Prova di ammissione al corso di laurea
e laurea magistrale a ciclo unico

SCIENZE E TECNICHE
DI PSICOLOGIA COGNITIVA

23 agosto 2018

Anno accademico 2018/2019
01. Quale tra i seguenti elementi cellulari è esclusivo della cellula eucariote?
   
   A) Nucleo  
   B) Citoplasma  
   C) DNA  
   D) RNA  
   
   Risposta corretta: A

02. Come si chiama il principale enzima coinvolto nella replicazione del DNA?
   
   A) DNA polimerasi  
   B) DNA idratasi  
   C) DNA combinasi  
   D) DNA mutasi  
   
   Risposta corretta: A

03. Secondo i più recenti studi condotti sui reperti fossili si stima che il genere Homo sia comparso sulla terra:
   
   A) Circa 2,5 milioni di anni fa  
   B) Circa 20 milioni anni fa  
   C) Circa 100.000 anni fa  
   D) Circa 70 milioni di anni fa  
   
   Risposta corretta: A

04. Perché è importante la biodiversità?
   
   A) Perché un'elevata biodiversità rafforza la struttura interna di un ecosistema e di conseguenza la sua produttività  
   B) Perché un'elevata biodiversità rende gli organismi più resistenti ai cambiamenti di temperatura  
   C) Perché una bassa biodiversità previene la diffusione di malattie infettive  
   D) Perché una bassa biodiversità aumenta il benessere delle popolazioni  
   
   Risposta corretta: A

05. Nell'ambito della biologia molecolare che cosa si intende per plasmide?
   
   A) Una piccola molecola di DNA circolare naturalmente presente nei batteri  
   B) Un batterio resistente alle infezioni virali  
   C) Un enzima in grado di accelerare le funzioni metaboliche  
   D) Il liquido in cui sono sospese le cellule sanguigne  
   
   Risposta corretta: A

06. Telencefalo e diencefalo nel loro insieme costituiscono:
   
   A) Il cervello  
   B) Il lobo frontale  
   C) Il tronco encefalico  
   D) Il midollo spinale  
   
   Risposta corretta: A

07. In anatomia che cos'è l'aracnoide?
   
   A) Una delle tre meninges  
   B) Un osso piatto del cranio  
   C) Un organo sensoriale  
   D) Un nervo ottico  
   
   Risposta corretta: A

08. Nell'uomo, l'osso iliaco è costituito da:
PSICOLOGIA

A) Iileo, ischio, pube  
B) Iileo, osso sacro, coccige  
C) Ischio, pube, coccige  
D) Iileo, pube, coccige

Risposta corretta: A

09. Quali tra le seguenti patologie umane determina una ridotta capacità del sangue di trasportare ossigeno?
   
A) Anemia  
B) Diabete  
C) Varicocele  
D) Glaucoma

Risposta corretta: A

10. A quale classe di vertebrati appartengono la balena e il capodoglio?
   
A) Mammiferi  
B) Pesci ossei  
C) Pesci cartilaginei  
D) Anfibi non tetrapodi

Risposta corretta: A

11. In quale fase della meiosi avviene l’accoppiamento dei cromosomi con conseguente crossing over?
   
A) Profase I  
B) Metafase II  
C) Anafase I  
D) Metafase I

Risposta corretta: A

12. In biologia, si definisce [.....] un insieme di cellule, strutturalmente simili, associate per funzione.
   
A) tessuto  
B) organo  
C) sistema  
D) apparato

Risposta corretta: A

13. Tra i seguenti animali solamente uno si riproduce per fecondazione esterna. Quale?
   
A) Rana  
B) Lupo  
C) Tartaruga  
D) Serpente

Risposta corretta: A

14. Nell’ambito della genetica che cosa si intende per autosomi?
   
A) I cromosomi non sessuali  
B) I cromosomi X degli individui femminili  
C) I cromosomi con alterazioni genetiche che possono portare a malattie autoimmuni  
D) I cromosomi Y degli individui maschili

Risposta corretta: A

15. Quala parte del neurone è deputata alla ricezione dei segnali provenienti dai neuroni afferenti?
   
A) I dendriti  
B) L’assone  
C) Il nucleo  
D) Lo stroma

Risposta corretta: A
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.

Sherlock Holmes is 130
The world's most famous detective is now 130 years old and, although he never really existed, he is today a very real part of English culture. Sherlock Holmes has passed on his remarkable methods to Scotland Yard. His analysis is based on the most detailed research. Holmes made famous the arts of observation and deduction.

When he [I] Doctor Watson, his friend and assistant, for the first time, he said: "I see you have [II] Afghanistan." But how did he know? Watson looked like a medical doctor and a military man. He had a dark skin, but his arms were white. [III] Holmes concluded that he was an English army doctor, and he had recently come back from a hot country, with an injured arm. The only possible country at the time was Afghanistan.

Stanley MacKenzie, president of the Sherlock Holmes Society, said: "Holmes is a mental superman and an eccentric. I envy his facility for solving problems in his armchair, with his eyes closed and his hands joined."

Yes, Holmes was very popular 130 years ago, and he is [IV] very popular today... both as the "real" 19th century detective, and now as a modern 21st century detective. There have been a dozen or so films about Sherlock Holmes since the 1970s; and since 2010, the BBC has had a big hit with the series "Sherlock", starring Benedict Cumberbatch as a modern-day Sherlock Holmes.

[V] sir Arthur Conan Doyle, the creator of the famous detective, did not want his character to live for so long. In fact he tried to stop writing the Sherlock Holmes stories in 1893, with the story "The Final Problem". Holmes and Moriarty, his big enemy, had a fight at the Riechenbach Falls in Switzerland, and they [VI] together into the water. But the readers protested so much that Conan Doyle was forced to "resurrect" the detective. Holmes miraculously survived, and there was another book of stories ten years later. Now at Meiringen in Switzerland, at the site of the falls, there is a "Sherlock Holmes pub" and a "Sherlock Holmes hotel", and a large Sherlock Holmes museum.

In England, there is a big "Sherlock Holmes Society" where members have meetings and discussions about the stories [VII] by Conan Doyle. For example, in one of the stories, Holmes took a train from London to Paris, but arrived in Paris before the train… How did he do it? One member looked at the train timetables of the 1890's, and found an explanation: He could have changed trains at Reading, near London, to arrive at the coast more quickly.

Sherlock Holmes is a legend that will not die. Every week about 40 cards and letters addressed to Mr Holmes are delivered at his address, 221B, Baker Street, in London. People ask the detective to solve their personal mysteries for them, and some even ask him to explain international events.

16. According to the article, Sherlock Holmes

A) applied brilliant deductive methods.
B) was a real person.
C) copied his methods from Scotland Yard.
D) was a doctor.

Risposta corretta: A

17. In the passage, the word [injured] means

A) damaged.
B) missing.
C) artificial.
D) shorter.

Risposta corretta: A

18. According to Stanley MacKenzie, Holmes

A) could solve problems sitting comfortably at home.
B) was a weak person.
C) was an impostor.
D) was an ordinary man.

Risposta corretta: A

19. Which of the following statements about Benedict Cumberbatch is true?

A) He is an actor.
B) He worked with Sherlock Holmes.
C) He was Conan Doyle's assistant.
D) He is the president of the Sherlock Holmes Society.

Risposta corretta: A
20. According to the text, Conan Doyle
   A) wanted to stop writing about Holmes.
   B) didn't want to stop writing about Holmes.
   C) had a fight with Moriarty in Switzerland.
   D) wrote the last story ever about Sherlock Holmes in 1893.

21. A member of the Sherlock Holmes Society
   A) explained how Holmes managed to arrive in Paris before the train.
   B) travelled from London to Paris with Sherlock Holmes.
   C) receives lots of letters from the detective's readers.
   D) lives in Reading.

22. "The Final Problem" is the title of
   A) one of the stories about Holmes.
   B) the last story about Holmes.
   C) the first story about Holmes.
   D) a TV show.

23. Which of the following statements is true?
   A) Sherlock Holmes lived at 221B Baker Street.
   B) Conan Doyle lived at 221B Baker Street.
   C) Scotland Yard's headquarters are at 221B Baker Street.
   D) Sherlock Holmes Society's members meet at 221B Baker Street.

24. When he [I] Doctor Watson, his friend and assistant...
   Choose the correct word or words to complete the sentence:
   A) met
   B) known
   C) meet
   D) seen

25. I see you have [II] Afghanistan.
   Choose the correct word or words to complete the sentence:
   A) been to
   B) gone in
   C) went to
   D) been in

26. [III] Holmes concluded that he was an English army doctor.
   Choose the correct word or words to complete the sentence:
   A) So
   B) Due to
   C) Besides
   D) Because of

27. Holmes was very popular 130 years ago, and he is [IV] very popular today.
Choose the correct word or words to complete the sentence:

A) still  
B) already  
C) just  
D) since  

Risposta corretta: A

28. [V] sir Arthur Conan Doyle, the creator of the famous detective, did not want...

Choose the correct word or words to complete the sentence:

A) However  
B) Also  
C) Because  
D) For  

Risposta corretta: A

29. ... they [VI] together into the water.

Choose the correct word or words to complete the sentence:

A) fell  
B) fall  
C) felt  
D) fallen  

Risposta corretta: A

30. ... meetings and discussions about the stories [VII] by Conan Doyle.

Choose the correct word or words to complete the sentence:

A) written  
B) wrote  
C) publishing  
D) make  

Risposta corretta: A

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

DOMANDA DI RISERVA [31]

31. A quale classe di macromolecole appartiene l'emoglobina?

A) Proteine  
B) Acidi nucleici  
C) Lipidi  
D) Carboidrati  

Risposta corretta: A