

031222

All Questions are compulsory.

Figures to the right indicate full marks.

Time: 3 hours

Total marks: 100

Q.1. a) Fill in the blanks.

5 Marks

1. \_\_\_\_\_ is one of the basic physical quantities of thermodynamics.  
(Temperature, Safety, Chemicals, Hygiene).
2. \_\_\_\_\_ °C is a boiling point of water. (0°, 100°, 273°, 32°)
3. Type-1 diabetes is treated using \_\_\_\_\_. (DNA, Iodine, Haemoglobin, Insulin)
4. \_\_\_\_\_ was born in Roslin Institute, Scotland. (CC Cat, Dolly sheep, FDA, Salmon)
5. \_\_\_\_\_ denotes Plank's constant. ( $h$ ,  $\lambda$ ,  $c$ ,  $\mu$ )

b) Match the column

5 Marks

- |                  |                |
|------------------|----------------|
| 1. Absorbance    | a. Herman      |
| 2. Lactoferin    | b. -273.16 °C  |
| 3. Fermentation  | c. pH scale    |
| 4. Absolute zero | d. Colorimeter |
| 5. Sorenson      | e. Yogurt      |

c) Write true or false

5 Marks

1. Purification of vaccines can be done using electrophoresis.
2. A microscope magnifies and resolves the image of an object.
3. DNA fingerprinting does not have any application in forensic science.
4. Mode is a value repeated the maximum number of times.
5. Units of measurements cannot be neutral.

d) Write one sentence answer.

5 Marks

1. Resolving power of microscope
2. Flash Point
3. Biomarkers
4. Chromatography
5. Attribute