**SMT.CHANDIBAI HIMATHMAL MANSUKHANI COLLEGE**

SAMPLE MCQ QUESTIONS FOR FH-2020 EXAMINATION

**DEPARTMENT\_\_BIOTECHNOLOGY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**CLASS MSC PART II Semester\_\_FOUR\_\_\_\_\_\_\_\_SUBLECT\_\_\_\_\_BIOTECHNOLOGY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Maximum Mark: 50 Duration: 1 Hour**

**Note:1)All questions are compulsory**

**2) Each question carries 2 marks**

**3) Choose only one correct option**

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|  | PAPER - I |
|  | The reason for the Nanomaterials to be the cornerstone of nanoscience is.   1. It has the potential for revolutionizing the way in which materials are created. 2. It is easy to produce nanomaterials. 3. Nanomaterials can be handled easily. 4. Nanomaterials can be easily modified. |
|  | Fullerene crystals have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ structure.   1. Cone. 2. Face centered cubic (FCC). 3. Sheet like. 4. Rectangular. |
|  | T- PESCIS stands for?   1. Targeted plasmonically enhanced single cell imaging spectroscopy. 2. Tagged plasmonically enhanced single cell imaging spectroscopy. 3. Targeted particle enhanced single cell imaging spectroscopy. 4. Targeted plasmonically enhanced single cellular imaging spectroscopy   . |
|  | In \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ gold coated silica nanoparticles are used to target the cancer cells.   1. Phototherapy. 2. Nanotherapy. 3. Chemotherapy. 4. Target therapy. |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ nanosensor use the sensitivity of the fluorescence for the qualitative and quantitative measurement.   1. Biological. 2. Electrochemical. 3. Chemical. 4. Optical. |
|  | Nanoparticles made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can be used to make air tight wrappers which preserve food for longer time.   1. CaF2. 2. SiO2 3. As2S3 4. Fe3O4 |
|  | PAPER - II |
|  | Which one of the following is not true for bioremediation?   1. It is based on natural process. 2. It involves microorganisms.. 3. Pollutants are converted into less harmful products. 4. Time taken is less as compared to other methods. |
|  | Which one is not a biological factor affecting the microbial degradation?   1. Concentration of microorganisms. 2. Nature of the pollutant. 3. Temperature. 4. Metabolic ability of the microorganisms. |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is referred as the use of microorganisms to degrade contaminants that pose environmental risk.   1. Bioremediation. 2. Biocleaning. 3. Bioleaching. 4. Biostimulation. |
|  | Which one of the following is a genetically modified organism used for bioremediation?   1. *S. aureus.* 2. *Sinorhizobium meliloti.* 3. *Bacillus subtilis.* 4. *Mycoplasma.* |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ plasmid in *Pseudomonas putida* is responsible for degradation of octane.   1. OCT. 2. XYL. 3. CAM. 4. NAH. |
|  | Strain HK44 was derived from\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  *a. P. fluorescens.*  *b. P. pudita .*  *c. E. coli.*  *d. B. subtilis.* |
|  | PAPER – III |
|  | What is the full form of EMBL?   1. England Mol-Bio Laboratory. 2. European Molecular Biology Laboratory. 3. European Mol-Bio Laboratory. 4. Eurasia Molecular Biology Laboratory. |
|  | The Human Genome Project was first proposed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   1. WHO. 2. National Institute of Health. 3. European Health Council. 4. U.S National Research Council. |
|  | Which one of the following is considered to be the first microarray technology?   1. Spotted microarray. 2. In Situ microarray. 3. Self-assembled microarray. 4. DNA microarray. |
|  | BLAST searching allows the user to select one sequence known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   1. Question. 2. Query. 3. Input. 4. Problem. |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are based on synthesizing DNA on minute polystyrene or silicone beads.   1. Spotted microarray. 2. In Situ microarray. 3. Self-assembled microarray. 4. DNA microarray. |
|  | Which of the following is not an application of DNA microarrays?   1. Measure the level of gene expression. 2. Genotyping. 3. Characterizing allelic diversity. 4. Gene cloning. |
|  | PAPER – IV |
|  | Which is the first biological database?   1. EMBL. 2. PDB. 3. GenBank. 4. DDBJ. |
|  | The most sequenced organism in GenBank is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   1. Mice. 2. Human. 3. *E. coli.* 4. Monkey. |
| 21. | If the distribution is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then the relative position of the points on each side of the sample median is same   1. Positively skewed. 2. Negatively skewed. 3. Symmetric. 4. Scattered. |
| 22. | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the most frequently occurring value among all the observation in a sample.   1. Mode. 2. Median. 3. Mean. 4. Central Tendency. |
| 23. | The limit of the region at which we no longer consider chance to be operating is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   1. Interval level. 2. Level of significance. 3. Confidence limit. 4. Confidence interval. |
| 24. | All of the following increases the width of a confidence interval except.   1. Increased confidence level. 2. Increased variability. 3. Increased sample size. 4. Decreased sample size. |
| 25. | Which of the following is not a characteristics of normal curve?   1. It is bell shaped. 2. It is symmetrical. 3. Mean, median and mode do not coincide. 4. It has two inflections. |
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