**IN THE LIGHT OF THE GRIEVANCES RECEIVED FROM THE CANDIDATES WHO APPEARED FOR THE TEST, THE FOLLOWING QUESTIONS WERE ELIMINATED DURING EVALUATION/SCRUTINY OF THE ONLINE WRITTEN TEST HELD ON 28.03.2015 FOR THE POST OF ASSISTANT PROFESSOR, CUSAT (LIFE SCIENCE/BIOTECHNOLOGY WITH SPECIALISATION IN <u>GENETIC ENGINEERING</u>)**

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## QUESTIONS ELIMINATED

1. The half life of Taq polymerase enzyme at 95°C is:
a. 1.6 hours
b. 7 hours
c. 3.5 hours
d. Not estimated

2. Melting temperature of a PCR reaction is calculated by the formula:
a. $Tm=4(GC)+2(CG)$
b. $Tm=2(GC)+2(AT)$
c. $Tm=4(GC)+2(AT)$
d. $Tm=4(GC)+4(AT)$

3. Which is not a database for comparative genomics?
a. PEDAT
b. MBGD
c. KEGG
d. SAGE

4. CRISPR-cas9 is an example for
a. Nuclease
b. Endonuclease
c. Nickase
d. Topoisomerase

5. Mitomycin is a
a. Aflotoxin
b. Bioengineered protein
c. Biochip
d. Immobilized enzyme

6. An additional gene function is established by employing one among the following experiments
a. Knock in
b. Knock out
c. Transgenic
d. Recombined

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7. An entire organism can be grown from a single cell following
a. Cloning
b. Genetic engineering
c. Cell culture
d. Transfusion

8. Southern blotting technique could not be applied directly to the blot transfer of mRNA separated by gel electrophoresis because
a. RNA is more stickier than DNA with nitrocellulose filter
b. Once attached, RNA cannot be separated out from nitrocellulose filter
c. RNA forms in bulk and sticks on nitrocellulose filter
d. RNA bands do not binds with nitrocellulose filter

9. ORF does not contain:
a. Codon for methionine
b. Stop codon
c. UUU codon
d. Any of these

10. Which of the following is not a soil DNA purification method?
a. Filtration column
b. Microwave heating
c. Chemical flocculation
d. Agarose gel purification

11. Methylated DNA has not been observed in one of the organisms below
a. E.coli
b. Homo sapiens
c. Arabidopsis thaliana
d. Drosophila

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