**Democratic and Popular Republic of Algeria**

**Ministry of Higher Education and Scientific Research**

**University of Ibn Khaldoun Tiaret**

**Faculty of Nature and Life Sciences**

**Department of Biology**

**2st Year (Section 01 and 02)**

**Correction sample (TEC)**

**PART ONE : The correct answer (s)**

1. A**,** D
2. A**,** C
3. B, D
4. B
5. A**,** C
6. A, D
7. C, D
8. A, B
9. A, D
10. A, D
11. A, C
12. A, D
13. A, B
14. A, D
15. A, B

**PART TWO**

1. **Compare between DNA and RNA (03p)**

|  |  |
| --- | --- |
| **Similarities** | **Differences** |
| 1. They are both made of building blocks , called **NUCLEOTIDES** | 1. The **BACKBONE** of DNA and RNA are slightly different in their chemical makeup |
| 2. Each **NUCLEOTIDES** is made of a **BASE** attached to a piece of backbone | 2. The **BASES** in DNA are G C A T and the **BASES** in RNA are : G C A U |
| 3. **NUCLEOTIDES** in both DNA and RNA are complementary **BASE PAIRES**: C pairs with G and A with T (or U). | 3. In **DNA** , each base is paired with another along the entire length of 2 strandsIn **RNA** , only certain bases are paired with their complement  |
|  | 4. DNA molecules have a **REGULAR** uniform shape ; RNA molecules have an **IRREGULAR** varied shape |
|  | 5. DNA molecules are huge , typically made of **BILLIONS** of nucleotides RNA molecules are much smaller , made of **HUNDREDS** of nucleotides |

1. **Write the legends of the following figure (Animal cell) : (02p)**

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