

Question Paper Preview

Notations :

- Options shown in green color and with ✓ icon are correct.
- Options shown in red color and with ✗ icon are incorrect.

Question Paper Name:	Micro Biology 8th June 2017 Shift 1
Subject Name:	Micro Biology
Creation Date:	2017-06-08 15:40:36
Duration:	150
Total Marks:	300
Display Marks:	No
Calculator:	Scientific
Magnifying Glass Required?:	No
Ruler Required?:	No
Eraser Required?:	No
Scratch Pad Required?:	No
Rough Sketch/Notepad Required?:	No
Protractor Required?:	No

Micro Biology

Group Number :	1
Group Id :	798407165
Group Maximum Duration :	0
Group Minimum Duration :	150
Revisit allowed for view? :	No
Revisit allowed for edit? :	No
Break time:	0
Group Marks:	300

Micro Biology

Section Id :	798407165
Section Number :	1
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	150
Number of Questions to be attempted:	150
Section Marks:	300
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	798407201
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 79840724637 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The presence of Negri inclusion bodies in host cells is characteristic of

Options :

1. ✘ Infectious mononucleosis
2. ✘ Congenital rubella
3. ✘ Aseptic meningitis
4. ✔ Rabies

Question Number : 2 Question Id : 79840724638 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

DNA photolyase recognizes which of the following in order to repair pyrimidine dimmers:

Options :

1. ✔ Distortion in the double helix
2. ✘ A specific palindromic sequence
3. ✘ A specific origin for repair to initiate
4. ✘ A free 3' end on the affected DNAstrand

Question Number : 3 Question Id : 79840724639 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Eukaryotic cells and their organelles are disrupted by sonication. The centrifuge is used to separate soluble and insoluble components. Protein X is found in the insoluble fraction following centrifugation. The insoluble fraction is treated with 0.5M NaCl and centrifugation is repeated protein X is now found in the soluble fraction. Protein X would be best described as:

Options :

1. ✘ An integral plasma membrane protein
2. ✘ An integral membrane protein in an organelle
3. ✔ A peripheral membrane protein
4. ✘ A soluble nuclear protein

Question Number : 4 Question Id : 79840724640 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following viruses would be most likely to establish a latent infection?

Options :

1. ✔ Adenovirus
2. ✘ Measles virus
3. ✘ Influenza virus
4. ✘ Parvovirus

Question Number : 5 Question Id : 79840724641 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

An experimental compound is discovered that prevents the activation of adenyl cyclase and the resulting increase in cyclic AMP. The toxic effects of which of the following bacteria might be prevented with the use of this experimental compound?

Options :

1. ✔ Vibrio cholerae
2. ✘ Corynebacterium diphtheriae

3. ✘ *Listeria monocytogenes*

4. ✘ *Brucella*

Question Number : 6 Question Id : 79840724642 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A child comes to an emergency room because of an infected dog bite. The wound is found to contain small Gram-negative rods. The most likely cause of infection is

Options :

1. ✘ *E. coli*

2. ✘ *H. influenzae*

3. ✔ *Pasteurella multocida*

4. ✘ *Brucella canis*

Question Number : 7 Question Id : 79840724643 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Diphtheria toxin is produced only by those strains of *C. Diphtheria* that are

Options :

1. ✘ Glucose fermenters

2. ✘ Sucrose fermenters

3. ✔ Lysogenic for β -prophage

4. ✘ Encapsulated

Question Number : 8 Question Id : 79840724644 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The bowel contains many microorganisms but the most prevalent bacterium is

Options :

1. ✘ *Staphylococcus*

2. ✘ *Klebsiella*

3. ✘ *E. coli*

4. ✔ *B. Fragilis*

Question Number : 9 Question Id : 79840724645 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following bacterial transport methods is energy independent?

Options :

1. ✘ Facilitated diffusion

2. ✔ Simple diffusion

3. ✘ Proton gradient energized active transport

4. ✘ ATP-dependent active transport

Question Number : 10 Question Id : 79840724646 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Iron is essential in bacterial metabolism. When bacteria invade the human host they must capture iron in order to survive. Which of the macromolecules listed below is important in bacterial iron metabolism?

Options :

1. ✘ Transferrin

- ✘ Lactoferrin
- ✘ Ferric oxide
- ✔ Siderophores

Question Number : 11 Question Id : 79840724647 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A bacterium is examined and is found to lack superoxide dismutase, catalase, and peroxidase. Which of the following statements best describes this bacterium?

Options :

- ✔ This bacterium is an anaerobe
- ✘ This bacterium will survive in an O₂ environment
- ✘ This bacterium is more virulent than one containing the three enzymes
- ✘ This bacterium does not produce peroxide

Question Number : 12 Question Id : 79840724648 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Certain enzymes catalyze the cross-linking of peptidoglycan, a unique constituent of bacterial cell walls. Which of the following may be a factor in antibiotic resistance, the target of which is cell-wall synthesis?

Options :

- ✘ Reverse transcriptase
- ✘ RNA polymerase
- ✘ DNA gyrase
- ✔ Transpeptidase

Question Number : 13 Question Id : 79840724649 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

If logarithmic growth of E.coli bacteria could be sustained for 48 h, with adequate nutrients, the mass of bacterial cells would equal a volume 500 times that of the planet earth. Which of the following are limiting factors in microbial growth?

Options :

- ✘ Accumulation of oxygen free radicals
- ✘ Accumulation of peroxide
- ✔ Accumulation of toxic products in the growth medium
- ✘ Oxygen

Question Number : 14 Question Id : 79840724650 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Ideally, an antibiotic should focus on a microbial target not found in mammalian cells. By this standard, which of the following antibiotic agents would be expected to be most toxic to humans?

Options :

- ✘ Penicillin
- ✔ Mitomycin
- ✘ Cephalosporin
- ✘ Vancomycin

Question Number : 15 Question Id : 79840724651 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Several antiviral compounds have been developed during the last decade. One such compound is ribavirin, a synthetic nucleoside structurally related to guanosine. Ribavirin therapy has been successfully used against

Options :

1. Respiratory syncytial virus
2. Herpes simplex virus
3. Hepatitis B
4. Group A coxsackievirus

Question Number : 16 Question Id : 79840724652 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Reverse transcriptase is an enzyme unique to the retroviruses. Which one of the following is a function of the enzyme reverse transcriptase?

Options :

1. DNase activity
2. RNA-dependent RNA polymerase activity
3. RNA isomerase activity
4. RNA-dependent DNA polymerase activity

Question Number : 17 Question Id : 79840724653 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The purpose of gene cloning is to produce large amounts of genes in pure form. The sequence of the cloning process is critical to the production of clones. Which of the following steps initializes the cloning process?

Options :

1. Isolation and fragmentation of source DNA
2. Detection and purification of clones
3. Joining of host DNA to a cloning vector
4. Incorporation of a cloning vector into the host cell

Question Number : 18 Question Id : 79840724654 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

DNA from a host sample can be amplified by a process known as the polymerase chain reaction (PCR). Which of the following is required for PCR?

Options :

1. Knowledge of the genetic sequence to be amplified
2. A single nucleotide primer
3. A universal probe to detect the amplified product
4. A heat-sensitive DNA polymerase enzyme

Question Number : 19 Question Id : 79840724655 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following viruses may be human tumor virus?

Options :

1. Epstein-Barr virus (EBV)
2. HIV
3. Papillomavirus
4. Varicella-zoster virus (VZV)

Question Number : 20 Question Id : 79840724656 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

DNA can be transferred from one bacterium to another by a number of processes. Uptake by a recipient cell of soluble DNA released from a donor cell is defined as

Options :

1. ✘ Conjugation
2. ✘ Recombination
3. ✔ Transformation
4. ✘ Transduction

Question Number : 21 Question Id : 79840724657 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following antibiotics attaches to 50S ribosome and inhibits peptidyl transferase?

Options :

1. ✘ Amdinocillin
2. ✘ Amphotericin
3. ✔ Chloramphenicol
4. ✘ Trimethoprim

Question Number : 22 Question Id : 79840724658 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Bacteria or their components may be characterized by unique constituents or structures. Neisseria meningitidis, group B, is characterized by

Options :

1. ✘ Repeating polysaccharide capsule of glucose and glucuronic acid
2. ✘ Outer-membrane proteins
3. ✔ Sialic acid polymers
4. ✘ Hyaluronic acid

Question Number : 23 Question Id : 79840724659 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following mycoplasmas has been implicated as a cause of nongonococcal urethritis (NGU)?

Options :

1. ✘ Mycoplasma hominis
2. ✘ M. fermentans
3. ✘ M. mycoides
4. ✔ Ureaplasma urealyticum

Question Number : 24 Question Id : 79840724660 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Infected tissues demonstrating budding fungal cells are seen in

Options :

1. ✘ Coccidioidomycosis, chromomycosis, aspergillosis
2. ✘ Tinea versicolor, tinea nigra, candidiasis
3. ✘ Blastomycosis, paracoccidioides, dermatophytosis

4. ✓ **Candidiasis, cryptococcosis, and sporotrichosis**

Question Number : 25 Question Id : 79840724661 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A clinical diagnosis of meningitis is confirmed with a latex agglutination test on CSF for the capsular polysaccharide of the organism. The most likely causative agent is

Options :

1. ✗ **Candida albicans**
2. ✓ **Cryptococcus**
3. ✗ **Paracoccidioides brasiliensis**
4. ✗ **Histoplasma capsulatum**

Question Number : 26 Question Id : 79840724662 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Mucor is best described by which of the following statements?

Options :

1. ✗ **Widespread in environment; conidia may be inhaled; microscopic appearance in specimen reveals dichotomous branching and septate hyphae**
2. ✗ **Round, black sporangia filled with endospores; sporangia unbranched, rising from a runner called a stolon**
3. ✓ **Single-tipped sporangiophores; no rhizoids or stolons; nonseptate hyphae, which show branching**
4. ✗ **Yeast forms with budding blastoconidia often showing pseudohyphae; positive germ tube test; chlamydospores present**

Question Number : 27 Question Id : 79840724663 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Burkitt's lymphoma is characterized by elevated "early antigen" tests with a restricted pattern of fluorescence. This disease is caused by

Options :

1. ✗ **Cytomegalovirus**
2. ✓ **Epstein-Barr virus**
3. ✗ **Lymphogranuloma venereum**
4. ✗ **Herpes simplex virus**

Question Number : 28 Question Id : 79840724664 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

This virus is a single-stranded RNA orthomyxovirus. Annual vaccination is necessary because of antigenic drift and shift.

Options :

1. ✗ **Measles virus**
2. ✓ **Influenza virus**
3. ✗ **Respiratory syncytial virus**
4. ✗ **Adenovirus**

Question Number : 29 Question Id : 79840724665 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Sporulation from flask-shaped, pigmented projections is commonly observed in which one of the following fungi?

Options :

1. ✘ *E. floccosum*
2. ✘ *C. immitis*
3. ✔ *P. verrucosa*
4. ✘ *M. canis*

Question Number : 30 Question Id : 79840724666 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Trypanosoma cruzi initially penetrates through the mucous membranes on the skin and then multiplies in a lesion known as a chagoma. In the chronic stage of the disease, the main lesions are often observed in the

Options :

1. ✘ Spleen and pancreas
2. ✔ Heart and digestive tract
3. ✘ Liver and spleen
4. ✘ Digestive tract and respiratory tract

Question Number : 31 Question Id : 79840724667 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

One of the most remarkable aspects of the human immune system is its diversity, that is, the ability to recognize a wide range of antigens and to mount a specific antibody response. This is called clonal selection. At the cellular level, which of the following are primarily responsible for such specificity?

Options :

1. ✔ Hypervariable regions in domains of B cells
2. ✘ The major histocompatibility complex
3. ✘ Specific T cell receptors
4. ✘ Memory cells

Question Number : 32 Question Id : 79840724668 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A "parasite" that may be a fungus is the initial clinical manifestation in up to 60% of patients with AIDS. This organism is

Options :

1. ✘ *Microsporidium*
2. ✘ *Cryptosporidium*
3. ✔ *Pneumocystis*
4. ✘ *Blastocystis*

Question Number : 33 Question Id : 79840724669 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Rickettsiae, which include the spotted fevers, Q fever, typhus, and scrub typhus, are

Options :

1. ✔ Obligate intracellular parasites
2. ✘ Easily stained (Gram-negative) with a Gram stain
3. ✘ Maintained in nature with humans as the mammalian reservoir
4. ✘ The cause of infections in which a rash is always present

Question Number : 34 Question Id : 79840724670 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which immunoglobulin mediates immediate hypersensitivity and is involved in immune response to parasitic infections?

Options :

1. ✘ IgG
2. ✘ IgM
3. ✔ IgE
4. ✘ IgA

Question Number : 35 Question Id : 79840724671 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Thymic hypoplasia (DiGeorge's syndrome) is usually associated with:

Options :

- | | | |
|------|-----------------------------|------------------------------|
| 1. ✘ | <u>Humoral</u>
Normal | <u>Cellular</u>
Normal |
| 2. ✔ | <u>Humoral</u>
Normal | <u>Cellular</u>
Deficient |
| 3. ✘ | <u>Humoral</u>
Deficient | <u>Cellular</u>
Normal |
| 4. ✘ | <u>Humoral</u>
Deficient | <u>Cellular</u>
Deficient |

Question Number : 36 Question Id : 79840724672 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

An allograft is best described as a

Options :

1. ✘ Transplant from one region of a person to another
2. ✘ Transplant from one person to a genetically identical person
3. ✔ Transplant from one species to the same species
4. ✘ Transplant from one species to another species

Question Number : 37 Question Id : 79840724673 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following tests combines features of gel diffusion and immuno-electrophoresis and is applicable only to negatively charged antigens?

Options :

1. ✘ Latex agglutination (LA)
2. ✘ Enzyme-linked immunosorbent assay (ELISA)
3. ✔ Counter immuno-electrophoresis (CIE)
4. ✘ Coagglutination (COA)

Question Number : 38 Question Id : 79840724674 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A psychrophilic halophile would be a microbe that prefers

Options :

1. ✓ Cold temperatures and increased amount of salt
2. ✗ Warm temperature and increased amount of pressure
3. ✗ Cold temperature and absence of oxygen
4. ✗ Cold temperature and increased amount of acid

Question Number : 39 Question Id : 79840724675 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Each of the following statements concerning the Gram stain is correct EXCEPT

Options :

1. ✗ *Escherichia coli* stains pink because it has a thin peptidoglycan layer
2. ✗ *Streptococcus pyogenes* stains blue it has thick peptidoglycan layer
3. ✗ *Mycoplasma pneumoniae* is not visible in the Gram stain because it does not have cell wall
4. ✓ *Mycobacterium tuberculosis* stains blue because it has a thick lipid layer

Question Number : 40 Question Id : 79840724676 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Freund's complete adjuvant which potentiates immunization is a mixture of

Options :

1. ✓ a water-in-oil emulsion, consisting of inactivated mycobacteria suspended in mineral oil
2. ✗ a water-in-oil emulsion, consisting of inactivated mycoplasma suspended in mineral oil
3. ✗ a water-in-oil emulsion, consisting of inactivated bacillus subtilis suspended in mineral oil
4. ✗ a water-in-oil emulsion, consisting of inactivated pseudomonas species suspended in mineral oil

Question Number : 41 Question Id : 79840724677 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

An antibiotic that resembles the 3' end of a charged tRNA molecule is

Options :

1. ✗ Streptomycin
2. ✗ Sparsomycin
3. ✓ Puromycin
4. ✗ Tetracyclin

Question Number : 42 Question Id : 79840724678 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Enzymes accelerate a reaction by which one of the following strategies

Options :

1. ✓ Decreasing energy required to form the transition state
2. ✗ Increasing kinetic energy of the substrate
3. ✗ Increasing the free energy difference between substrate and the product
4. ✗ Increasing the turn-over number of enzymes

Question Number : 43 Question Id : 79840724679 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

which of the following is NOT a second messenger

Options :

1. ✘ cyclic GMP
2. ✘ diacylglycerol
3. ✘ inositol triphosphate
4. ✔ phosphatidylinositol

Question Number : 44 Question Id : 79840724680 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

cytotoxic T cells express

Options :

1. ✘ CD8 marker and are class II MHC restricted
2. ✘ CD4 Marker and Class I MHC restricted
3. ✘ CD4 Marker and are Class II MHC restricted
4. ✔ CD8 marker and are Class I MHC restricted

Question Number : 45 Question Id : 79840724681 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

alpha-amanitin is a fungal toxin which inhibits eukaryotic RNA polymerases. The three eukaryotic polymerases show differential sensitivity to this toxin. Which one of the following order (higher to lower) is correct in respect of sensitivity to words alpha-amanitin

Options :

1. ✘ RNA POL III > RNA POL II > RNA POL I
2. ✔ RNA POL II > RNA POL III > RNA POL I
3. ✘ RNA POL I > RNA POL III > RNA POL II
4. ✘ RNA POL II > RNA POL I > RNA POL III

Question Number : 46 Question Id : 79840724682 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following chemicals is a DNA intercalator?

Options :

1. ✘ 5-Bromouracil
2. ✘ Ethyl methane sulfonate
3. ✔ Acridine orange
4. ✘ UV radiation

Question Number : 47 Question Id : 79840724683 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following contribute to intrinsic fluorescence to a protein

Options :

1. ✔ Aromatic amino acids
2. ✘ Disulfide bonds
3. ✘ Charged amino acids

4. ✖ Branched chain amino acids

Question Number : 48 Question Id : 79840724684 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

B cells do NOT perform which of the following

Options :

1. ✖ Act as an antigen processing cells
2. ✖ Respond to antigens by making antibodies
3. ✖ Proliferate and differentiate into plasma cells
4. ✔ Production of pro-inflammatory cytokines like IFN- γ

Question Number : 49 Question Id : 79840724685 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Lipid rafts are rich in both spingolipids and cholesterol. Cholesterol plays a central role in raft formation since lipid rafts apparently do not form in its absence. Why do you think cholesterol is essential for the formation of lipid raft?

Options :

1. ✖ Cholesterol decreases the mobility of spingolipids in the lipid bilayer
2. ✖ Large head groups of spingolipids repel each other in presence of cholesterol
3. ✖ Cholesterol interacts with fatty acids tails in the membrane
4. ✔ The planar cholesterol molecules are postulated to fill the voids that form underneath the large head groups of the spingolipids.

Question Number : 50 Question Id : 79840724686 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

50. The nodulation (nod) genes are classified as common nod genes or host specific nod genes. Some statements related to such classification are given below

- A. nodA is a common nod gene and nodC is a host specific gene
- B. nodB is a common nod gene and nodP is a host specific gene
- C. nodQ is a common nod gene and nodA is a host specific gene
- D. nodH is a common nod gene and nodQ is a host specific gene

Choose correct answers from the above statements.

Options :

1. ✖ A and B
2. ✖ C and D
3. ✖ A only
4. ✔ B only

Question Number : 51 Question Id : 79840724687 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

As cancer progresses, several genome rearrangements including translocations, deletions, duplications etc occur. If these rearrangements are to be identified, which of the following techniques would be most suitable

Options :

1. ✖ RAPD
2. ✖ Microarray
3. ✔ Multi colour FISH
4. ✖ Flow Cytometry

Question Number : 52 Question Id : 79840724688 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A student noted the following points regarding *Agrobacterium tumefaciens*

- A. *A. tumefaciens* is a gram negative soil bacterium
- B. Opine catabolism genes are present in T-DNA region of Ti plasmid
- C. Opines are synthesized by the condensation of alpha acids and alpha keto acids or amino acids and sugars
- D. A callus culture of crown gall tissue caused by *A. tumefaciens* in plants can be multiplied without adding phyto-hormones

Which one of the combinations of the above statements is correct?

Options :

- 1. ✘ A, B and C
- 2. ✘ A, B and D
- 3. ✘ B, C and D
- 4. ✔ A, C and D

Question Number : 53 Question Id : 79840724689 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Leader sequence in some of the protozoan parasites is transcribed elsewhere in the genome. The joining of the two transcripts occurs by the process of

Options :

- 1. ✘ Alternate splicing
- 2. ✔ Trans splicing
- 3. ✘ Ligation
- 4. ✘ RNA editing

Question Number : 54 Question Id : 79840724690 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

During replication the RNA primer is degraded by the 5' to 3' exonuclease activity of

Options :

- 1. ✘ RNase H1 (Ribonuclease H1)
- 2. ✔ FEN-1 (Flap endonuclease 1)
- 3. ✘ Topoisomerase II B
- 4. ✘ DNA polymerase gamma

Question Number : 55 Question Id : 79840724691 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Some T lymphocytes respond to antigen stimulation by producing cytokines and especially IL-2 cytokine which is a growth factor and signature cytokine for T cell activation. IL-2 causes T cell proliferation there by increasing the antigen specific T cell clones expansion amplifying the immune responses. This is an example of

Options :

- 1. ✘ Endocrine signalling
- 2. ✘ Paracrine signalling
- 3. ✔ Autocrine signalling
- 4. ✘ Cyclic signalling

Question Number : 56 Question Id : 79840724692 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

5-Bromouracil is a base analog that can cause mutation when incorporated into DNA. Which of the following is the most likely changes that 5-Bromouracil induces

Options :

1. ✓ T : A to C : G
2. ✗ T : A to A : T
3. ✗ G : C to T : A
4. ✗ C : G to A : T

Question Number : 57 Question Id : 79840724693 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

You have expressed a bacterial recombinant protein of your interest in insect cell line. You can use affinity chromatography to purify as you have nickel column available in your lab. With what molecule will you tag the protein to purify using those columns?

Options :

1. ✗ GST
2. ✓ Histidine
3. ✗ Histamine
4. ✗ Proline

Question Number : 58 Question Id : 79840724694 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In an experiment to detect a new protein in fixed cells, no secondary antibody tagged with fluorescence dye is available. In such situation what would be the best choice out of the following to detect the protein?

Options :

1. ✓ Protein A-FITC
2. ✗ Protein A-sepharose
3. ✗ Biotin-FITC
4. ✗ Avidin-FITC

Question Number : 59 Question Id : 79840724695 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following statements is INCORRECT for fluorescence in situ hybridization (FISH) technique?

Options :

1. ✗ A fluorescence or confocal microscope is used for detection of the signal
2. ✗ A labelled sequence of nucleotide is used
3. ✓ Specific fluorescence tagged antibodies are used
4. ✗ A stringent washing step is essential to remove appearance of non specific signal

Question Number : 60 Question Id : 79840724696 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Following table showing selected characteristics of important fungal groups

<u>Fungal group</u>	<u>Characteristics</u>
A	no regularly occurring septa in thallus
B	perforated septa
C	forms arbuscular mycorrhizae on plant roots
D	have zoospores with flagella

In the above table, the fungal groups A, B, C and D are respectively -

Options :

- ✘ Chytridiomycetes, Ascomycetes, Glomeromycetes, Zygomycetes
- ✔ Zygomycetes, Ascomycetes, Glomeromycetes, Chytridiomycetes
- ✘ Ascomycetes, Zygomycetes, Glomeromycetes, Chytridiomycetes
- ✘ Chytridiomycetes, Zygomycetes, Ascomycetes, Glomeromycetes

Question Number : 61 Question Id : 79840724697 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following statements is NOT correct regarding effect of genetic drift?

Options :

- ✘ It alters allele frequency substantially only in small populations
- ✘ It can cause allelic frequencies to change at random
- ✘ It can lead to loss of genetic variation within populations
- ✔ It can cause harmful alleles to become eliminated

Question Number : 62 Question Id : 79840724698 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The active form of vitamin B1 is called Thiamine Pyrophosphate which acts as -

Options :

- ✔ Co-enzyme in oxidative decarboxylation of α -keto acids
- ✘ Co-enzyme in Kreb's Cycle
- ✘ Catalyzer in determining respiratory quotient
- ✘ Adjuvant in production of antigen specific T cell clones

Question Number : 63 Question Id : 79840724699 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

All those blue-green algae which can fix atmospheric nitrogen contain one of the following -

Options :

- ✘ Akinetes
- ✔ Heterocysts
- ✘ Aplanospores
- ✘ Parthenospores

Question Number : 64 Question Id : 79840724700 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Gibbs free energy (G) expresses the amount of energy capable of doing work during a reaction at constant -

Options :

1. ✓ Temperature and Pressure
2. ✗ Temperature and volume
3. ✗ Pressure and volume
4. ✗ Temperature and mass

Question Number : 65 Question Id : 79840724701 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A hapten is a nonimmunogenic small protein. Which of the following statements best describes haptens?

Options :

1. ✗ Haptens activate T cells
2. ✓ Penicillin is a hapten
3. ✗ Haptens do not react with specific antibody
4. ✗ Haptens bind the major histocompatibility complex (MHC)

Question Number : 66 Question Id : 79840724702 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The major role of T cells in the immune response includes which one of the following?

Options :

1. ✓ Recognition of epitopes presented with major histo-compatibility complex molecules on all surfaces
2. ✗ Complement fixation for pathogen killing
3. ✗ Phagocytosis that is critical for antigen processing
4. ✗ Production of antibodies in a B cell independent manner

Question Number : 67 Question Id : 79840724703 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The quantitative relationships among pH, the buffering action of a mixture of weak acid with its conjugate base, and the pKa of the weak acid is given by the -

Options :

1. ✗ Oxidation - reduction reactions
2. ✓ Henderson-Hasselbalch reaction
3. ✗ EMP- reaction
4. ✗ Photo-oxidative reaction

Question Number : 68 Question Id : 79840724704 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Nucleoid is usually understood as

Options :

1. ✗ A group of chromosomes associated with lipid
2. ✓ A single poorly defined nucleus or ill defined nucleus which is having double stranded DNA but lack histone protein
3. ✗ A single ill defined nucleus which is having single stranded DNA and lack histone protein
4. ✗ A single poorly defined nucleus or ill defined nucleus which is having double stranded DNA but having extra histone protein content

Question Number : 69 Question Id : 79840724705 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In double helix of DNA, the two strands are -

Options :

1. ✘ Separated by from other by protein sheath
2. ✘ Coiled over each other without any support
3. ✘ Coiled around the line of protein fibre
4. ✔ Coiled around common axis

Question Number : 70 Question Id : 79840724706 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

If you run a pentavalent IgM through SDS PAGE, how many bands you are supposed to get by western blot transfer and probing by alkaline phosphatase conjugated secondary antibody?

Options :

1. ✘ Five
2. ✘ Four
3. ✘ Three
4. ✔ One

Question Number : 71 Question Id : 79840724707 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following gene seems to control and play a pivotal role in mediating the interaction between environmental and inherited factors for cancer

Options :

1. ✔ P⁵³
2. ✘ S²¹
3. ✘ L²⁷
4. ✘ G³³

Question Number : 72 Question Id : 79840724708 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

RNA molecules that exhibit catalytic activity are called

Options :

1. ✘ mRNAs
2. ✘ ribonucleases
3. ✘ ribosomes
4. ✔ ribozyme

Question Number : 73 Question Id : 79840724709 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Survival of allografts is increased by choosing donors with few major histocompatibility complex (MHC) mismatches with recipients and by use of immunosuppression in recipients. Which one of the following procedures might be a useful measure of immunosuppression?

Options :

1. ✓ Administration of corticosteroids to recipient
2. ✗ Lymphoid irradiation of donor
3. ✗ Administration of immunoglobulin to recipient
4. ✗ Destruction of donor T cells

Question Number : 74 Question Id : 79840724710 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

which of the following takes place during the oxidative phosphorylation in mitochondria?

Options :

1. ✓ Protons are pumped from the matrix to the intermembrane space
2. ✗ Protons are pumped from the intermembrane space to the matrix
3. ✗ Electrons are pumped from the matrix to the intermembrane space
4. ✗ Electrons are pumped from the intermembrane space to the matrix

Question Number : 75 Question Id : 79840724711 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Diacylglycerol activates which of the following enzymes?

Options :

1. ✗ Protein Kinase A
2. ✓ Protein Kinase C
3. ✗ MAP kinase
4. ✗ Tyrosine kinase

Question Number : 76 Question Id : 79840724712 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following is true about a circular double stranded DNA genome that is determined by chemical means to be 21% adenosine?

Options :

1. ✗ The genome is 10.5 % guanosine
2. ✗ The genome is 21 % guanosine
3. ✓ The genome is 29 % guanosine
4. ✗ The genome is 58 % guanosine

Question Number : 77 Question Id : 79840724713 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Chlamydiae are small Gram-negative rods once thought to be viruses. Which of the following best characterizes chlamydiae as distinct from viruses?

Options :

1. ✓ Independent synthesis of proteins
2. ✗ Susceptibility to antimicrobial agents
3. ✗ Intracellular reproduction
4. ✗ Cannot visualize with light microscope

Question Number : 78 Question Id : 79840724714 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In the classical model of transcriptional control described by Jacob and Monod, a repressor protein binds to

Options :

1. ✘ an enhancer
2. ✘ an AUG sequence
3. ✔ an operator
4. ✘ a TATA box

Question Number : 79 Question Id : 79840724715 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Kuru is a fatal disease and is characterized by tremors and ataxia; Creutzfeldt-Jakob disease (CJD) is characterized by both ataxia and dementia. These diseases are thought to be caused by

Options :

1. ✘ Slow viruses
2. ✘ Cell wall-deficient bacteria
3. ✘ Environmental toxins
4. ✔ Prions

Question Number : 80 Question Id : 79840724716 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Interferon, a protein that inhibits viral replication, is produced by cells in tissue culture when the cells are stimulated with which of the following?

Options :

1. ✘ Botulinum toxin
2. ✘ Synthetic polypeptides
3. ✔ Viruses
4. ✘ Chlamydiae

Question Number : 81 Question Id : 79840724717 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Plants and some bacteria differ from animals in that plants and some bacteria can

Options :

1. ✘ form polymers from glucose
2. ✔ use carbon di oxide to increase their biomass
3. ✘ Produce NADH via reductive reaction
4. ✘ synthesize glutamate and aspartate

Question Number : 82 Question Id : 79840724718 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The class of antibiotics known as the quinolones are bactericidal. Their mode of action on growing bacteria is thought to be

Options :

1. ✔ Inhibition of DNA gyrase
2. ✘ Inactivation of penicillin-binding protein II
3. ✘ Inhibition of β -lactamase
4. ✘ Prevention of the cross-linking of glycine

Question Number : 83 Question Id : 79840724719 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Elevation of the intracellular inositol triphosphate (IP₃) results in a release of Ca²⁺ from which of the following organelles?

Options :

1. ✗ peroxisome
2. ✗ lysosome
3. ✗ mitochondria
4. ✓ Smooth Endoplasmic Reticulum

Question Number : 84 Question Id : 79840724720 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The completion of the S phase of the cell cycle of a mammalian cell is marked by all the following EXCEPT:

Options :

1. ✗ Histone content per cell is double that of cells in G1 phase
2. ✗ in replicated DNA, newly incorporated bases are paired with parental bases
3. ✗ each replicated chromosome has four telomeres
4. ✓ Sister chromatids disjoin from each other

Question Number : 85 Question Id : 79840724721 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

All of the following contribute to promoter binding by RNA polymerase in E. Coli EXCEPT the

Options :

1. ✓ rho factor
2. ✗ -10 consensus sequence
3. ✗ -35 consensus sequence
4. ✗ β subunit of RNA polymerase

Question Number : 86 Question Id : 79840724722 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

M. tuberculosis can be found in the sputum of patients with tuberculosis. After digestion of the sputum, isolation is best accomplished using

Options :

1. ✗ Löffler's medium
2. ✗ Thayer-Martin agar
3. ✗ Thiosulfate citrate bile salts sucrose medium
4. ✓ Löwenstein-Jensen medium

Question Number : 87 Question Id : 79840724723 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following is the predominant flora of the mouth that is the major cause of dental caries?

Options :

1. ✓ α-hemolytic streptococci
2. ✗ Lactobacillus
3. ✗ E. coli

4. ✘ B. Fragilis

Question Number : 88 Question Id : 79840724724 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Traditional vaccination for the common cold is virtually impossible because there are multiple serotypes of which one of the following viruses?

Options :

1. ✘ Rabies
2. ✔ Rhinovirus
3. ✘ Cytomegalovirus
4. ✘ Hepatitis

Question Number : 89 Question Id : 79840724725 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The vaccine for measles is best characterized as a

Options :

1. ✘ Killed virus vaccine
2. ✘ Inactivated virus vaccine
3. ✔ Live attenuated virus vaccine
4. ✘ Recombinant viral vaccine

Question Number : 90 Question Id : 79840724726 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

" Zinc fingers" are important in cellular regulation because they are

Options :

1. ✘ at the catalytic sites of the many kinases
2. ✔ a structural motif in many DNA-binding proteins
3. ✘ characteristic of palindromic stretches of unique-sequence DNA
4. ✘ restricted to the cytoplasmic domain of growth-factor receptors

Question Number : 91 Question Id : 79840724727 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In prokaryotes, environmental sensing frequently involves regulatory proteins (two component system) that sense and respond to changes in surroundings. These two-component systems may involve which of the following?

- I. Protein phosphorylation
- II. Transcriptional Regulation
- III. Membrane proteins

Options :

1. ✘ I only
2. ✘ II only
3. ✘ III only
4. ✔ I, II and III

Question Number : 92 Question Id : 79840724728 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In cross AaBb X AaBb, mendel's principle of independent assortment predicts that the ratio of the four possible phenotypes of the off springs will be

Options :

- ✘ 1 : 1 : 1 : 1
- ✘ 3 : 2 : 2 : 2
- ✘ 4 : 2 : 2 : 1
- ✔ 9 : 3 : 3 : 1

Question Number : 93 Question Id : 79840724729 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

common lesions found in DNA after exposure to ultraviolet light are

Options :

- ✔ pyrimidine dimmers
- ✘ single strand breaks
- ✘ purine dimmers
- ✘ base deletions

Question Number : 94 Question Id : 79840724730 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following types of bonds or interactions are LEAST likely to be involved in stabilizing the three-dimensional folding of most proteins?

Options :

- ✘ Hydrogen bonds
- ✘ Electrostatic bonds
- ✘ Disulfide bonds
- ✔ Ester bonds

Question Number : 95 Question Id : 79840724731 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following is correct concerning the evolution of Photosystem II in cyanobacteria?

Options :

- ✘ It is made of photosystemI in these organisms unnecessary for photosynthetic fixation of carbon dioxide.
- ✔ It provides these organisms with an almost inexhaustible supply of electrons from water.
- ✘ It allowed these organisms to use any electron donor to replace electrons lost from the excited chlorophyll a molecules.
- ✘ It allowed photochemically produced ATP to be exported to the cytoplasm.

Question Number : 96 Question Id : 79840724732 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which one of the following sequence of events occurs when the E. coli are released from catabolite repression by transfer to low-glucose medium?

Options :

- ✔ cAMP levels raise, cAMP binds to CAP, cAMP-CAP complex binds to a site on DNA and activates transcription.
- ✘ cAMP levels raise, cAMP binds to CAP, cAMP-CAP complex binds to a site on DNA and represses transcription.

- ✘ cAMP levels raise, cAMP binds to CAP, cAMP-CAP complex is removed from the a site on DNA and activates transcription.
- ✘ cAMP levels fall, cAMP is removed from CAP, CAP binds to a site on DNA and activates transcription.

Question Number : 97 Question Id : 79840724733 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The ability of the yeast to produce invertase, an enzyme necessary to metabolize sucrose, was abolished by either of two mutations, m-1 and m-2, that arose spontaneously in two separate yeast cultures. A heterozygote formed by mating m-1 mutant cells with m-2 mutant cells would be expected to restore the yeast's ability to produce invertase enzyme if m-1 and m-2 are

Options :

- ✔ mutations of the two separate nonallelic genes
- ✘ in the same complementation groups
- ✘ identical alleles of the same gene
- ✘ both temperature-sensitive mutations

Question Number : 98 Question Id : 79840724734 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

An idiotype is characterized by

Options :

- ✘ Determinant exposed after papain cleavage to an F(ab')₂ fragment
- ✔ Determinant from one clone of cells and probably located close to the antigen binding site of the immunoglobulin
- ✘ Determinant inherited in a Mendelian fashion and recognized by cross-immunization of individuals in a species
- ✘ Heavy-chain determinant recognized by heterologous antisera

Question Number : 99 Question Id : 79840724735 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following is most likely to lead to a loss of gene function?

Options :

- ✘ A missense mutation in the open reading frame
- ✘ a change from a TAA codon to a TAG codon in the coding region
- ✘ A change from T to C in the promoter region
- ✔ A frameshift mutation in the coding region

Question Number : 100 Question Id : 79840724736 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A solution contains DNA polymerase I, Mg²⁺ salts of dATP, dGTP, dCTP and dTTP and an appropriate buffer. Which of the following DNA molecule would serve as a template for DNA synthesis when added to this solution?

Options :

- ✘ A single-stranded closed circle
- ✔ A single-stranded closed circle base-paired to a shorter linear strand with a 3'-terminal hydroxyl
- ✘ A single-stranded closed circle base-paired to a shorter linear strand with a 3'-terminal phosphate

4. ✘ A double -stranded closed circle

Question Number : 101 Question Id : 79840724737 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following statements is correct concerning a homeobox?

Options :

1. ✘ It is a part of promoter in eukaryotic genes that code for proteins involved in segmentation.
2. ✘ It is a conserved protein structure found in glycolytic pathway enzymes
3. ✘ It is a conserved protein sequence found in tRNA-binding proteins
4. ✔ It is a conserved DNA sequence found in genes that code for proteins that regulate development.

Question Number : 102 Question Id : 79840724738 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

When the coding region of a prokaryotic gene is cloned into the lac Z gene downstream from the translational initiator, the chance of an in-frame fusion is

Options :

1. ✘ 1/2
2. ✘ 1/3
3. ✘ 1/5
4. ✔ 1/6

Question Number : 103 Question Id : 79840724739 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The rate-limiting step of the fatty acid synthesis is catalyzed by

Options :

1. ✔ acetyl CoA carboxylase
2. ✘ ATP-citrate lyase
3. ✘ pyruvate dehydrogenase
4. ✘ keto hydroxyl hexolase

Question Number : 104 Question Id : 79840724740 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Heat-shock proteins were originally identified as proteins produced in response to heat stress. Some are now known to act as

Options :

1. ✔ molecular chaperones that regulate protein folding
2. ✘ protein-tyrosine kinases
3. ✘ GTPase activating proteins
4. ✘ ionophores that dissipate proton gradient

Question Number : 105 Question Id : 79840724741 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

All the following statements about the type-B cyclin proteins are correct EXCEPT during the cell division process -

Options :

1. ✔ Their presence is required for exit from mitosis

- ✘ they are present in cells during the G2 phase
- ✘ They are degraded via the ubiquitin pathway
- ✘ They are newly synthesized during every cell cycle

Question Number : 106 Question Id : 79840724742 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A bacterial protein-coding gene contains a terminator codon in the middle of the coding region, yet expression of the gene in the bacterium produces a functional protein. Translation of the gene probably requires

Options :

- ✘ the excision of an intron
- ✔ a suppressor tRNA
- ✘ ribosomes that lack 5S RNA
- ✘ An mRNA with no ribosome binding site

Question Number : 107 Question Id : 79840724743 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following is NOT an example of allosteric regulation?

Options :

- ✘ Regulation of phosphofruktokinase activity by fructose 2,6-bisphosphate
- ✔ inactivation of nitrogenase by ADP-ribosylation
- ✘ Regulation of the lac operon by allolactose in *E. coli*
- ✘ Catabolite repression by CAP in *E. coli*

Question Number : 108 Question Id : 79840724744 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In a bacterial cell, a mutation in an aminoacyl-tRNA synthetase leads to changing of the entire tRNAser population with alanine. Which of the following describes the results of using these aminoacyl tRNAs for protein synthesis in the cell?

Options :

- ✘ The alanyl-tRNAser will not function in protein synthesis
- ✘ proteins synthesized using the alanyl-tRNAser will neither contain alanine nor serine.
- ✘ proteins synthesized using the alanyl-tRNAser will contain only serine where alanine would normally occur.
- ✔ proteins synthesized using the alanyl-tRNAser will contain only alanine where serine would normally occur.

Question Number : 109 Question Id : 79840724745 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following matings between *E. coli* strains would result in a high frequency of transfer of chromosomal genes?

Options :

- ✘ $F^+ \times F^+$
- ✘ $F^+ \times F^-$
- ✘ $Hfr \times Hfr$

4. ✓ Hfr X F⁻

Question Number : 110 Question Id : 79840724746 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In genetics suppression of a mutation refers to

Options :

1. ✓ restoration of the original phenotype due to a second mutation
2. ✗ restoration of the original DNA sequence by mutation
3. ✗ prevention of expression of the mutant gene by metabolic regulation
4. ✗ inactivation of the gene by methylation

Question Number : 111 Question Id : 79840724747 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Substrate level phosphorylation in the citric acid cycle (Kreb's) depends directly on the energy of the

Options :

1. ✓ thioester bond of the succinyl CoA
2. ✗ oxidative decarboxylation of isocitrate to α -ketoglutarate
3. ✗ formation of citrate from oxaloacetate and acetyl CoA
4. ✗ FAD-dependent oxidation of succinate to fumarate

Question Number : 112 Question Id : 79840724748 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Two-dimensional (2-D) gel electrophoresis performed under denaturing conditions can be used to separate proteins according to which of the following characteristics?

Options :

- | | | |
|------|--|---|
| 1. ✗ | <u>First Dimension</u>
Subunit molecular weight | <u>Second Dimension</u>
Density |
| 2. ✗ | <u>First Dimension</u>
Density | <u>Second Dimension</u>
Charge |
| 3. ✗ | <u>First Dimension</u>
Amino acid composition | <u>Second Dimension</u>
charge |
| 4. ✓ | <u>First Dimension</u>
Isoelectric point (pI) | <u>Second Dimension</u>
Subunit molecular weight |

Question Number : 113 Question Id : 79840724749 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The expression of the trp operon in E. coli is regulated in part by the availability of the amino acid tryptophan. This regulatory process is referred as

Options :

1. ✓ attenuation
2. ✗ translational read-through

- ✘ anti-termination
- ✘ nonsense suppression

Question Number : 114 Question Id : 79840724750 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Bacillus thuringensis is a gram positive, soil dwelling bacterium that produces

Options :

- ✔ insecticidal protein
- ✘ antibiotics
- ✘ fungicidal protein
- ✘ anti-viral protein

Question Number : 115 Question Id : 79840724751 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

One of the important consequences of geographical isolation is

Options :

- ✘ Preventing speciation
- ✔ Speciation through reproductive isolation
- ✘ Random creation of new species
- ✘ No change in the isolated fauna

Question Number : 116 Question Id : 79840724752 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

One gene - One enzyme relationship was established for the first time in:

Options :

- ✘ Salmonella typhimurium
- ✘ Escherichia coli
- ✘ Diplococcus pneumonia
- ✔ Neurospora crassa

Question Number : 117 Question Id : 79840724753 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In which one of the following the BOD (Biochemical Oxygen Demand) of sewage (S), distillery effluent (DE), Paper mill effluent (PE) and sugar mill effluent (SE) have been arranged in ascending order:

Options :

- ✘ SE < PE < S > DE
- ✔ PE < S < SE > DE
- ✘ S < DE < PE < SE
- ✘ SE < S < PE < DE

Question Number : 118 Question Id : 79840724754 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The function of the fimbriae that are present in both Gram +ve and Gram -ve bacteria is ;

Options :

1. ✓ Attachment
2. ✗ Absorption
3. ✗ Secretion
4. ✗ Binary fission

Question Number : 119 Question Id : 79840724755 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Inclusion bodies that are exclusively found in aquatic blue green , purple and green photosynthetic bacteria:

Options :

1. ✗ Vacuoles
2. ✗ palade granules
3. ✓ Gas vacuoles
4. ✗ Elementary bodies

Question Number : 120 Question Id : 79840724756 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The isolation of individual organelles from the cell homogenate is achieved through :

Options :

1. ✗ X-ray diffraction
2. ✗ Chromatography
3. ✓ Differential centrifugation
4. ✗ Microspectro photometry

Question Number : 121 Question Id : 79840724757 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Resolving power of human eye, compound microscope and electron microscope respectively

Options :

1. ✗ 4.0A° , 3.0μ , 0.1mm
2. ✗ 1.0μ , 3.0μ , 4mm
3. ✓ 0.1mm , 3.0μ , 4.0A°
4. ✗ 0.1μ , 3.0μ , 4.0μ

Question Number : 122 Question Id : 79840724758 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Conversion of fats into carbohydrates is a part of

Options :

1. ✗ HMP pathway
2. ✓ glyoxylate cycle
3. ✗ EMP pathway
4. ✗ TCA cycle

Question Number : 123 Question Id : 79840724759 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A group of linear single stranded bacteriophages infects the E. Coli which is carrying F plasmid

Options :

1. ✓ M13 bacteriophage
2. ✗ Øx 174
3. ✗ λ phage
4. ✗ T4 phage

Question Number : 124 Question Id : 79840724760 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The most exploited vector in Genetic engineering is pBR322 , has a composite sequences from :

Options :

1. ✓ Col E1, PMB 1 and pSC 101
2. ✗ PMB 9, PCR1 and pSC200
3. ✗ pUC, PMB 9 and pACYC184
4. ✗ M13 , PMB 1 and pCR1

Question Number : 125 Question Id : 79840724761 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The order of sedimentation of sub cellular structures during differential centrifugation is -

Options :

1. ✓ Nucleus - Mitochondria - Lysosome - ribosome
2. ✗ Lysosome - ribosome - Mitochondria - Nucleus
3. ✗ Mitochondria - Nucleus - Lysosome - ribosome
4. ✗ Lysosome - Mitochondria - Nucleus - ribosome

Question Number : 126 Question Id : 79840724762 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Kojic acid is obtained from:

Options :

1. ✗ Nocardia
2. ✗ Micrococcus
3. ✗ Penicillium
4. ✓ Aspergillus

Question Number : 127 Question Id : 79840724763 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In 1965, who created the first bioinformatics data base for Atlas of protein sequences:

Options :

1. ✓ Margaret Day Hoffs
2. ✗ Richard Durbin
3. ✗ Michael J- Dunn
4. ✗ Pearson

Question Number : 128 Question Id : 79840724764 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

One of the following is example of Homology and similarity search tool

Options :

1. ✘ PROSPECT
2. ✘ EMBOSS
3. ✘ RASMOL
4. ✔ BLAST

Question Number : 129 Question Id : 79840724765 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following Data Base is a current sequence map of the human genome:

Options :

1. ✘ OMIM
2. ✘ HGMD
3. ✔ Golden Path
4. ✘ Gene Cards

Question Number : 130 Question Id : 79840724766 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Phylogenetic relationship can be shown by

Options :

1. ✔ Dendrogram
2. ✘ Gene Bank
3. ✘ BLAST
4. ✘ FASTA

Question Number : 131 Question Id : 79840724767 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The pyramid number is inverted in the case of

Options :

1. ✔ Parasite food chain
2. ✘ Grassland Ecosystem
3. ✘ Forest ecosystem
4. ✘ Lake system

Question Number : 132 Question Id : 79840724768 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which stain is extensively used in Endospore stain:

Options :

1. ✘ Basic fuchsin
2. ✘ India Ink
3. ✘ Methylene Blue
4. ✔ Malachite Green

Question Number : 133 Question Id : 79840724769 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Actinomycetes are:

Options :

1. ✘ Gram - ve aerobic
2. ✘ Gram - ve anaerobic
3. ✘ Gram + ve anaerobic
4. ✔ Gram + ve aerobic

Question Number : 134 Question Id : 79840724770 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following N_2 fixing bacterium living in association with sugarcane:

Options :

1. ✘ Acetobacter
2. ✘ Azotobacter
3. ✘ Frankia
4. ✔ Azospirillum

Question Number : 135 Question Id : 79840724771 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which virus used to change the primary cell cultures to transformed cell lines exhibiting immortality?

Options :

1. ✘ HIV
2. ✔ EBV
3. ✘ Polio
4. ✘ Rabies

Question Number : 136 Question Id : 79840724772 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

In Hybridoma technology, the HAT selection is employed for selection of fusion partners by inactivating by the following

Options :

1. ✔ HGPRT
2. ✘ ATPase
3. ✘ Adenylate Cyclase
4. ✘ cyclic GMP Kinase

Question Number : 137 Question Id : 79840724773 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following macromolecules would yield only one type of monomer after complete hydrolysis:

Options :

1. ✘ DNA
2. ✔ Glycogen
3. ✘ Lipoprotein
4. ✘ RNA

Question Number : 138 Question Id : 79840724774 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following occurs during first meiotic pro-phase:

Options :

1. ✘ Sister chromatids separate
2. ✘ Sister chromatids are replicated
3. ✘ Homologous chromosomes separate
4. ✔ Homologous chromosomes undergo exchange

Question Number : 139 Question Id : 79840724775 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The migration of a protein on SDS-Poly acrylamide gel is best described as inversely proportion to the :

Options :

1. ✘ Negative charge
2. ✘ Isoelectric point
3. ✘ log of positive charge
4. ✔ log of molecular weight

Question Number : 140 Question Id : 79840724776 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A graphic representation of number of individuals of different species belonging to each trophic level in an ecosystem is known as :

Options :

1. ✘ Ecological pyramid
2. ✘ pyramid of biomass
3. ✔ pyramid of Number
4. ✘ pyramid of energy

Question Number : 141 Question Id : 79840724777 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Which of the following are found only in organisms containing polycistronic mRNA?

Options :

1. ✘ Missense mutations
2. ✔ Polar mutations
3. ✘ Temperature-sensitive mutations
4. ✘ Alternative splicing sites

Question Number : 142 Question Id : 79840724778 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

polysomes contains:

Options :

1. ✘ One mRNA with one paladae grove
2. ✘ One mRNA with many lysosomes
3. ✔ One mRNA with many ergosomes
4. ✘ Many mRNA with many lysosomes

Question Number : 143 Question Id : 79840724779 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

A genetically engineered microorganism used successfully in bioremediation of oil spills is a

Options :

- ✘ Trichoderma
- ✘ Xanthomonas
- ✘ Bacillus
- ✔ Pseudomonas

Question Number : 144 Question Id : 79840724780 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The following viruses that infect insects and have come into prominence for controlling pest and have the efficient expression system for over production of animal proteins

Options :

- ✘ Rabies virus
- ✘ EB-virus
- ✘ HSV-II
- ✔ Baculovirus

Question Number : 145 Question Id : 79840724781 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The ribosome is involved in all of the following EXCEPT

Options :

- ✘ peptide bond formation
- ✔ aminoacylation of tRNA
- ✘ binding of aminoacyl tRNA to mRNA
- ✘ binding of mRNA at an initiation codon

Question Number : 146 Question Id : 79840724782 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

The latest and most effective therapy for AIDS patients includes azidothymidine (AZT), dideoxyinosine (DDI), and saquinavir or similar agents. Use of these three drugs would inhibit which of the following viral processes?

Options :

- ✘ RNase, DNase
- ✘ gp120 formation
- ✘ p24 antibody expression
- ✔ Reverse transcriptase, protease

Question Number : 147 Question Id : 79840724783 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

IgA antibody is the first line of defense against infections at the mucous membrane. It is usually an early specific antibody. Which of the following statements regarding IgA is NOT true?

Options :

- ✘ Complement fixation tests for IgA antibody will be positive if specific IgA antibody is present
- ✔ IgA is not found in saliva, therefore an IgA diagnostic test on saliva would have no value

- ✘ IgA can be destroyed by bacterial proteases
- ✘ IgA is absent in colostrum

Question Number : 148 Question Id : 79840724784 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

Complement is a series of important host proteins which provide protection from invasion by foreign microorganisms. Which one of the following statements best describes complement?

Options :

- ✘ Complement inhibits phagocytosis
- ✘ Microorganisms agglutinate in the presence of complement but do not lyse
- ✘ Complement plays a minor role in the inflammatory response
- ✔ Complement protects the host from pneumococcal and Haemophilus infection through complement components C1, C2, and C4

Question Number : 149 Question Id : 79840724785 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

One of the most common sexually transmitted diseases that may lead to cervical carcinoma is caused by which of the following viruses?

Options :

- ✘ Cytomegalovirus
- ✔ Papillomavirus
- ✘ Adenovirus
- ✘ Herpes simplex virus

Question Number : 150 Question Id : 79840724786 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 0.66

DNA is NOT hydrolyzed by alkali whereas RNA is readily hydrolyzed. This susceptibility of RNA is due to -

Options :

- ✘ The double helical structure of DNA
- ✘ The presence of Uridine in RNA
- ✘ Due to features observed in RNA as stem - loop structures
- ✔ The presence of 2'-OH group in RNA