



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Bachelor of Science in Medical Lab Technology

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
c) Test explosions
- b) Rigid container
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 contains
- 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
 - b) BSL II laboratory
 - c) BSL III laboratory
 - d) BSL IV laboratory
- (39) Forms of IPR include

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

(51)



Identify the safety violation

- a) Organized lab.
c) All of these
- (52) Patent applications are divided into following headings
a) Field of the invention
c) Both a and b
- (53) Steps leading to Commercialization are
a) Assessment of report of invention
- b) Unorganized lab
d) None of these
- b) Background of the invention
d) None of these.
- b) Requirement for licensing

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