



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Bachelor of Pharmacy

Course Name – Pharmaceutical Biotechnology

Course Code - BP605T

(Semester VI)

Time allotted : 1 Hrs.30 Min.

Full Marks : 75

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 75=75

Choose the correct alternative from the following :

- (1) The first synthetic antibiotic was?

a) Tetracycline	b) Nystatin
c) Chloramphenicol	d) Ampicillin
- (2) Using genetic techniques in forensic science is also called

a) Genetic fingerprinting	b) In vivo culture
c) Hybridoma technology	d) Gene transfer
- (3) The most commonly employed cross-linked polymer is

a) Collagen	b) Cellulose
c) Polyacrylamide gel	d) Cation exchange resin
- (4) Glucose biosensor is an example of _____ biosensor.

a) Thermal	b) Optical
c) Amperometry	d) Conductometric
- (5) Highest percentage of starch present in

a) Amylase	b) Amylopectin
c) Both	d) None of these
- (6) Who is the inventor of biosensor?

a) Robert Hooke	b) Thomas Alva Edison
c) Leland C Clark, Jr	d) Einstein
- (7) In a pregnancy kit, which molecule does the kit actually test for?

a) Baby's urine test	b) Blood test
c) HCG test	d) Amniotic fluid test
- (8) Which of the following is a characteristic of a photometric biosensor?

- (21) c- DNA libraries are produced from
- a) RNAs
 - b) Messenger RNAs
 - c) Transfer RNAs
 - d) Ribosomal RNAs
- (22) Viral mediated gene transfer is called _____
- a) Conjugation
 - b) Transduction
 - c) Transformation
 - d) Transversion
- (23) The temperature cycles in a PCR are in the order
- a) 95 °, 55 °, 72 °
 - b) 55 °, 72 °, 95 °
 - c) 72 °, 55 °, 95 °
 - d) 95 °, 72 °, 55 °
- (24) Which enzyme is active at 72 ° in the polymerase chain reaction _____
- a) Isomerase
 - b) Exonuclease
 - c) Polymerase
 - d) Endonuclease
- (25) The vaccines prepared through recombinant DNA technology are
- a) Third generation vaccines
 - b) First generation vaccines
 - c) Second generation vaccines
 - d) None
- (26) The DNA fragments have strictly ends due to _____
- a) Endonuclease
 - b) Unpaired bases
 - c) Calcium ions
 - d) Free methylation
- (27) Which bacterium is used in the production of insulin by genetic engineering?
- a) Saccharomyces
 - b) Rhizobium
 - c) Escherichia
 - d) Mycobacterium
- (28) The trade name of human insulin is _____
- a) Humatrope
 - b) Humulin
 - c) Intron
 - d) Activase
- (29) Recombinant plasmids are added to a bacterial culture that has been pretreated with _____ ions
- a) Iodine
 - b) Magnesium
 - c) Calcium
 - d) Ferric
- (30) Which enzyme is used to join together two different types of DNA molecules?
- a) Ligase
 - b) Endonuclease
 - c) Exonuclease
 - d) Protease
- (31) Which of the following enzymes in bacteria are responsible for restricting the growth of viruses?
- a) Restriction endonuclease
 - b) Topoisomerase
 - c) Gyrase
 - d) Protease
- (32) All of the following are applications of rDNA technology except
- a) Treatment of human genetic disorders
 - b) Production of human proteins in bacterial cells
 - c) Using bacteria to detect the presence of carcinogens
 - d) Altering plants to make them resistant to pests
- (33) Which molecules move faster in gel electrophoresis?
- a) Longer
 - b) Smaller
 - c) Positively charged, negatively charged
 - d) Heavier, lighter

- a) Mutation
c) Meiosis
- b) Sexual reproduction
d) Evolution
- (60) Mutation is generally due to
- a) Lethal gene
c) Recessive gene
- b) Dominant gene
d) Complementary gene
- (61) In mutational event, when adenine is replaced by guanine, it is
- a) Transition
c) Transversion
- b) Transcription
d) Frame shift mutation
- (62) Muller was first to produce induced mutations in by exposing them x rays.
- a) Paramecium
c) Drosophila
- b) Arabidopsis
d) Xenopus
- (63) Mutation is
- a) Change which affects the offspring's of F2 generation
c) Change in parents not inherited
- b) Change that is inherited
d) Plant growth controlling factor
- (64) X ray causes mutation by
- a) Deletion
c) Transversion
- b) Transition
d) Base substitution
- (65) The induction of mutation by X rays was discovered by
- a) Muller
c) Weismann
- b) Hugo de Vries
d) Morgan
- (66) A mutation that does not alter the protein production is called a
- a) Deletion mutation
c) Silent mutation
- b) Inversion mutation
d) Transverse mutation
- (67) Original: ATCCAT mutation: ATCGCAT which type of mutation is occurred?
- a) Deletion
c) Insertion
- b) Inversion
d) Transverse
- (68) Who first isolated citric acid?
- a) Thomas Edison
c) Charles Darwin
- b) Carl Wilhelm
d) Francis Crick
- (69) Which of the following organisms is not used for the production of citric acid?
- a) Aspergillus wentii
c) Candida oleophila
- b) Bacillus licheniformis
d) Saccharomyces cerevisiae
- (70) Citrate is the feedback inhibitor of _____
- a) Hexokinase
c) Pyruvate dehydrogenase
- b) Phosphofructokinase
d) Malate dehydrogenase
- (71) Who discovered the citric acid cycle?
- a) Hans Krebs
c) Wehmer
- b) Carl Wilhelm
d) Adam
- (72) How inoculum is prepared in the production of antibiotics?
- a) On solid media
c) First on solid media than on liquid media
- b) On liquid media
d) On suspension
- (73) pH required for the production of penicillin will be _____

a) 8.0

b) 7.5

c) 6.5

d) 5.0

(74) The doubling time of *Penicillium notatum* is _____

a) 6 hrs

b) 5 hrs

c) 4 hrs

d) 3 hrs

(75) What is the precursor of penicillin?

a) Benzylpenicillin

b) Isopenicillin N

c) phenylacetic acid

d) L- α aminoadipic acid