Assignment 2

The due date for submitting this assignment has passed. As per our recent dates you have not submitted this assignment.

1. Which of the following is not a method to KNOCK-DOWN a gene function? 
   - Knockout mutation 
   - RNAi
   - CRISPR
   - Activation tagging
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA

2. With reference to the CRISPR/Cas9 technology, the PAM sequence is:
   - NGG
   - NGC
   - AGT
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA

3. Which of the following techniques would you prefer to study the spatial expression pattern of a gene in a developing zebrafish embryo?
   - In situ hybridization
   - Promoter trapping
   - Promoter driving
   - All of the above
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA

4. During the development of root, a gene is expressed in the vascular cells for a short period but then this protein moves to the nuclei of the cells. Which technique would you prefer to study the localization of the protein in the cell?
   - Western blot
   - Immunohistochemistry
   - Transcriptional fusion
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA

5. Which of the following represents the construct for translational fusion?
   - pGEM-GFP
   - pGEM-3Zf (GFP)
   - pGEM-3Zf (GFP)
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA

6. Yeast two hybrid assay is used to study:
   - DNA-DNA interaction
   - Protein-protein interaction
   - Protein-DNA interaction
   - All of the above
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA

7. Which of the following is NOT correct with respect to CRISPR/Cas9 based genome editing technique in plant:
   - Create a targeted endonuclease protein
   - Cas9 protein is recruited to the target sequence with the help of guide RNA in the sequence specific manner
   - Cas9 makes a double stranded break at the target sequence in the genomic copy
   - The break caused in the genome by Cas9 cannot be repaired
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA

8. Which of the following is NOT correct with respect to reverse transcription-polymerase chain reaction (RT-PCR)?
   - It can be used to measure protein levels in a cell population
   - It can be used to study chromatin
   - It can be used to detect the presence of specific transcript in a tissue
   - It can be used to study distribution of transcripts in a tissue section
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA

9. Which of the following is the most recent and advanced method of global gene expression analysis?
   - Microarray
   - RT-PCR
   - Next-generation sequencing
   - qPCR
   - The answer is incorrect.
   Score: 1
   Accepted Answers: 
   Accepted Answers: NA