

National Testing Agency

Question Paper Name: 5301 Biotechnology 30th June 2019 Shift 2
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Duration: 180
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Biotechnology

Group Number : 1
Group Id : 489994217
Group Maximum Duration : 0
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Revisit allowed for view? : No
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Break time: 0
Group Marks: 100

Biotechnology

Section Id : 489994273
Section Number : 1
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions: 100
Number of Questions to be attempted: 100
Section Marks: 100
Display Number Panel: Yes
Group All Questions: No

Sub-Section Number: 1
Sub-Section Id: 489994297
Question Shuffling Allowed : Yes

Question Number : 1 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Biodynamic products are better than

- A. Traditional products
- B. Vermi products
- C. Natural products
- D. All the above

Options :

1. 1
2. 2
3. 3

4. 4

Question Number : 2 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Biodynamic Technology is for

- A. Chemical Farming
- B. Organic Farming
- C. Natural Farming
- D. d. Activated organic Farming

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 3 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Biodynamic Calendar is for which plant part

- A. Root
- B. Stem
- C. Leaf
- D. All the above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 4 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Vermi-technology is for

- A. Vermi Casting
- B. Vermi-composting
- C. Vermi-culture
- D. All the above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 5 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

As per Biodynamic Calendar what is best time for 500 preparation is

- A. Ascending Moon
- B. Descending Moon
- C. Perigee
- D. Apogee

Options :

- 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Number : 6 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In Biodynamic what is the best time for 501 preparation is

- A. Ascending Moon
- B. Descending Moon
- C. Perigee
- D. Apogee

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 7 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Vermivash basically works as an

- A. Growth promoter
- B. Growth regulator
- C. Fungal Control
- D. All the above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 8 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Best variety of earthworms for composting are also known as

- A. Red worms
- B. Pink worms
- C. Green Worms
- D. Gray worms

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 9 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Vermiwash is rich in

- A. Hormones
- B. Minerals
- C. Nutrients
- D. All the above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 10 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The best feed for earthworms is

- A. Fresh dung
- B. Decomposed Dung
- C. Decomposed Leaves
- D. Mixture of decomposed leaf & dung

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 11 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following materials can be used as a bioplastic

- A. Polystyrene
- B. Polypropylene
- C. Polyhydroxybutyrate
- D. All of these

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 12 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

PHB producing microorganisms can be isolated from:

- A. Rhizospheric soils
- B. Sewage Water
- C. Industrialwaste disposal site
- D. All of these

Options :

- 1. 1
- 2. 2
- 3. 3

4. 4

Question Number : 13 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Bioplastics find applications in which of the following sectors:

- A. Food packaging
- B. Agriculture
- C. Health & medicine
- D. All of these

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 14 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following means of disposal of conventional plastic after use is not toxic to the environment?

- A. Release into oceans
- B. Burial in landfills
- C. Incineration
- D. None of these

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 15 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is **not true** about conventional plastics:

- A. They are produced from perishable sources
- B. They are biodegradable
- C. Their burning releases toxic fumes
- D. Conventional plastics are absolutely unsustainable

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 16 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is true about bioplastics:

- A. Bioplastics cannot be used in automobile industries
- B. Bioplastics can be produced as well as degraded by microorganisms
- C. Bioplastics are non-recyclable and unsustainable
- D. None of these

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 17 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following dye can be used for screening of PHB producing bacteria

- A. Coomassie Brilliant Blue
- B. Methylene Blue
- C. Nile Blue
- D. Bromophenol Blue

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 18 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is a shortcoming of bioplastics compared to conventional plastic:

- A. Brittleness
- B. Not cost-effective
- C. Poor interaction with fibres
- D. All of these

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 19 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is the correct sequence of the genes involved in the PHB biosynthetic pathway:

- A. PhaA → PhaB → PhaC
- B. PhaB → PhaA → PhaC
- C. PhaC → PhaA → PhaB
- D. PhaA → PhaC → PhaB

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 20 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following conditions are favorable for the production of polyhydroxyalkanoates:

- A. Excess C; low N, O & P
- B. Excess N & P; low C & O
- C. Excess C & O; low P & N
- D. Excess N; low C, O & P

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 21 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

DoD clean-up policy is determined centrally under which the followings:

- A. DERP
- B. HERP
- C. AERP
- D. CERP

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 22 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The _____ program for the clean-up of closed or abandoned hazardous waste sites is administered by EPA.

- A. Superfund
- B. HZAMAT
- C. NPL
- D. HPS

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 23 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is EPA's demonstration program for innovative clean-up technologies?

- A. NPL
- B. HPS
- C. SITE
- D. SIGHT

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 24 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the followings are the most common contaminants in hazardous sites according to EPA data analysis?

- A. VOC
- B. Metals
- C. PAH
- D. PCB

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 25 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The use of _____ technologies for all types of VOCs is expected to continue according to EPA analysis.

- A. SBE
- B. SVE
- C. SAP
- D. SAL

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 26 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the followings soil remediation technology uses liquids and mechanical processes to scrub soils?

- A. SVE
- B. Soil washing
- C. NPL
- D. HPS

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 27 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following technique is successful in treating petroleum hydrocarbons?

- A. SVE
- B. Soil washing
- C. NPL
- D. Landfarming

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 28 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the followings solidification uses a powerful source of energy to melt soil?

- A. SVE
- B. Soil washing
- C. Asphalt batching
- D. Vitrification

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 29 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which in situ remediation technology that combines elements of bioventing and vacuum-enhanced pumping?

- A. Bio slurping
- B. Soil washing
- C. Asphalt batching
- D. Vitrification

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 30 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following soil remediation process injects air into the contaminated media at a rate designed to maximize in situ biodegradation?

- A. Bio slurping
- B. Bioventing
- C. Asphalt batching
- D. Vitrification

Options :

- 1. 1
- 2. 2

3. 3

4. 4

Question Number : 31 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Archaea and bacteria are

- A. Prokaryote
- B. Eukaryote
- C. Both
- D. None

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 32 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Haloarchaea generally grow in

- A. High salt
- B. High temperature
- C. both a & b
- D. d. None of the above

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 33 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the accurate method for identification of haloarchaea?

- A. Lipid profile
- B. Carbohydrate fermentation
- C. Molecular method
- D. None of the above

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 34 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the size of halocins?

- A. 100 kDa
- B. 3-30 kDa
- C. 90 kDa
- D. d. 200 kDa

Options :

1. 1

- 2. 2
- 3. 3
- 4. 4

Question Number : 35 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Haloarchaea generally grow at

- A. Low pH
- B. Slight basic medium
- C. Neutral pH
- D. None of the above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 36 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Antimicrobial proteins produced by haloarchaea are

- A. Halophiles
- B. Thermoplast
- C. Halocins
- D. Proteocins

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 37 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which method has been used for sequencing of halocins

- A. Sanger
- B. Edman
- C. QTOF
- D. LCMS

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 38 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Halocins are generally

- A. Cationic
- B. Anionic
- C. Neutral
- D. None of the above

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 39 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which method was used for determination of mass of halocins?

- A. MALDI-TOF
- B. LC-MS
- C. PAGE
- D. d. Q-TOF

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 40 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Halocins may be applied in safety of

- A. Fruits
- B. Medicines
- C. Leather hides
- D. None

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 41 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following statements is true?

- A. A positive value of π indicates that a substituent is larger than H.
- B. A positive value of π indicates that a substituent is more electrons donating than H.
- C. A positive value of π indicates that a substituent is more hydrophobic than H.
- D. A negative value of π indicates that a substituent is more hydrophobic than H.

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 42 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The QSAR equation relating the insecticidal activity of a series of diethyl phenylphosphonates versus σ is shown below.

$$\log \left(\frac{1}{C} \right) = 2.282\sigma - 0.348, (r^2 0.952, r 0.976,$$

What does $\log (1/C)$ represent?

- A. The concentration
- B. The catalytic activity
- C. The insecticidal activity
- D. The physicochemical property

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 43 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is a Craig plot used for?

- A. To compare the activities of different compounds having different substituents.
- B. To compare the values of a specific physicochemical property for a range of substituents.
- C. To compare the values of two specified physicochemical properties for a range of substituents.
- D. None of the answers are correct.

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 44 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What does CoMFA stand for in 3D QSAR?

- A. Compound molecular formula assessment
- B. Compound mass field analysis
- C. Comparative molecular field analysis
- D. Comparative modelling force field analysis

Options :

- 1. 1

2. 2
3. 3
4. 4

Question Number : 45 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What two physical features (or fields) are most important in 3D QSAR studies?

- A. Hydrophobic and steric fields.
- B. Electrostatic and steric fields.
- C. Hydrophobic and electrostatic fields.
- D. Steric field and dipole moment.

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 46 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is not crucial for 3D QSAR studies?

- A. Identification of the active conformation for each molecule
- B. Identification of the pharmacophore for each molecule
- C. Alignment of each molecule
- D. Identification of the target structure

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 47 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the relevance of a probe atom in 3D QSAR?

- A. It is used to position a molecule into a lattice of grid points.
- B. It is used to determine the position of the various grid points making up the lattice.
- C. It is an atom of the test molecule which is used as a spatial reference point.
- D. It is placed at the grid points of a lattice to determine the important properties of a molecule placed in the lattice.

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 48 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What symbol represents the partition coefficient in a QSAR equation?

- pH
- π
- P
- Σ

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 49 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What symbol is used to represent molar refractivity as a steric factor in a QSAR equation?

- MR
- R
- F
- ES

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 50 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is measured by the software called Sterimol?

- The Hammett substituent constant
- Taft's steric factor
- The Verloop steric parameter
- d. The substituent hydrophobicity constant

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 51 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which bacterium is found in Dosa batter

- A. Both a & b
- B. *Enterococcus*
- C. *Lactobacillus*
- D. *Salmonella*

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 52 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one is probiotic food?

- A. Drinks
- B. Pickles
- C. Curd
- D. All above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 53 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Proteins are made up of -

- A. Lipids
- B. Glucose
- C. Amino acids
- D. Metabolites

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 54 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one is not pathogen?

- A. *Pseudomonas*
- B. *Lactobacillus*
- C. *Salmonella*
- D. *Vibrio*

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 55 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one is secondary metabolite?

- A. Pepsin
- B. Amylase
- C. Lactic acid
- D. Carbohydrates

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 56 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fermented foods are dominated by

- A. Mostly lactic acid bacteria
- B. Mixture of bacteria
- C. Pathogens
- D. Fungi

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 57 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one is antimicrobial compound produced by lactic acid bacteria?

- A. Trypsin
- B. Propionic acid
- C. Bacteriocins
- D. All above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 58 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What are bacteriocins?

- A. Antimicrobial carbohydrates
- B. Inflammatory proteins
- C. Antimicrobial proteins
- D. Immunity proteins

Options :

- 1. 1
- 2. 2
- 3. 3

4. 4

Question Number : 59 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the therapeutic application of bacteriocins?

- A. in infectious diseases
- B. Cancer treatment
- C. Immune modulation
- D. All above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 60 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Bacteriocins generally act by

- A. Protein binding
- B. DNA binding
- C. Pore formation
- D. Enzymatic activity

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 61 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Bacteriocins are

- A. Peptides from bacteria
- B. Antimicrobial compounds
- C. Both a & b
- D. Lipid compounds

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 62 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Antibiotics are

- A. Secondary metabolites
- B. Large proteins
- C. Primary metabolites
- D. None

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 63 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Hybrid bacteriocins contain

- A. one bacteriocins
- B. Many bacteriocins joint
- C. Many proteins
- D. None

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 64 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which two bacteriocins have been used to make hybrid

- A. Nisin and Pediocin
- B. Pediocin and enterocin
- C. Pediocin and plantaricin
- D. None

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 65 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

ATP Efflux in hybrid bacteriocins was

- A. lower
- B. Not changed
- C. Higher
- D. None of the above

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 66 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Host range of hybrid has been

- A. Increased
- B. Decreased
- C. Remained same
- D. Not known

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 67 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The N-terminal of bacteriocins are generally

- A. Anionic
- B. Hydrophobic
- C. Cationic
- D. Complex

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 68 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Hybrid bacteriocins have

- A. Broad host range
- B. Stability
- C. Activity
- D. Solubility

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 69 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which two parameters were used to measure the efficacy of hybrid bacteriocins?

- A. Activity
- B. Structure
- C. ATP efflux
- D. a & c

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 70 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which pathogen has been used as target to monitor the efficacy of hybrid bacteriocin

- A. *Salmonella*
- B. *Lactobacillus*
- C. *Pseudomonas*
- D. *Enterococcus*

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 71 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which region of the plant is dominated by bacteria?

- A. Root
- B. Leaf
- C. Cortex
- D. a & b

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 72 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which method is used for purification of bacteriocin

- A. Chromatography
- B. Precipitation
- C. Filtration
- D. all above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 73 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is plant probiotics?

- A. Beneficial bacteria
- B. Harmful bacteria
- C. Beneficial plants
- D. All animals

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 74 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What are bacteriocins?

- A. Antimicrobial proteins
- B. Inflammatory proteins
- C. Antimicrobial carbohydrates
- D. Immunity proteins

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 75 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Why final pH of medium drops after the growth of lactic acid bacteria

- A. Production of base
- B. Lactic acid
- C. Proteins
- D. None of the above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 76 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one is antimicrobial compound produced by lactic acid bacteria?

- A. Lactic acid
- B. Propionic acid
- C. Trypsin
- D. a & b

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 77 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Inhibition range of bacteriocins of lactic acid bacteria are generally

- A. Narrow
- B. Moderate
- C. Broad
- D. None of above

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 78 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Bacteriocins are generally

- A. Heat stable
- B. Enzyme stable
- C. pH stable
- D. a & c

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 79 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Bacteriocins may be purified from

- A. Cells
- B. Cell free supernatant
- C. Cell wall
- D. Cytosol

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 80 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Bacteriocins are generally

- A. Globular
- B. Helical
- C. Linear
- D. b & c

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 81 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The process of burning of municipal solid waste at high temperature is called

- A. Incineration
- B. Composting
- C. Land filing
- D. Shredding

Options :

- 1. 1
- 2. 2
- 3. 3

4. 4

Question Number : 82 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is a biodegradable waste?

- A. Polythene bags
- B. Synthetic fiber
- C. Food waste
- D. Paper

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 83 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In which method of disposal of municipal solid waste, the waste is dumped in the soil?

- A. Incineration
- B. Composting
- C. Land filing
- D. Shredding

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 84 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is correct regarding disposal of waste by land filling?

- A. Economical method
- B. Preferred in low lying areas
- C. Foul gases are not produced
- D. Separation of different types of waste not required.

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 85 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The density of ash produced in the municipal solid waste is

- A. 100 kg/m³
- B. 450 kg/m³
- C. 700 kg/m³
- D. 1000 kg/m³

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 86 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The process of decomposition of biodegradable solid waste by earthworms is called

- A. Land fills
- B. Shredding
- C. Vermi-composting
- D. Composting

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 87 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The waste produced in cotton mills are

- A. Municipal solid waste
- B. Non-biodegradable waste
- C. Hazardous waste
- D. Non-hazardous waste.

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 88 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is not the land filling method?

- A. Bangalore method
- B. Area method
- C. Depression method
- D. Trench method

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 89 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is a liquid that passes through solid waste and extract suspended impurities from it?

- A. Leachate
- B. Sludge
- C. Distilled water
- D. Municipal waste

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 90 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is not the municipal solid waste?

- A. Radioactive substance
- B. Ashes
- C. Food waste
- D. Rubbish

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 91 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The prefix "nano" comes from which of the followings

- A. French word meaning billion
- B. Greek word meaning dwarf
- C. Spanish word meaning particle
- D. Latin word meaning invisible

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 92 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The size of nano-particles is between _____ nm.

- A. 100 to 1000
- B. 0.1 to 10
- C. 1 to 100
- D. d. 0.01 to 1

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 93 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Who first used the term nanotechnology and when?

- A. Richard Feynman, 1959
- B. Norio Taniguchi, 1974
- C. Eric Drexler, 1986
- D. Sumio Iijima, 1991

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 94 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

For high sensitivity or selectivity environmental sensors to sense the gaseous chemical like _____

- A. CO₂
- B. NO₃
- C. O₂
- D. NO

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 95 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The term which refers to the breakup within a compound due to microbial activity is?

- A. Microbial degradation
- B. Agro-degradation
- C. Photo-degradation
- D. Decomposition

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 96 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is graphene?

- A. A new material made from carbon nanotubes
- B. A one-atom thick sheet of carbon
- C. Thin film made from fullerenes
- D. Software tool to measure and graphically represents nanoparticles.

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 97 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fullerene or bucky ball is made up of _____ carbon atoms.

A. 100
B. 20
C. 75
D. 6

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 98 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The most important property of nonmaterial is :

A. force
B. friction
C. pressure
D. temperature

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 99 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following statement/s is are true?

A. All four
B. (ii) and (iv)
C. (i), (ii) and (iv)
D. (ii), (iii) and (iv)

i. Volume to surface area ratio is very large for nanomaterials.

ii. The cut-off limit of human eye is 10^{-5} m.

iii. Hardness of a SWNT is about 63×10^9 Pa.

iv. Carbon nanotubes are cylindrical fullerenes.

Options :

1. 1
2. 2
3. 3

4. 4

Question Number : 100 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The width of a carbon nanotube is _____ nm.

- A. 1
- B. 1.3
- C. 2.5
- D. 10

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4