

National Testing Agency

Question Paper Name: MTB 1 M Tech Biotechnology Science Stream 30th May 2019 Shift2 Set1
Subject Name: M.Tech.(Biotechnology) Science Stream
Creation Date: 2019-05-30 19:01:11
Duration: 180
Total Marks: 100
Display Marks: Yes
Share Answer Key With Delivery Engine: Yes
Actual Answer Key: Yes

M.Tech.(Biotechnology) Science Stream

Group Number : 1
Group Id : 128206225
Group Maximum Duration : 0
Group Minimum Duration : 120
Revisit allowed for view? : No
Revisit allowed for edit? : No
Break time: 0
Group Marks: 100

Part - A

Section Id : 128206379
Section Number : 1
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions: 30
Number of Questions to be attempted: 30
Section Marks: 30
Display Number Panel: Yes
Group All Questions: No

Sub-Section Number: 1
Sub-Section Id: 128206630
Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 12820613273 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 of the following is a ketose sugar?

- (a) Glucose
- (b) Fructose
- (c) Mannose
- (d) Talose

Options :

- 12820652355. A
- 12820652356. B
- 12820652357. C
- 12820652358. D

Question Number : 2 Question Id : 12820613274 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Photosystem II is most reactive at

- (a) 700 nm
- (b) 680 nm
- (c) 620 nm
- (d) 710 nm

Options :

- 12820652359. A
- 12820652360. B
- 12820652361. C
- 12820652362. D

Question Number : 3 Question Id : 12820613275 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Bacterial molecular taxonomy uses

- (a) 5S RNA
- (b) 30S RNA
- (c) 16S RNA
- (d) 60S RNA

Options :

- 12820652363. A
- 12820652364. B
- 12820652365. C
- 12820652366. D

Question Number : 4 Question Id : 12820613276 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 endosymbiotic theory deals with the origins of

- (a) Chloroplast
- (b) Ribosome
- (c) Centrosome
- (d) Nucleus

Options :

- 12820652367. A
- 12820652368. B
- 12820652369. C
- 12820652370. D

Question Number : 5 Question Id : 12820613277 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 heart chamber pumps oxygen-rich blood to the rest of the body

- (a) Right ventricle
- (b) Left ventricle
- (c) Right atrium
- (d) Left atrium

Options :

12820652371. A

12820652372. B

12820652373. C

12820652374. D

Question Number : 6 Question Id : 12820613278 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 could be the best indicator of SO₂ pollution

- (a) Lichen
- (b) Diatoms
- (c) Algae
- (d) Bryophyta

Options :

12820652375. A

12820652376. B

12820652377. C

12820652378. D

Question Number : 7 Question Id : 12820613279 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 correct order of decrease in acidic character of the following compounds cyclohexanol (I), acetic acid (II), 2,6-dinitrophenol (III) and phenol (IV) is

- a. III > II > IV > I
- b. I > II > III > IV
- c. II > IV > III > I
- d. II > III > IV > I

Options :

12820652379. A

12820652380. B

12820652381. C

12820652382. D

Question Number : 8 Question Id : 12820613280 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 among the following is sulphur containing amino acid

- a. Alanine
- b. Glycine
- c. Cystine
- d. Arginine

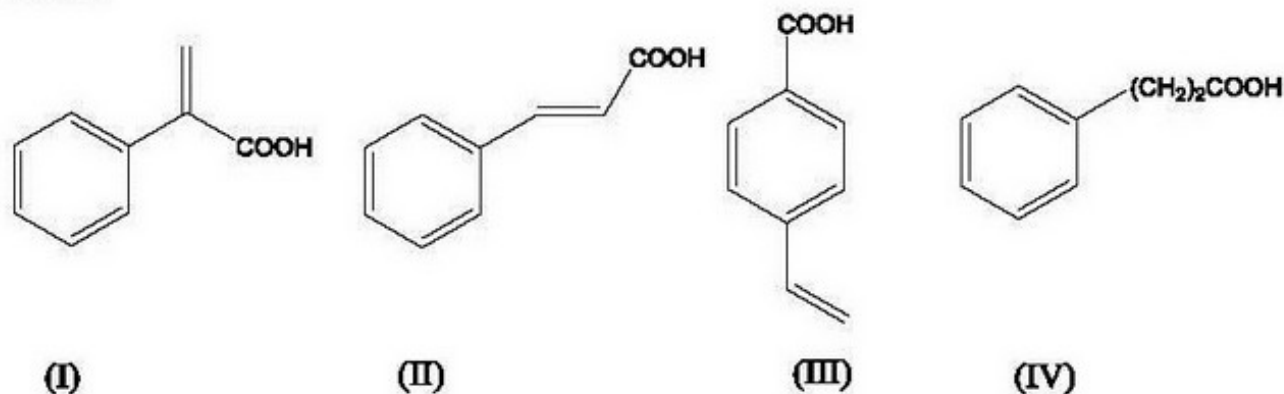
Options :

- 12820652383. A
- 12820652384. B
- 12820652385. C
- 12820652386. D

Question Number : 9 Question Id : 12820613281 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

An organic compound 'P' with molecular formula $C_9H_8O_2$ on oxidation gives benzoic acid as one of the products. The possible structure/s of compound P is/are



- a. I and III
- b. (b) II and IV
- c. (c) I and II
- d. (d) II only

Options :

- 12820652387. A
- 12820652388. B
- 12820652389. C
- 12820652390. D

Question Number : 10 Question Id : 12820613282 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 of the following statements is correct?

- a. UV spectroscopy is attributed to electronic transitions
- b. IR spectroscopy is attributed to rotational transitions
- c. H_2O absorbs visible light
- d. FTIR spectroscopy is used to study rotational transitions

Options :

- 12820652391. A

12820652392. B
12820652393. C
12820652394. D

Question Number : 11 Question Id : 12820613283 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 role of inhibitor in catalytic reaction?

- a. Increase the rate
- b. Reduce the rate
- c. Increase the yield
- d. Reduce the Yield

Options :

12820652395. A
12820652396. B
12820652397. C
12820652398. D

Question Number : 12 Question Id : 12820613284 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 of the following ions have zero crystal field stabilization energy

(CFSE)

- a. Fe^{2+}
- b. Zn^{2+}
- c. Co^{3+}
- d. Ni^{2+}

Options :

12820652399. A
12820652400. B
12820652401. C
12820652402. D

Question Number : 13 Question Id : 12820613285 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 shapes of XeF_5^+ and XeF_5^- , respectively, are

- a. pentagonal planar and square pyramidal
- b. pentagonal planar and trigonal bipyramidal
- c. square pyramidal and pentagonal bipyramida
- d. square pyramidal and pentagonal planar

Options :

12820652403. A
12820652404. B
12820652405. C
12820652406. D

Question Number : 14 Question Id : 12820613286 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 which decreases the entropy of the universe is

- a. reversible process
- b. irreversible process
- c. impossible process
- d. possible process

Options :

12820652407. A

12820652408. B

12820652409. C

12820652410. D

Question Number : 15 Question Id : 12820613287 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

PET stands for

- a. polyethylene terephthalate
- b. polyethyl terephthalate
- c. para ethyl terephthalic acid
- d. para ethyl terephthalate

Options :

12820652411. A

12820652412. B

12820652413. C

12820652414. D

Question Number : 16 Question Id : 12820613288 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Friction works in a direction _____ to the direction of object's motion.

- a. Same
- b. Perpendicular
- c. Opposite
- d. Downwards

Options :

12820652415. A

12820652416. B

12820652417. C

12820652418. D

Question Number : 17 Question Id : 12820613289 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 among these is NOT a valid conservation law of classical Physics?

- a. Law of conservation of energy
- b. Law of conservation of angular momentum
- c. Law of conservation of current
- d. Law of conservation of charge

Options :

12820652419. A

12820652420. B

12820652421. C

12820652422. D

Question Number : 18 Question Id : 12820613290 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 magnitude of charge of an electron is

- a. 2.602×10^{-19}
- b. 1.602×10^{-19}
- c. 4.327×10^{-6}
- d. 0

Options :

12820652423. A

12820652424. B

12820652425. C

12820652426. D

Question Number : 19 Question Id : 12820613291 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A concave mirror's focus is

- a. At the pole
- b. Real
- c. Virtual
- d. Undefined

Options :

12820652427. A

12820652428. B

12820652429. C

12820652430. D

Question Number : 20 Question Id : 12820613292 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A body starts at rest and travels 120 cm in the 8th second. It's acceleration is

- a. 9.6 m/s^2
- b. 0.16 m/s^2
- c. 0.34 m/s^2
- d. 1.12 m/s^2

Options :

- 12820652431. A
- 12820652432. B
- 12820652433. C
- 12820652434. D

Question Number : 21 Question Id : 12820613293 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A particle performs linear S.H.M. at a particular instant, velocity of particle is 'u' and acceleration is 'α' while at another instant velocity is 'v' and acceleration is 'β' ($0 < \alpha < \beta$). The distance between the two positions is,

- (a) $(u^2 - v^2) / (\alpha + \beta)$
- (b) $(u^2 + v^2) / (\alpha + \beta)$
- (c) $(u^2 - v^2) / (\alpha - \beta)$
- (d) $(u^2 + v^2) / (\alpha - \beta)$

Options :

- 12820652435. A
- 12820652436. B
- 12820652437. C
- 12820652438. D

Question Number : 22 Question Id : 12820613294 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Two similar wires A and B are made of different materials. A is twice more elastic than B. When same force is applied, the ratio of elongation of B to A is

- a. 1 : 1
- b. 1 : 4
- c. 2 : 1
- d. 4 : 1

Options :

- 12820652439. A
- 12820652440. B
- 12820652441. C
- 12820652442. D

Question Number : 23 Question Id : 12820613295 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 compound microscope, focal length and aperture of the object used is respectively

- a. large and large
- b. large and small
- c. short and large
- d. short and small

Options :

- 12820652443. A
- 12820652444. B
- 12820652445. C
- 12820652446. D

Question Number : 24 Question Id : 12820613296 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If temperature of a black body increases from 7 °C to 287 °C, then the rate of energy radiation increases by

- a. $(287/7)^4$
- b. 16
- c. 4
- d. 2

Options :

- 12820652447. A
- 12820652448. B
- 12820652449. C
- 12820652450. D

Question Number : 25 Question Id : 12820613297 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the vectors $-3\hat{i} + 4\hat{j} - 2\hat{k}$, $-\hat{i} + 2\hat{k}$ and $\hat{i} - p\hat{j}$ are coplanar, then the value of p is

- a. $p = 2$
- b. $p = -1$
- c. $p = 0$
- d. $p = 1$

Options :

- 12820652451. A
- 12820652452. B
- 12820652453. C
- 12820652454. D

Question Number : 26 Question Id : 12820613298 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Consider the following equation

If $A = \begin{bmatrix} 2 & 3 \\ 5 & -2 \end{bmatrix}$ be such that $A^{-1} = kA$, then k equals to

- a. 19
- b. 1/19
- c. -19
- d. -1/19

Options :

- 12820652455. A
- 12820652456. B
- 12820652457. C
- 12820652458. D

Question Number : 27 Question Id : 12820613299 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Consider the following equation

$f(x) = \frac{e^{x^2} - \cos x}{x^2}$, for $x \neq 0$ is continuous at $x = 0$, then $f(0)$ is equal to

- a. 3/2
- b. -3/2
- c. 1/2
- d. 1

Options :

- 12820652459. A
- 12820652460. B
- 12820652461. C
- 12820652462. D

Question Number : 28 Question Id : 12820613300 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 function $f(x) = \log(x)/x$ is increasing in the interval

- a. (1, 2e)
- b. (0, e)
- c. (2, 2e)
- d. (1/e, 2e)

Options :

- 12820652463. A
- 12820652464. B
- 12820652465. C
- 12820652466. D

Question Number : 29 Question Id : 12820613301 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the function $f(x)$ is continuous on its domain where

$$f(x) = x^2 + ax + b, \quad 0 \leq x \leq 2$$

$$= 4x - 1, \quad 2 < x \leq 4$$

$$= ax^2 + 17b, \quad 4 < x \leq 6$$

Then the values of a and b are

- a. 1, -1
- b. -1, 2
- c. 2, -1
- d. -2, 1

Options :

12820652467. A

12820652468. B

12820652469. C

12820652470. D

Question Number : 30 Question Id : 12820613302 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

You are given the information that $\log 2 = 0.3010$ and $\log 3 = 0.4771$, then the value of $\log_5 512$ is:

- a. 2.870
- b. 2.967
- c. 3.876
- d. 3.912

Options :

12820652471. A

12820652472. B

12820652473. C

12820652474. D

Part - B

Section Id :	128206380
Section Number :	2
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	100
Number of Questions to be attempted:	70
Section Marks:	70
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	128206631
Question Shuffling Allowed :	Yes

Question Number : 31 Question Id : 12820613303 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many fragments are formed when immunoglobulin is treated with enzyme Papain?

- (a) Two
- (b) Three
- (c) Four
- (d) Five

Options :

12820652475. A

12820652476. B

12820652477. C

12820652478. D

Question Number : 32 Question Id : 12820613304 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 medium is used to screen myeloma-spleen hybrid cells?

- (a) IMDM
- (b) DMEM
- (c) HT
- (d) HAT

Options :

12820652479. A

12820652480. B

12820652481. C

12820652482. D

Question Number : 33 Question Id : 12820613305 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 hypervariable region is present in the

- (a) C-terminal of heavy chain of immunoglobulin
- (b) C-terminal of heavy and light chain of immunoglobulin
- (c) N-terminal of heavy chain of immunoglobulin
- (d) N-terminal of heavy and light chain of immunoglobulin

Options :

12820652483. A

12820652484. B

12820652485. C

12820652486. D

Question Number : 34 Question Id : 12820613306 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 polysaccharide vaccine?

- (a) Hepatitis B vaccine
- (b) Polio vaccine
- (c) Hib vaccine
- (d) Anthrax vaccine

Options :

- 12820652487. A
- 12820652488. B
- 12820652489. C
- 12820652490. D

Question Number : 35 Question Id : 12820613307 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 biosimilar?

- (a) An inferior biologic
- (b) An approved biologic with comparable quality, safety and efficacy to an approved reference product whose exclusivity has expired
- (c) A copy biologic with no similarity to an existing biologic
- (d) A biologic with similar functionality to an existing biologic, but a different amino acid sequence

Options :

- 12820652491. A
- 12820652492. B
- 12820652493. C
- 12820652494. D

Question Number : 36 Question Id : 12820613308 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fermentation is a processing method in the preparation of

- (a) Milk
- (b) Yoghurt
- (c) Jam
- (d) Jelly

Options :

- 12820652495. A
- 12820652496. B
- 12820652497. C
- 12820652498. D

Question Number : 37 Question Id : 12820613309 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 enzymes are used for converting corn starch to high fructose corn syrup?

- (a) Glucoisomerace
- (b) Glucoamylase
- (c) Cellulase
- (d) Pectinase

Options :

- 12820652499. A
- 12820652500. B
- 12820652501. C
- 12820652502. D

Question Number : 38 Question Id : 12820613310 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 part of the plant will always generate a virus-free clone upon *in vitro* cultivation?

- (a) Cotyledonary leaf culture
- (b) Axenic culture
- (c) Stem culture
- (d) Meristem tip culture

Options :

- 12820652503. A
- 12820652504. B
- 12820652505. C
- 12820652506. D

Question Number : 39 Question Id : 12820613311 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 competitive inhibition, an inhibitor:

- (a) binds at several different sites on an enzyme.
- (b) binds reversibly at the active site.
- (c) binds only to the ES complex.
- (d) binds covalently to the enzyme.

Options :

- 12820652507. A
- 12820652508. B
- 12820652509. C
- 12820652510. D

Question Number : 40 Question Id : 12820613312 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Two proteins have same molecular weight and same isoelectric point. The best way to resolve them will be

- (a) Ion Exchange Chromatography
- (b) Gel Filtration Chromatography
- (c) Reverse Phase Chromatography
- (d) Chromatofocussing

Options :

- 12820652511. A
- 12820652512. B
- 12820652513. C
- 12820652514. D

Question Number : 41 Question Id : 12820613313 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 immobilized on the microtiter well in sandwich ELISA?

- (a) Detection antibody
- (b) Sample
- (c) Capture antibody
- (d) Secondary antibody conjugated to an enzyme

Options :

- 12820652515. A
- 12820652516. B
- 12820652517. C
- 12820652518. D

Question Number : 42 Question Id : 12820613314 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

You are purifying an enzyme with molecular weight of 80 kDa. Analysis using SDS-PAGE showed the presence of two bands at 50kDa and 30kDa. Which of the following statements will be an appropriate interpretation?

- (a) The enzyme consists of two polypeptide chains linked with inter disulphide bonds.
- (b) The enzyme consists of two polypeptide chains linked with intra covalent bonds.
- (c) The enzyme consists of single polypeptide chain with multiple inter disulphide bonds
- (d) The enzyme is a homodimer with intra covalent and disulphide bond.

Options :

- 12820652519. A
- 12820652520. B
- 12820652521. C
- 12820652522. D

Question Number : 43 Question Id : 12820613315 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 Histone molecule is a linker molecule?

- (a) H1
- (b) H2A
- (c) H2B
- (d) H3

Options :

- 12820652523. A
- 12820652524. B
- 12820652525. C
- 12820652526. D

Question Number : 44 Question Id : 12820613316 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

DNA binding proteins can be detected by

- (a) DNA finger printing
- (b) DNA foot printing
- (c) Radiolabelled probed
- (d) Western blotting

Options :

12820652527. A

12820652528. B

12820652529. C

12820652530. D

Question Number : 45 Question Id : 12820613317 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

DNA is completely digested into mononucleotides to quantify the amount of A, T, G and C by HPLC. It is observed that the amount of A≠T and G≠C. This is possible once the DNA is.....in nature.

- (a) single stranded
- (b) double stranded
- (c) intron less
- (d) G:C rich

Options :

12820652531. A

12820652532. B

12820652533. C

12820652534. D

Question Number : 46 Question Id : 12820613318 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 of the following region in Ti-plasmid is introduced into the plant cells by *Agrobacterium tumefaciens*?

- (a) T-DNA
- (b) T-DNA and Origin of replication
- (c) T-DNA and Virulence region
- (d) Origin of replication

Options :

12820652535. A

12820652536. B

12820652537. C

12820652538. D

Question Number : 47 Question Id : 12820613319 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If in a world, at some point of evolutionarily significant time where DNA was made of 5 nucleotides (A, B, C, D and E). The nucleotide A & B are complementary, C is complementary to both D and E; What do you think will happen in 200 million years?

- (a) The DNA would evolve to have only 2 nucleotides and they would be A & B
- (b) The DNA would lose either E or D
- (c) The DNA would develop multi-complementary and a sixth nucleotide F would be used complementary to A, to increase genetic versatility.
- (d) They would evolve to develop a different set of nucleotides.

Options :

12820652539. A

12820652540. B

12820652541. C

12820652542. D

Question Number : 48 Question Id : 12820613320 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 glucose units in glycogen are linked by

- (a) Alpha 1-4 and 1-6
- (b) Alpha 1-4 and 4-6
- (c) Alpha 1-4 only
- (d) Beta 1-4 and 1-6

Options :

12820652543. A

12820652544. B

12820652545. C

12820652546. D

Question Number : 49 Question Id : 12820613321 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 of the following is an inhibitor of electron transport chain?

- (a) Ricin
- (b) Mupirocin
- (c) Antimycin A
- (d) Camptothecin

Options :

12820652547. A

12820652548. B

12820652549. C

12820652550. D

Question Number : 50 Question Id : 12820613322 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Cystic fibrosis having defect in

- (a) G protein-coupled receptor
- (b) T cell maturation
- (c) Receptor mediated endocytosis
- (d) Ion channel

Options :

- 12820652551. A
- 12820652552. B
- 12820652553. C
- 12820652554. D

Question Number : 51 Question Id : 12820613323 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 primary components of the extracellular matrix are

- (a) Fibrous proteins and glycosaminoglycans
- (b) Cholesterol and fibrous proteins
- (c) Glycosaminoglycans and glycolipids
- (d) Fibrous proteins and glycolipids

Options :

- 12820652555. A
- 12820652556. B
- 12820652557. C
- 12820652558. D

Question Number : 52 Question Id : 12820613324 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Alcohol production from starch and raw sugar utilizes selected strains of

- (a) *Saccharomyces cerevisiae*
- (b) *Candida pseudotropicalis*
- (c) *Aspergillus niger*
- (d) *Streptomyces griseus*

Options :

- 12820652559. A
- 12820652560. B
- 12820652561. C
- 12820652562. D

Question Number : 53 Question Id : 12820613325 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Most enzymes that take part in Kreb's cycle are located in

- (a) Cytoplasm
- (b) Mitochondrial matrix
- (c) Plasma membrane
- (d) Inner mitochondrial membrane

Options :

- 12820652563. A

12820652564. B
12820652565. C
12820652566. D

**Question Number : 54 Question Id : 12820613326 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 final product of Calvin cycle is

- (a) RuBP
- (b) Glucose
- (c) Dihydroxy acetone phosphate
- (d) Glyceraldehyde-3-phosphate

Options :

12820652567. A
12820652568. B
12820652569. C
12820652570. D

**Question Number : 55 Question Id : 12820613327 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 1 Wrong Marks : 0

Identify the technique NOT associated with the analysis of gene expression.

- (a) DNA microarray
- (b) Reverse transcriptase-PCR
- (c) Northern blotting
- (d) Yeast two hybrid system

Options :

12820652571. A
12820652572. B
12820652573. C
12820652574. D

**Question Number : 56 Question Id : 12820613328 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 1 Wrong Marks : 0

An enzyme which cleaves both strands of DNA producing blunt ends

- (a) EcoRI
- (b) Hind III
- (c) Alu I
- (d) BglII

Options :

12820652575. A
12820652576. B
12820652577. C
12820652578. D

**Question Number : 57 Question Id : 12820613329 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 among the following is NOT a feature of Type III restriction endonuclease?

- (a) one enzyme with two different subunits.
- (b) cleaves only on one side of recognition sequence
- (c) recognizes and methylates the same sequence.
- (d) cleaves 20-26 base pairs away.

Options :

12820652579. A

12820652580. B

12820652581. C

12820652582. D

Question Number : 58 Question Id : 12820613330 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Select complement component that is strongly chemoattractant for neutrophils is:

- (a) C3
- (b) C3b
- (c) C5a
- (d) C9

Options :

12820652583. A

12820652584. B

12820652585. C

12820652586. D

Question Number : 59 Question Id : 12820613331 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 cytokine down regulates the expression of Th1 cytokines ?

- (a) IL2
- (b) IL10
- (c) IL17
- (d) IL4

Options :

12820652587. A

12820652588. B

12820652589. C

12820652590. D

Question Number : 60 Question Id : 12820613332 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 formation of memory cells is the objective of vaccination. Immunological memory is predominantly the function of which of the following?

- (a) The complement system
- (b) Cells bearing pattern-recognition receptor molecules
- (c) Cells of the adaptive immune system
- (d) Molecules comprising of the chemical barrier

Options :

- 12820652591. A
- 12820652592. B
- 12820652593. C
- 12820652594. D

Question Number : 61 Question Id : 12820613333 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Scientist X is in a hurry, he/she has a long DNA template that he/she wishes to replicate. Which DNA polymerase will scientist X use to enable replication of long DNA strands in shorter duration of time?

- (a) DNA polymerase I
- (b) DNA polymerase II
- (c) DNA polymerase III
- (d) DNA polymerase IV

Options :

- 12820652595. A
- 12820652596. B
- 12820652597. C
- 12820652598. D

Question Number : 62 Question Id : 12820613334 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A sub-cellular organelle without a membrane is

- (a) nucleus
- (b) lysosome
- (c) ribosome
- (d) mitochondria

Options :

- 12820652599. A
- 12820652600. B
- 12820652601. C
- 12820652602. D

Question Number : 63 Question Id : 12820613335 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 genetic code is called degenerate because

- (a) m-RNA degenerates rapidly
- (b) one codon may code for many amino acids
- (c) one codon codes for only one amino acid
- (d) one amino acid may have more than one codon

Options :

- 12820652603. A
- 12820652604. B
- 12820652605. C
- 12820652606. D

Question Number : 64 Question Id : 12820613336 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Hemophilia-A is caused by the congenital deficiency of functional blood coagulation factor:

- (a) VIII
- (b) IX
- (c) XI
- (d) XII

Options :

- 12820652607. A
- 12820652608. B
- 12820652609. C
- 12820652610. D

Question Number : 65 Question Id : 12820613337 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Rank the following terms in ascending order based on their size.

- (a) antigen, pathogen, epitope
- (b) pathogen, antigen, epitope
- (c) pathogen, epitope, antigen
- (d) epitope, antigen, pathogen

Options :

- 12820652611. A
- 12820652612. B
- 12820652613. C
- 12820652614. D

Question Number : 66 Question Id : 12820613338 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A cell has mitochondria, ribosomes, smooth and rough ER, and other parts. Based on this information, it COULD NOT be.

- (a) a cell from a pine tree.
- (b) a grasshopper cell.
- (c) a yeast (fungus) cell.
- (d) a bacterium.

Options :

- 12820652615. A
- 12820652616. B
- 12820652617. C
- 12820652618. D

Question Number : 67 Question Id : 12820613339 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 regarding protein purification is INCORRECT?

- (a) Lectins are used to purify a glycoprotein in affinity chromatography
- (b) NaCl solution is used to Elute proteins in ion exchange chromatography.
- (c) In affinity chromatography, the binding of protein to ligand is by specific covalent interaction
- (d) The shape and net charge of protein is used to separate proteins in gel filtration chromatography

Options :

- 12820652619. A
- 12820652620. B
- 12820652621. C
- 12820652622. D

Question Number : 68 Question Id : 12820613340 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

O₂ binding to hemoglobin results in

- (a) Increased affinity for O₂
- (b) extensive protein conformational change
- (c) both (a) and (b)
- (d) 100-fold lower affinity for the last O₂ bound than for the first

Options :

- 12820652623. A
- 12820652624. B
- 12820652625. C
- 12820652626. D

Question Number : 69 Question Id : 12820613341 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 telomere sequence of 5'-TTA GGG TTA GGG TTA GGG TTA GGG TTA GGG-3' is encoded by telomerase enzyme contain a template sequence of

- (a) 5'-TTAGGG-3'
- (b) 5'-UUAGGG-3'
- (c) 5'-CCCTAA-3'
- (d) 5'-CCCUAA-3'

Options :

- 12820652627. A
- 12820652628. B
- 12820652629. C
- 12820652630. D

Question Number : 70 Question Id : 12820613342 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

CpG islands when present extensively in a genome that indicates that the downstream gene is

- (a) Under the control of general transcription factors
- (b) Under the control of epigenetic mechanisms
- (c) Under the control of histone acetyl transferase
- (d) Under the control of histone modifiers

Options :

- 12820652631. A
- 12820652632. B
- 12820652633. C
- 12820652634. D

Question Number : 71 Question Id : 12820613343 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 suited method for understanding the exact copy number of mRNA expressed in a given cell is

- (a) Fluorescent tagged Northern blotting
- (b) Oligo based RNA microarray
- (c) Genome sequencing
- (d) Deep sequencing of transcriptome

Options :

- 12820652635. A
- 12820652636. B
- 12820652637. C
- 12820652638. D

Question Number : 72 Question Id : 12820613344 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Chromatin immuno precipitation (ChIP) is a technique used largely to identify

- (a) Protein DNA interaction
- (b) Gene expression analysis
- (c) Transcription status of a given chromosome region
- (d) In vivo detection of transgene integration

Options :

- 12820652639. A
- 12820652640. B
- 12820652641. C
- 12820652642. D

Question Number : 73 Question Id : 12820613345 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Law of independent assortment can fail because of

- (a) Mitosis
- (b) Complementary gene action
- (c) Reduction division
- (d) None of the above

Options :

- 12820652643. A
- 12820652644. B
- 12820652645. C
- 12820652646. D

**Question Number : 74 Question Id : 12820613346 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 1 Wrong Marks : 0

p53 is important to cause

- (a) Cell cycle arrest
- (b) Block in apoptosis
- (c) Cell cycle progression
- (d) Mitosis

Options :

- 12820652647. A
- 12820652648. B
- 12820652649. C
- 12820652650. D

**Question Number : 75 Question Id : 12820613347 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 1 Wrong Marks : 0

Function of amino acyl tRNAsynthetase is

- (a) tRNA maturation
- (b) tRNA transport to ribosome
- (c) tRNA anti-codon synthesis
- (d) tRNA linking to aminoacid

Options :

- 12820652651. A
- 12820652652. B
- 12820652653. C
- 12820652654. D

**Question Number : 76 Question Id : 12820613348 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 1 Wrong Marks : 0

Total number of codons that bring in aminoacids

- (a) 64
- (b) 60
- (c) 20
- (d) 61

Options :

- 12820652655. A
- 12820652656. B
- 12820652657. C
- 12820652658. D

Question Number : 77 Question Id : 12820613349 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Highest frequency of genetic recombination is

- (a) 90%
- (b) 25%
- (c) 75%
- (d) 50%

Options :

12820652659. A

12820652660. B

12820652661. C

12820652662. D

Question Number : 78 Question Id : 12820613350 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many DNA duplex are formed after 10 cycles of PCR starting from one DNA duplex?

- (a) 128
- (b) 256
- (c) 1024
- (d) 1042

Options :

12820652663. A

12820652664. B

12820652665. C

12820652666. D

Question Number : 79 Question Id : 12820613351 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 can be used for genome editing?

- (a) CRISPR/Cas
- (b) Zinc finger nucleases
- (c) a, and b
- (d) TUNEL

Options :

12820652667. A

12820652668. B

12820652669. C

12820652670. D

Question Number : 80 Question Id : 12820613352 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 a western blotting analysis done after denaturing polyacrylamide gel electrophoresis of a protein, the observed band is slightly more than the predicted molecular weight deduced from the amino acid sequence. This is because of

- (a) Post translational modification
- (b) Protein dimerization
- (c) Formation of inclusion body
- (d) Protein misfolding

Options :

- 12820652671. A
- 12820652672. B
- 12820652673. C
- 12820652674. D

Question Number : 81 Question Id : 12820613353 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 antibody crosses placenta?

- (a) IgG
- (b) IgM
- (c) IgA
- (d) IgE

Options :

- 12820652675. A
- 12820652676. B
- 12820652677. C
- 12820652678. D

Question Number : 82 Question Id : 12820613354 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

High Fructose Corn Syrup (HFCS) is mainly consists of

- (a) Only fructose
- (b) Only glucose
- (c) Glucose, fructose and sucrose
- (d) Glucose and fructose

Options :

- 12820652679. A
- 12820652680. B
- 12820652681. C
- 12820652682. D

Question Number : 83 Question Id : 12820613355 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 low temperature-long time (LTLT) pasteurization of milk, the process condition is

- (a) 71 °C, 15 sec
- (b) 71 °C, 30 min
- (c) 63 °C, 15 sec
- (d) 63 °C, 30 min

Options :

- 12820652683. A
- 12820652684. B
- 12820652685. C
- 12820652686. D

Question Number : 84 Question Id : 12820613356 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

TSS of a food sample is measured as $^{\circ}$ Brix and a sugar solution of 15 $^{\circ}$ Brix represents one containing

- (a) 15g of sugar in 100 ml solution
- (b) 15g of sugar in 100g solution
- (c) 15g of sugar in 1000 ml solution
- (d) 15g of sugar in 1000 g solution

Options :

- 12820652687. A
- 12820652688. B
- 12820652689. C
- 12820652690. D

Question Number : 85 Question Id : 12820613357 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 active compound in turmeric is

- (a) Eugenol
- (b) Curcumin
- (c) Capsaicin
- (d) Crocetin

Options :

- 12820652691. A
- 12820652692. B
- 12820652693. C
- 12820652694. D

Question Number : 86 Question Id : 12820613358 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

IUPAC name of drug aspirin is

- (a) Acetylsalicylic acid
- (b) 2-Acetoxybenzoic acid
- (c) Benzoic acid
- (d) 2-salicylic acid

Options :

- 12820652695. A
- 12820652696. B
- 12820652697. C
- 12820652698. D

**Question Number : 87 Question Id : 12820613359 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 1 Wrong Marks : 0

Most drugs are excreted and eliminated by the

- (a) Liver
- (b) Kidney
- (c) Stomach
- (d) Heart

Options :

- 12820652699. A
- 12820652700. B
- 12820652701. C
- 12820652702. D

**Question Number : 88 Question Id : 12820613360 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 1 Wrong Marks : 0

A drug that enhances the effect of another drug is called a

- (a) Antagonist
- (b) Synergist
- (c) Agonist
- (d) Protagonist

Options :

- 12820652703. A
- 12820652704. B
- 12820652705. C
- 12820652706. D

**Question Number : 89 Question Id : 12820613361 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical**

Correct Marks : 1 Wrong Marks : 0

Kwashiorkor disease is caused due to the deficiency of

- (a) Lysine
- (b) Essential fatty acids
- (c) Vitamin K
- (d) Protein

Options :

- 12820652707. A
- 12820652708. B
- 12820652709. C

12820652710. D

Question Number : 90 Question Id : 12820613362 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 aids in long term preservation of fruits and vegetables

- (a) Pasteurization
- (b) Blanching
- (c) Canning
- (d) Exclusion of moisture

Options :

12820652711. A

12820652712. B

12820652713. C

12820652714. D

Question Number : 91 Question Id : 12820613363 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Chondrus crispus is commonly known as

- (a) Nori
- (b) Eel grass
- (c) Irish moss
- (d) Turtle grass

Options :

12820652715. A

12820652716. B

12820652717. C

12820652718. D

Question Number : 92 Question Id : 12820613364 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Cytarabine is an antimetabolite analogue of cytidine isolated from a marine sponge and is used in the treatment of leukemia. The anticancer activity of cytarabine is imparted by

- (a) Its ability to interfere with tubulin polymerization
- (b) Its ability to interfere with protein folding
- (c) Its ability to interfere with DNA replication
- (d) Its ability to interfere with ATP synthesis

Options :

12820652719. A

12820652720. B

12820652721. C

12820652722. D

Question Number : 93 Question Id : 12820613365 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Synahorin is a

- (a) Fishery by-product
- (b) Intensive breeding technique
- (c) Ichthyotoxin
- (d) Drug used for induced breeding

Options :

- 12820652723. A
- 12820652724. B
- 12820652725. C
- 12820652726. D

Question Number : 94 Question Id : 12820613366 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 among the following are commonly called Stony Corals?

- (a) Gorgonacea
- (b) Scleractinia
- (c) Stolonifera
- (d) Pennatulacea

Options :

- 12820652727. A
- 12820652728. B
- 12820652729. C
- 12820652730. D

Question Number : 95 Question Id : 12820613367 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Amnesic shellfish poisoning (ASP) is a shellfish intoxication caused by a diatom. Name the toxin responsible for ASP.

- (a) Ciguatoxin
- (b) Domoic acid
- (c) Okadaic acid
- (d) Brevetoxins

Options :

- 12820652731. A
- 12820652732. B
- 12820652733. C
- 12820652734. D

Question Number : 96 Question Id : 12820613368 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Invertebrate with the largest and most complex brain is

- (a) Squid
- (b) Sperm whale
- (c) Octopus
- (d) Portuguese man-of-war

Options :

- 12820652735. A
- 12820652736. B
- 12820652737. C
- 12820652738. D

Question Number : 97 Question Id : 12820613369 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Scomberomorus maculates is commonly called as

- (a) King mackerel
- (b) Indian mackerel
- (c) Spanish mackerel
- (d) Blue mackerel

Options :

- 12820652739. A
- 12820652740. B
- 12820652741. C
- 12820652742. D

Question Number : 98 Question Id : 12820613370 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 era known as the 'age of fishes' is

- (a) Cambrian
- (b) Mesozoic
- (c) Paleozoic
- (d) Cenozoic

Options :

- 12820652743. A
- 12820652744. B
- 12820652745. C
- 12820652746. D

Question Number : 99 Question Id : 12820613371 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Symbiodium is

- (a) An algal symbiont in corals
- (b) A coral polyp
- (c) Symbiotic cleaner shrimp
- (d) A diatom genus

Options :

- 12820652747. A

- 12820652748. B
- 12820652749. C
- 12820652750. D

Question Number : 100 Question Id : 12820613372 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fish that is widely used for transgenic studies

- (a) Rainbow trout
- (b) Zebrafish
- (c) Tilapia
- (d) Mahi mahi

Options :

- 12820652751. A
- 12820652752. B
- 12820652753. C
- 12820652754. D

Question Number : 101 Question Id : 12820613373 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 Monod model predicts that the specific growth rate

- (a) Will increase with concentration of the growth limiting substrate until it reaches a maximum value
- (b) Will decrease with the concentration of the growth limiting substrate
- (c) Will increase with the concentration of the growth limiting substrate
- (d) Does not depend on growth limiting substrate

Options :

- 12820652755. A
- 12820652756. B
- 12820652757. C
- 12820652758. D

Question Number : 102 Question Id : 12820613374 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A fed-batch reactor containing $1 \text{ g}\cdot\text{L}^{-1}$ of substrate in 2 L of medium. It is fed with $1 \text{ g}\cdot\text{L}^{-1}$ of substrate at the rate of 1 litre per hour. After 10 hours, the concentration of substrate in the reactor was $0.5 \text{ g}\cdot\text{L}^{-1}$. The mass of substrate that was used by the culture in the reactor was

- (a) 2 g
- (b) 6 g
- (c) 8 g
- (d) 12 g

Options :

- 12820652759. A
- 12820652760. B
- 12820652761. C
- 12820652762. D

Question Number : 103 Question Id : 12820613375 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Other than increase in capital cost, increasing the number of steps in downstream processing of proteins enhances the final cost of the product because

- (a) Loss in yield at each step is cumulative
- (b) Loss in activity/function at each step is cumulative
- (c) Difficulties in maintaining stringency at later stages of purification
- (d) Increase in contamination of the product at each step is cumulative

Options :

12820652763. A

12820652764. B

12820652765. C

12820652766. D

Question Number : 104 Question Id : 12820613376 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Fluorescence microscopy is based on the ability of certain molecules to

- (a) Continuously emit light of a constant wavelength
- (b) Absorb light of many different wavelengths
- (c) Absorb light of a given wavelength and then emit light of a longer wavelength
- (d) Absorb light of a given wavelength and then emit light of a shorter wavelength

Options :

12820652767. A

12820652768. B

12820652769. C

12820652770. D

Question Number : 105 Question Id : 12820613377 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 addition of silicone antifoam to a production fermenter has the disadvantage of

- (a) Reducing mass transfer
- (b) Producing undesirable byproducts
- (c) Increasing gas hold up
- (d) Decrease dissolved oxygen

Options :

12820652771. A

12820652772. B

12820652773. C

12820652774. D

Question Number : 106 Question Id : 12820613378 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Crude sample containing five components namely A, B, C, D and E having molecular weight 31kDa, 151kDa, 17kDa, 19.7kDa and 1.7kDa respectively were run on gel permeation/filtration column. Order of elution of will be....

- (a) EDCAB
- (b) BADCE
- (c) ABCDE
- (d) EDCBA

Options :

- 12820652775. A
- 12820652776. B
- 12820652777. C
- 12820652778. D

Question Number : 107 Question Id : 12820613379 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A patent is granted for

- (a) 14 years
- (b) 15 years
- (c) 20 years
- (d) 10 Years

Options :

- 12820652779. A
- 12820652780. B
- 12820652781. C
- 12820652782. D

Question Number : 108 Question Id : 12820613380 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A Chemostat of volume 3 liters has a feed rate of 6 liters h^{-1} . Dilution rate would be

- (a) $2 h^{-1}$
- (b) 0.5 h
- (c) 18 litres h^{-1}
- (d) $9 h^{-1}$

Options :

- 12820652783. A
- 12820652784. B
- 12820652785. C
- 12820652786. D

Question Number : 109 Question Id : 12820613381 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Crystallization of solutes is limited by

- (a) Hydrodynamic boundaries
- (b) Thermodynamic boundaries
- (c) Supersaturation
- (d) Number of components in the mixture

Options :

- 12820652787. A
- 12820652788. B
- 12820652789. C
- 12820652790. D

Question Number : 110 Question Id : 12820613382 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Filtration flux is affected by

- (a) Cross flow velocity
- (b) Feed pH
- (c) Transmembrane pressure
- (d) a, b and c

Options :

- 12820652791. A
- 12820652792. B
- 12820652793. C
- 12820652794. D

Question Number : 111 Question Id : 12820613383 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 solar collectors the required surface characteristics combination is

- (a) High emissivity and low absorptivity
- (b) High emissivity and high reflectivity
- (c) Low emissivity and high absorptivity
- (d) High reflectivity and high absorptivity

Options :

- 12820652795. A
- 12820652796. B
- 12820652797. C
- 12820652798. D

Question Number : 112 Question Id : 12820613384 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 response curve for a step input signal from a reactor is called

- (a) E-curve
- (b) C-curve
- (c) F-curve
- (d) I-curve

Options :

- 12820652799. A
- 12820652800. B
- 12820652801. C
- 12820652802. D

Question Number : 113 Question Id : 12820613385 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 universal logic gate is

- (a) NAND
- (b) OR
- (c) AND
- (d) NOT

Options :

12820652803. A

12820652804. B

12820652805. C

12820652806. D

Question Number : 114 Question Id : 12820613386 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A bipolar junction transistor has

- (a) Two terminals
- (b) Three terminals
- (c) 4 terminals
- (d) Five terminals

Options :

12820652807. A

12820652808. B

12820652809. C

12820652810. D

Question Number : 115 Question Id : 12820613387 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Transformer works on the principle of

- (a) Faraday's laws
- (b) Coulomb's Law
- (c) Kirchoff's laws
- (d) Joule's law

Options :

12820652811. A

12820652812. B

12820652813. C

12820652814. D

Question Number : 116 Question Id : 12820613388 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 a step down transformer

- (a) Secondary voltage is higher than primary voltage
- (b) Secondary current is higher than primary current
- (c) Secondary power is less than primary power
- (d) Secondary power is more than primary power

Options :

- 12820652815. A
- 12820652816. B
- 12820652817. C
- 12820652818. D

Question Number : 117 Question Id : 12820613389 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 computer terminology, WWW stands for

- (a) World Wide Web Worm
- (b) World Wide Web Wireless
- (c) World Wide Website Worm
- (d) World Wide Website Wireless

Options :

- 12820652819. A
- 12820652820. B
- 12820652821. C
- 12820652822. D

Question Number : 118 Question Id : 12820613390 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 invented the World Wide Web?

- (a) Vinton Cerf
- (b) Douglas C. Engelbart
- (c) Tim Berners-Lee
- (c) Robert E. Kahn

Options :

- 12820652823. A
- 12820652824. B
- 12820652825. C
- 12820652826. D

Question Number : 119 Question Id : 12820613391 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 of the following is a valid private IPv4 address?

- (a) 172.16.25.10
- (b) 192.168.1.1.10
- (c) 192.168.1.2.10
- (d) 192.168.1

Options :

- 12820652827. A

- 12820652828. B
- 12820652829. C
- 12820652830. D

Question Number : 120 Question Id : 12820613392 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 global coordination of the DNS Root, IP addressing and other Internet protocol resources is performed as the _____ functions.

- (a) Internet Address Numbers Authority
- (b) Internet Assigned Name Authority
- (c) Internet Address Name Authority
- (d) Internet Assigned Numbers Authority

Options :

- 12820652831. A
- 12820652832. B
- 12820652833. C
- 12820652834. D

Question Number : 121 Question Id : 12820613393 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 main functionality of Domain Name Server is

- (a) To translate IP addresses to domain names
- (b) To translate domain names into IP addresses
- (c) To translate MAC address to IP addresses
- (d) To translate IP addresses to MAC addresses

Options :

- 12820652835. A
- 12820652836. B
- 12820652837. C
- 12820652838. D

Question Number : 122 Question Id : 12820613394 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

IEEE standard that was developed for original wireless specification is

- (a) IEEE 802.3
- (b) IEEE 802.4
- (c) IEEE 802.10
- (d) IEEE 802.11

Options :

- 12820652839. A
- 12820652840. B
- 12820652841. C
- 12820652842. D

Question Number : 123 Question Id : 12820613395 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 of the following network devices operate at layer 3 of OSI model?

- (a) Router
- (b) Hub
- (c) Repeater
- (d) Resistor

Options :

12820652843. A

12820652844. B

12820652845. C

12820652846. D

Question Number : 124 Question Id : 12820613396 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 protocol that allows you to connect and login to a remote computer is

- (a) HTTP
- (b) FTP
- (c) Telnet
- (c) SMTP

Options :

12820652847. A

12820652848. B

12820652849. C

12820652850. D

Question Number : 125 Question Id : 12820613397 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

FTP is built on _____ architecture

- (a) Client-server
- (b) Peer-to-peer architecture
- (c) Remote server
- (d) Domain server

Options :

12820652851. A

12820652852. B

12820652853. C

12820652854. D

Question Number : 126 Question Id : 12820613398 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 XML stand for?

- (a) Exclusive Markup Language
- (b) Extensible Markup Language
- (c) Exclusive Model Language
- (d) Extensible Model Language

Options :

- 12820652855. A
- 12820652856. B
- 12820652857. C
- 12820652858. D

Question Number : 127 Question Id : 12820613399 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 of the following is an example of a static data structure?

- (a) Array
- (b) Stack
- (c) Queue
- (d) Tree

Options :

- 12820652859. A
- 12820652860. B
- 12820652861. C
- 12820652862. D

Question Number : 128 Question Id : 12820613400 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

SMTP is used to

- (a) Report extraordinary events
- (b) Retrieve specific management information
- (c) Transfer mail through the network
- (d) Manipulate management information

Options :

- 12820652863. A
- 12820652864. B
- 12820652865. C
- 12820652866. D

Question Number : 129 Question Id : 12820613401 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

An Ethernet hub uses _____ topology

- (a) Mesh
- (b) Bus
- (c) Tree
- (d) Stack

Options :

- 12820652867. A
- 12820652868. B
- 12820652869. C
- 12820652870. D

Question Number : 130 Question Id : 12820613402 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

One KB is equivalent to

- (a) 1000 bits
- (b) 8000 bits
- (c) 2048 bits
- (d) 8192 bits

Options :

12820652871. A

12820652872. B

12820652873. C

12820652874. D