Week 11 Assignment 11

Due on 2019-10-16, 23:59 IST.

1) Which of the following statements is NOT true for a single point mutation in the genome?  1 point
- It cannot alter the primary sequence of a protein
- It can lead to a change in the amino acid sequence of a protein
- It can affect protein structure and function if located in a protein-coding region

No, the answer is incorrect.
Acceptable Answers:
- It cannot alter the primary sequence of a protein

2) Which of the following statements is NOT true for the p53 tumor suppressor gene?  1 point
- It is not dependent on DNA
- It is not located on the Y chromosome
- It supports metastatic bone data
- It is a transcription factor for growth arrest

No, the answer is incorrect.
Acceptable Answers:
- It is not dependent on DNA

3) Aramis is working on a PTHrP database for a disease-related protein. Which of his observations is CORRECT?  1 point
- Phosphorylation of 5 and 9 and acetylation at 4
- Phosphorylation of 5 and acetylation at 3
- Phosphorylation and acetylation at 5
- Phosphorylation and acetylation at 3

No, the answer is incorrect.
Acceptable Answers:
- Phosphorylation of 5 and 9 and acetylation at 4

4) Which of the following software can be used to perform pathway enrichment from a differentially expressed dataset?  1 point
- QIAGEN
- DIAUX
- ESTRACE
- All of the above

No, the answer is incorrect.
Acceptable Answers:
- QIAGEN

5) Instructions for Q2-DQ:
Network analysis in visual analytics platform for comprehensive gene expression profiling. 6 meta-analysis. Please answer the following questions using the list of genes as input.

Follow the steps given below using network analysis:
2. Select "RenalMatrix Organ", hematopoiesis
3. Select "DQ" - Open the gene set
5. Click Proceed

What are the total number of sub networks identified after the analysis?
- 8 sub networks
- 6 sub networks
- 1 sub network
- No sub network

No, the answer is incorrect.
Acceptable Answers:
- 8 sub networks

6) How many edges, edges and seeds are present in sub network 1?  1 point
- 10 and 11
- 10 and 7
- 8 and 1
- 10 and 8

No, the answer is incorrect.
Acceptable Answers:
- 10 and 11

7) After answering Q1 and Q2, click on "Proceed" and answer the following question.
Which of the following protein is the most influential candidate in the sub network?  1 point
- DQ19
- DQ14
- DQ21
- DQ17

No, the answer is incorrect.
Acceptable Answers:
- DQ19

8) Follow the steps mentioned below and answer the Questions 8 and 9.
I. Select "KDDOS" as "Dataset" in Functional Explorer (Right side)  1 point
2. Click Submit

Which of the following pathway appeared at top 10 for using KDDOS database with sub network 1?
- Network addition
- Folate biosynthesis
- Type I collagen
- DAG/lipoxygenase

No, the answer is incorrect.
Acceptable Answers:
- Folate biosynthesis

9) How many pathways were identified with adjusted p-value less than 0.02 in sub network 1 with KDDOS database?  1 point
- 0
- 1
- 2
- 3

No, the answer is incorrect.
Acceptable Answers:
- 2