





## **BRAINWARE UNIVERSITY**

## **Term End Examination 2023**

Programme – B.Optometry-2019/B.Sc.(MLT)-2019/B.Sc.(MLT)-2020/B.Optometry-2020/B.Sc.(PA)-2020/B.Physiotherapy-2020/B.Sc.(MLT)-2021/B.Sc. (MRIT)-2021/B.Optometry-2021/B.Sc.(PA)-2021/B.Physiotherapy-2021/B.Sc. (OTT)-2021

Course Name – Bioethics & Biosafety
Course Code - GEBT201
( Semester II )

Full Marks: 60 Time: 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## Group-A

(Multiple Choice Type Question)

1 x 15=15

- 1. Choose the correct alternative from the following:
  - (i) Headquarter of World Trade Organization (WTO) is
    - a) Munich, Germany

b) Vienna, Austria

c) Geneva, Switzerland

- d) London, UK
- (ii) Biosafety level 3 laboratory is applicable to
  - a) Clinical research

- b) Dangerous and exotic agents
- c) Undergraduate training institute
- d) None

- (iii) BSL4 level include
  - a) Toxic and hazards chemical.
- b) mitochondrial cloning.

c) Self cloning

- d) None of these
- (iv) DNA of eukaryotic organisms has several repeating units of short sequences called
  - a) random repeats.

b) tandem repeats.

c) mini satellites

- d) all of these
- (v) Safety equipment for primary barriers include
  - a) Ventilators

b) Face shields

c) Safety glasses

- d) Both ii and iii
- (vi) In India, the published literary work is protected until
  - a) Lifetime of author

- b) 25 years after the death of author
- c) 40 years after the death of author
- d) 60 years after the death of author
- (vii) Number of member states under WIPO are
  - a) 180

b) 156

c) 192

- d) None of these
- (viii) Symbol of Maharaja of Air India is

| (ix)  | <ul><li>a) Copyright</li><li>c) Trademark</li><li>The term 'Intellectual Property Rights' covers</li></ul>   | d) All of the above  |                                 |
|---|--|--|---------------------------------|
|   | a) Copyrights c) Trade dress Yersinia pestis(plague) can be studied in   | b) Know-how<br>d) All of the above   |                                 |
| (xi)  | <ul><li>a) BSL I laboratory</li><li>c) BSL III laboratory</li><li>A patent document must have</li></ul>  | b) BSL II laboratory d) BSL IV laboratory  |                                 |
| (xii)   | <ul><li>a) Description of invention</li><li>c) Both i and ii</li><li>Ebola virus and Variola virus can be studied in</li></ul>   | <ul><li>b) Claims of scope of protection</li><li>d) None of these</li></ul>          |                                 |
| (xiii)  | <ul><li>a) BSL I laboratory</li><li>c) BSL III laboratory</li><li>Which regulatory body responsible for implementation of the processing o</li></ul> | b) BSL II laboratory<br>d) BSL IV laboratory<br>entation of biosafety guidelines for |                                 |
| (xiv)   | <ul><li>a) RDAC</li><li>c) DST</li><li>Which of the following dye is used for observing</li></ul>  | b) GEAC<br>d) ICAR<br>g DNA in agarose gel?  |                                 |
| (xv)  | <ul><li>a) Ethydium bromide</li><li>c) Methylene blue</li><li>The most reproducible type marker is</li><li>a) RAPD</li></ul>   | b) acetocarmine d) None of these b) RFLP   |                                 |
|   | c) SSR   | d) None of these   |                                 |
|   | <b>Grou</b><br>(Short Answer Ty  |  | 3 x 5=15                        |
| <ol> <li>Explain briefly WIPO</li> <li>Explain DNA fingerprinting.</li> <li>Write about the classfication of forensic science.</li> <li>Write about the application of forensic science.</li> <li>Differentiate between bioethics and business ethics.</li> </ol> OR Classify patents.  |  |  | (3)<br>(3)<br>(3)<br>(3)<br>(3) |
| Cit   |  |  | (-)                             |
|   | <b>Group</b><br>(Long Answer Typ   |  | 5 x 6=30                        |
| <ol> <li>Write short note on: Biotechnology and social responsibility.</li> <li>State the public acceptance issues in biotechnology.</li> <li>How and who can helps intellectual property right in India?</li> <li>Discuss the criteria for patent challenge</li> <li>Discuss the advantages of patents</li> <li>Mention the alternatives of patent</li> </ol> OR |  |  | (5)<br>(5)<br>(5)<br>(5)<br>(5) |
| M   | Iention two PCR and non-PCR based type marke   |  | (5)                             |
|   |  |  |                                 |