



قائمة الاسئلة 2025-04-12 08:00

تقنيات حيوية ميكروبية-(433203)-الثالث -احياء دقيقة - كلية العلوم-درجة الامتحان(50)

مختار عبده محمد الحكيمي

- 1) Origin of Replication is
 - 1) - RNA
 - 2) + DNA
 - 3) - RNA and DNA
 - 4) - RNA, DNA, and protein
- 2) Vectors are naturally found in some
 - 1) - bacteria
 - 2) - yeasts
 - 3) + bacteria and yeasts
 - 4) - bacteriophages
- 3) The amplification of DNA (milions of copies) takes place in
 - 1) - microorganisms
 - 2) - microorganisms and PCR
 - 3) + PCR
 - 4) - all organisms
- 4) DNA Methylation in bacteria is
 - 1) - natural step
 - 2) - protection method
 - 3) + natural and protection step
 - 4) - None of these answeres

(5) الـ (rRNA) يدخل في تركيبه سكر الـ

- | | | |
|--------------------------|---|-----|
| 2-Deoxyribose | - | (1) |
| Ribose | + | (2) |
| Ribose and 2-Deoxyribose | - | (3) |
| 3-Deoxyribose | - | (4) |

- 6) Restriction enzymes are found only in some
 - 1) - yeasts
 - 2) + bacteria
 - 3) - fungi
 - 4) - bacteriophages

(7) بالتجربة التي قام بها Stahli and Meselson (1957) ثبت أن الـ DNA يتضاعف بطريقة

- | | | |
|------------------------------------|---|-----|
| conservative | - | (1) |
| semi-conservative | + | (2) |
| semi-conservative and conservative | - | (3) |
| None of these answeres | - | (4) |

- 8) 70S initiation complex means
 - 1) - rRNA
 - 2) - tRNA
 - 3) - mRNA
 - 4) + All the three answers
- 9) Transcription takes place on
 - 1) - template strand
 - 2) - antisense strand
 - 3) - non-coding strand
 - 4) + All the three answers



- 10) Recognition site for any restriction enzyme on DNA strand is usually
- 1) - 4 nucleotides
 - 2) - 6 nucleotides
 - 3) + 4 nucleotides or 6 nucleotides
 - 4) - None of these answers
- 11) The purpose of sequencing is to determine the of nucleotides that make up any DNA molecule.
- 1) - number
 - 2) - order
 - 3) + number and order
 - 4) - None of these answers
- 12) The 2 primers in PCR amplification should contain 50-60%
- 1) - A+T
 - 2) - G+T
 - 3) - A+C
 - 4) + G+C
- 13) The goal of Tris-EDTA buffer as a DNA preservative solution is to
- 1) - solubilize DNA or RNA.
 - 2) - protect DNA or RNA from degradation.
 - 3) + solubilize DNA or RNA, and protecting it from degradation.
 - 4) - None of these answers
- 14) The types of ends resulting from the use of DNA restriction enzymes are
- 1) - 1 type
 - 2) - 2 types
 - 3) + 3 types
 - 4) - 4 types

(15) مضاعفة الـ DNA من خلال النواقل (Vectors) في الخلايا تعرف بشكل دقيق باسم

- | | | |
|-------------------------------|---|-----|
| Cloning | - | (1) |
| Molecular cloning | + | (2) |
| Cloning and molecular cloning | - | (3) |
| None of these answers | - | (4) |

- 16) The target of using Southern blotting is to determine the presence of a DNA segment or gene using a
- 1) + probe
 - 2) - probes
 - 3) - primer
 - 4) - primers

(17) مصطلح Biotechnology يعني

- | | | |
|--|---|-----|
| العمل المنظم باستخدام الهندسة الوراثية | - | (1) |
| إستخدام الكائنات الحية للحصول على منتج ما. | - | (2) |
| التعامل مع الكائنات الحية أو أحد جزيئاتها بشكل علمي منظم | + | (3) |
| ليس أي من هذه الإجابات | - | (4) |

- 18) Genetic engineering means:
- 1) - DNA isolation.
 - 2) - DNA transfer.
 - 3) - DNA modification.
 - 4) + isolation, transfer and modification of DNA of living organisms.
- 19) Gene expression is
- 1) + produce the protein according to the codons sequences
 - 2) - produce DNA from RNA
 - 3) - replication and transcription



- 4) - produce RNA from DNA
- عدد القواعد النيتروجينية للـ DNA أربعة وعدد القواعد النيتروجينية للـ RNA أربعة وعليه يكون مجموع هذه القواعد (20)
- (1) - ثمانية قواعد نيتروجينية
- (2) + خمسة قواعد نيتروجينية
- (3) - أربعة قواعد نيتروجينية
- (4) - ليس أي من هذه الإجابات
- 21) DNA diameter is stable due to the binding of
- 1) + Two purine rings and a pyrimidine ring
- 2) - One purine ring and two pyrimidine rings
- 3) - Two purine rings and three pyrimidine rings
- 4) - Two purine rings and two pyrimidine rings
- 22) DNA replication takes place in
- 1) - gap 0 phase
- 2) - gap 1 phase
- 3) - gap 2 phase
- 4) + S phase
- 23) Helicase enzyme function is
- 1) - cutting the two DNA strands
- 2) + separating the two DNA strands
- 3) - cutting and separating the two DNA strands
- 4) - None of these answers
- 24) Another name for DNA gyrase is
- 1) - topoisomerase I
- 2) + topoisomerase II
- 3) - topoisomerase III
- 4) - topoisomerase IV
- لنسخ الـ mRNA في الخلايا يرتبط انزيم RNA polymerase بتتابعات الـ (25)
- Origin of replication - (1)
- Promoter + (2)
- 5' Untranslated region - (3)
- Start codon - (4)

