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|-------------------------|-----------------------|
| Academic Year | 2023/2024 |
| العام الدراسي | |
| Term | 1 |
| الفصل | |
| Subject | Biology C-INSPIRE |
| المادة | بيولوجي - انسبر |
| Grade | 11 |
| الصف | |
| Stream | Advanced |
| المسار | المتقدم |
| Number of MCQ | 20 |
| عدد الأسئلة الموضوعية | |
| Marks of MCQ | 5 |
| درجة الأسئلة الموضوعية | |
| Type of All Questions | MCQ/الأسئلة الموضوعية |
| نوع كافة الأسئلة | |
| Maximum Overall Grade | 100 |
| الدرجة المقصودة الممكنة | |
| Exam Duration - | 120 minutes |
| مدة الامتحان - | |
| Mode of Implementation | SwiftAssess |
| طريقة التطبيق | |
| Calculator | Allowed |
| الآلة الحاسبة | سموحة |

| Question* | Learning Outcome/Performance Criteria** | Lesson | Reference(s) in the Student Book (Aldiwan Version) | |
|-----------|---|---------|--|-----------------|
| | | | المراجع في كتاب الطالب (نسخة المدون) | الصفحة |
| السؤال* | نتائج التعلم / معايير الأداء** | الدرس | مثال/تشريح / ملخص | الصفحة |
| 1 | BIO.3.3.02.012- Use the Punnett square method to solve basic genetics problems involving monohybrid crosses, incomplete dominance, codominance, dihybrid crosses, and sex-linked genes. | U3M10L1 | Figure 5 | page 9 |
| 2 | BIO.3.3.02.012- Use the Punnett square method to solve basic genetics problems involving monohybrid crosses, incomplete dominance, codominance, dihybrid crosses, and sex-linked genes. | U3M10L1 | Figure 8 | page 10 |
| 3 | BIO.3.1.03.038 - Explain the phases of meiosis in terms of cell division, the movement of chromosomes, and crossing over of genetic material. | U3M10L2 | | page 12 |
| 4 | BIO.3.3.01.036 - Investigate that variations of inherited traits between parent and offspring arise from genetic differences that result either from the subset of chromosomes and therefore from inherited genes or rarely from mutations and show the variations of inherited traits in a pedigree. | U3M10L2 | Figure 10 | page 12 |
| 5 | BIO.3.2.04.010 - Explain that in artificial selection, humans have the capacity to influence certain characteristics of organisms through selective breeding. | U3M10L3 | | page 15 |
| 6 | BIO.3.2.04.010 - Explain that in artificial selection, humans have the capacity to influence certain characteristics of organisms through selective breeding. | U3M10L3 | | page 16 |
| 7 | BIO.3.3.01.036 - investigate that variations of inherited traits between parent and offspring arise from genetic differences that result either from the subset of chromosomes and therefore from inherited genes or rarely from mutations and show the variations of inherited traits in a pedigree. | U3M10L4 | Table 2, 3 | page 21, 22, 23 |
| 8 | BIO.3.3.02.011 - Explain the concepts of genotype, phenotype, dominance, incomplete dominance, codominance, recessiveness, and sex linkage according to Mendelian laws of inheritance. | U3M10L4 | | page 19, 20 |
| 9 | BIO.3.3.02.020 - Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population. | U3M10L5 | | page 31 |
| 10 | BIO.3.3.02.012 - Use the Punnett square method to solve basic genetics problems involving monohybrid crosses, incomplete dominance, codominance, dihybrid crosses, and sex-linked genes. | U3M10L5 | Figure 18 | page 25 |
| 11 | BIO.3.3.01.036 - investigate that variations of inherited traits between parent and offspring arise from genetic differences that result either from the subset of chromosomes and therefore from inherited genes or rarely from mutations and show the variations of inherited traits in a pedigree. BIO.3.3.02.012 - Use the Punnett square method to solve basic genetics problems involving monohybrid crosses, incomplete dominance, codominance, dihybrid crosses, and sex-linked genes. | U3M10L5 | | page 27, 32 |
| 12 | BIO.3.3.01.023 - Identify examples, using information collected from printed and electronic resources, of the qualities that depend on the amount of protein produced, which in turn depends on the number of copies of a specific version of the gene, and predict to explain how the imbalance of the lack or presence of one copy or two copies of a specific version of the gene may affect the expression of a particular trait. | U3M10L5 | | page 28, 30 |
| 13 | BIO.3.3.01.012 - Analyze a simulated strand of DNA to determine the genetic code and base pairing of DNA. | U3M11L1 | | page 42, 43 |
| 14 | BIO.3.3.01.012 - Analyze a simulated strand of DNA to determine the genetic code and base pairing of DNA. | U3M11L1 | Figure 7 | page 46 |
| 15 | BIO.3.3.01.012 - Analyze a simulated strand of DNA to determine the genetic code and base pairing of DNA. | U3M11L1 | | page 46 |
| 16 | BIO.3.3.01.016 - Explain the current model of DNA replication and describe the different repair mechanisms that can correct mistakes in DNA sequencing including the mechanisms of biotechnology and bioinformatics. | U3M11L2 | Figure 10 | page 50 |
| 17 | BIO.3.3.01.016 - Explain the current model of DNA replication and describe the different repair mechanisms that can correct mistakes in DNA sequencing including the mechanisms of biotechnology and bioinformatics. | U3M11L2 | | page 50 |
| 18 | BIO.3.3.01.016 - Explain the current model of DNA replication and describe the different repair mechanisms that can correct mistakes in DNA sequencing including the mechanisms of biotechnology and bioinformatics. | U3M11L2 | | page 50 |
| 19 | BIO.3.3.01.015 - Conclude that each distinct gene chiefly controls the production of a specific protein, which in turn affects the traits of the individual. | U3M11L3 | Figure 15 | page 58 |
| 20 | BIO.3.3.01.009 - Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells | U3M11L3 | Figure 14 | page 56 |

* Questions might appear in a different order in the actual exam, or on the exam paper in the case of G3 and G4.

قد تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي، أو على ورقة الامتحان في حالة الصفين G3 و G4.

** As it appears in the textbook, LMS, and (Main_IP).

كما وردت في كتاب الطالب و LMS والخططة الفصلية.