



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22
Programme – Bachelor of Optometry
Course Name – Bioethics & Biosafety
Course Code - GEBT201
(Semester II)

Time allotted : 1 Hrs.15 Min.

Full Marks : 60

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

Choose the correct alternative from the following :

- (1) Simple sequence repeats are
 - a) 1-6 bp long sequences distributed along the chromosome
 - b) individual specific in number and position.
 - c) also called as micro satellites
 - d) All of these
- (2) Radioactive probe is not required in
 - a) RAPD
 - b) AFLP
 - c) RFLP
 - d) All of these
- (3) Molecular marker Include
 - a) RFLP
 - b) AFLP
 - c) SSR
 - d) All of these
- (4) Which regulatory body responsible for implementation of biosafety guidelines for recombinant DNA technology?
 - a) RDAC
 - b) GEAC
 - c) DST
 - d) ICAR
- (5) Which of the following dye is used for observing DNA in agarose gel?
 - a) Ethyidium bromide
 - b) acetocarmine
 - c) Methylene blue
 - d) None of these
- (6) The following cannot be exploited by assigning or by licensing the rights to others
 - a) Patent
 - b) Design
 - c) trade mark
 - d) None of these
- (7) Which one of the following marker is used for selection of transgenic plants:
 - a) Drug resistance gene.
 - b) RAPD marker.
 - c) Antibiotic resistance gene
 - d) vitamin resistance gene
- (8) Molecular markers are used to construct
 - a) chromosome maps
 - b) cytogenetic maps
 - c) physical maps
 - d) All of these

- (9) Radioactive waste are:
- a) Nuclear war materials
 - b) Rigid container
 - c) Test explosions
 - d) Both (Nuclear war materials) and (Test explosions)
- (10) Intellectual Property Rights (IPR) is a process which protects the use of information and ideas that are of
- a) Ethical value
 - b) Commercial value
 - c) Social value
 - d) Moral value
- (11) Mastermix of PCR contain
- a) DNA, Forward and reverse Primer, Mg⁺, Buffer, Taqpolymerase.
 - b) DNA, Forward Primer, Mg⁺, Buffer, Taqpolymerase
 - c) DNA, Mg⁺, Buffer, Taqpolymerase
 - d) DNA, Primer, Mg⁺, Buffer, Taqpolymerase
- (12) The length of RAPD primer is
- a) 10-15 bp
 - b) 30-40 bp
 - c) 40-50 bp
 - d) None of these
- (13) Chemical, reagents or broth cultures should be pipetted by _____?
- a) mouth
 - b) pipette
 - c) ear
 - d) nose
- (14) What is the name of the procedure performed under sterile conditions to eliminate contamination in hopes to obtain a pure culture of one type of microorganism?
- a) sterilization technique.
 - b) aseptic technique.
 - c) disinfectant technique
 - d) pathogen technique.
- (15) Handling of Recombinant products requires
- a) Characteristics of donor and recipient organism
 - b) Characteristic of the modified organism
 - c) expression and properties of the gene product
 - d) All of these
- (16) Paris Convention for the Protection of Industrial Property, initially signed in
- a) 1983
 - b) 1883
 - c) 1988
 - d) 1999
- (17) Which regulatory body helps and supports British businesses with regard to trade with India:
- a) The UK India Business Council (UKIBC)
 - b) British High commission
 - c) British Academy of Commerce
 - d) None of these
- (18) Main features of TRIPs agreement are
- a) Standards
 - b) Enforcement
 - c) Dispute settlement
 - d) All of these
- (19) Salmonella can be studied in
- a) BSL I laboratory
 - b) BSL II laboratory
 - c) BSL III laboratory
 - d) BSL IV laboratory
- (20) Number of member states under WIPO are
- a) 180
 - b) 156
 - c) 192
 - d) None of these
- (21) Trade in services includes which of the following?
- a) Aerospace
 - b) Insurance
 - c) Textiles
 - d) Computer hardware
- (22) Facility design for secondary barriers consist of
- a) Basic Laboratory
 - b) Containment laboratory
 - c) Maximum Containment laboratory
 - d) All of these
- (23) Headquarter of World Trade Organization (WTO) is

- a) Munich, Germany
b) Vienna, Austria
c) Geneva, Switzerland
d) London, UK
- (24) Biosafety level 3 laboratory is applicable to
a) Clinical research
b) Dangerous and exotic agents
c) Undergraduate training institute
d) None
- (25) Which one of the following does not included under Category IV types of rDNA activities?
a) Self cloning
b) Toxin gene clonings
c) Cloning of genes for vaccine production: e.g. Rinderpest and leprosy antigens
d) Genes coding for antibiotic resistance into pathogenic organisms.
- (26) Physical Containment (PC) mainly include
a) Host
b) bacteria
c) Plasmid.
d) Preventing the exposure of the researcher and the environment to the harmful agents
- (27) The extension temperature of PCR is --- degree centigrade.
a) 72
b) 50-60
c) 95
d) 20
- (28) Which one of the following marker is of co-dominant type?
a) RAPD.
b) RFLP.
c) all.
d) i and ii
- (29) Examples of hazardous waste are
a) Chemical waste
b) Radioactive waste
c) Both a and b
d) None of these
- (30) The set of DNAs generated by using random primers in a PCR reaction is called
a) SSR.
b) RFLP
c) AFLP
d) None of these
- (31) Organisms handled in BSL-III labs are
a) Leishmania donovani
b) SARS coronavirus
c) M. tuberculosis
d) All of these
- (32) Safety equipment for primary barriers include
a) Ventilators
b) Face shields
c) Safety glasses
d) Both ii and iii
- (33) Handling of Recombinant products requires
a) Characteristics of donor and recipient organism
b) Characteristic of the modified organism
c) expression and properties of the gene product
d) All of these
- (34) Which of the following type(s) of Personal Protective Equipment (PPE) is frequently used?
a) Safety glasses.
b) Gloves
c) Lab Coats.
d) All of the above
- (35) Which one of the following is not a component of elements of containment?
a) Laboratory practice; and technique.
b) Safety equipment and
c) Facility design.
d) Biochemical hazard.
- (36) The total duration of patent is years
a) 10
b) 20
c) 30
d) 40
- (37) Which statement is wrong with respect to patent?
a) Valid for 20 years
b) Not a time consuming and lengthy
c) require payment every year.
d) none
- (38) Hepatitis A, B, and C virus can be studied in

- a) BSL I laboratory
c) BSL III laboratory
- b) BSL II laboratory
d) BSL IV laboratory
- (39) Forms of IPR include
a) Patents
c) Copyright
- b) Trademark
d) All of these
- (40) Measles virus can be studied in
a) BSL I laboratory
c) BSL III laboratory
- b) BSL II laboratory
d) BSL IV laboratory
- (41) Leishmania donovani can be studied in
a) BSL I laboratory
c) BSL III laboratory
- b) BSL II laboratory
d) BSL IV laboratory
- (42) In India, the literary work is protected until
a) Lifetime of author
c) 40 years after the death of author
- b) 25 years after the death of author
d) 60 years after the death of author
- (43) The rights of a patentee are
a) Sell or distribute
c) Assign the property to others
- b) License
d) all
- (44) Example of intangible property include
a) Copyrights
c) Vehicles
- b) Land
d) Furniture
- (45) Which of the following is not an intellectual property law?
a) Copyright Act, 1957
c) Customs Act, 1962
- b) Trademark Act, 1999
d) Design Act, 2000
- (46) The term 'Intellectual Property Rights' covers
a) Copyrights
c) Trade dress
- b) Know-how
d) All of the above
- (47) GEAC stands for
a) Genetic Engineering Applied Committee
c) Genetic Engineering Appraisal Council
- b) Genetic Engineering Appraisal Committee
d) Genetic Engineered Appraisal Committee
- (48) A patent document must have
a) Description of invention
c) Both i and ii
- b) Claims of scope of protection
d) None of these
- (49) Ebola virus and Variola virus can be studied in
a) BSL I laboratory
c) BSL III laboratory
- b) BSL II laboratory
d) BSL IV laboratory
- (50) The number of nucleotide repeats in minisatellite are
a) 6-10
c) 15-30
- b) 1-5
d) 30-80

(51)



Identify the safety violation

- a) Organized lab.
c) All of these
- b) Unorganized lab
d) None of these
- (52) Patent applications are divided into following headings
a) Field of the invention
- b) Background of the invention

- c) Both a and b
- (53) Steps leading to Commercialization are
- a) Assessment of report of invention
- c) Prosecuting patent application
- (54) Plant is a
- a) Tangible property
- c) Both a and b
- (55) Trademarks are
- a) Tangible property
- c) Both a and b
- (56) Franchises are
- a) Tangible property
- c) Both a and b
- (57) Dis advantages of GMO food is
- a) Allergic Reaction
- c) more nutritious food
- (58) GEAC stands for _____
- a) Genetic Ethical Approval Committee
- c) Genetic Ethical Active Commission
- (59) Which of the following can be patented
- a) Machine
- c) Composition of matter
- (60) De-contamination Process using Bio organism is known as
- a) Bio pesticides
- c) Biosafety
- d) None of these.
- b) Requirement for licensing
- d) All of these
- b) Intangible property
- d) None of these
- b) Intangible property
- d) None of these
- b) Intangible property
- d) None of these
- b) Autoimmune response
- d) Pest resistance Plant Production
- b) Genetic Engineering Active Commission
- d) Genetic Engineering Approval Committee
- b) .Process
- d) All of the above
- b) Bio remediation
- d) Bio ethics