Virginia  
B) the land east of the Appalachians  
C) the Appalachians Mountains  
D) the Indian reservations

Risposta corretta: A
20. When Washington received the governor’s instructions, he
A) accepted them willingly
B) refused to accept them
C) hadn’t joined the army yet
D) was 42 years old

Risposta corretta: A

21. Which of the following statements about the French and Indian War is true?
A) Washington’s army was smaller than the enemy’s
B) Washington’s army was bigger than the enemy’s
C) The USA won the war
D) The French kept the enemy’s guns and horses

Risposta corretta: A

22. In the passage, the word \textit{allowed} means
A) permitted
B) prohibited
C) limited
D) obliged

Risposta corretta: A

23. During the War for Independence,
A) Washington was a strong and inspirational leader
B) the American troops never suffered hunger
C) the Americans were defeated by the British.
D) the Americans were defeated by the French

Risposta corretta: A

24. \textit{...a country that was to become the [I] powerful in the world.}
Choose the correct word or words to complete the sentence.
A) most
B) more
C) more than
D) so

Risposta corretta: A

25. \textit{He was [II] into the Army as a very young man.}
Choose the correct word or words to complete the sentence.
A) sent
B) send
C) sended
D) been sent

Risposta corretta: A

26. \textit{This experience [III] him an opportunity...}
Choose the correct word or words to complete the sentence.
A) gave
B) took
C) given
D) bought

Risposta corretta: A
27. ...a job [IV] led him further and further into the wild...
Choose the correct word or words to complete the sentence.

A) which  
B) whose  
C) the which  
D) with which  

Risposta corretta: A

28. ... the governor called upon his best soldier to [V] the situation...
Choose the correct word or words to complete the sentence.

A) deal with  
B) give up  
C) hold on  
D) hang up  

Risposta corretta: A

29. The governor told Washington [VI] and find the French.
Choose the correct word or words to complete the sentence.

A) to go  
B) of go  
C) that go  
D) of going  

Risposta corretta: A

30. ...that didn’t come [VII] after George was long dead and gone.
Choose the correct word or words to complete the sentence.

A) until  
B) since  
C) above  
D) along  

Risposta corretta: A

Rispondete alla successiva domanda 31 SOLO se espressamente indicato dalla Commissione.

DOMANDA DI RISERVA [31]

31. Quale tra i seguenti organelli cellulari è dotato di un DNA proprio?

A) Mitocondrio  
B) Ribosoma  
C) Apparato di Golgi  
D) Perossisoma  

Risposta corretta: A