

Telangana State Council Higher Education

Notations :

1.Options shown in green color and with icon are correct.

2.Options shown in red color and with icon are incorrect.

Question Paper Name :	Yes
Subject Name :	None
Creation Date :	
Duration :	No
Total Marks :	No
Display Marks:	No
Calculator :	No
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	Yes
Protractor Required? :	N
Show Watermark on Console? :	o
Highlighter :	
Auto Save on Console?	Y
Change Font Color :	e
Change Background Color :	s
Change Theme :	
Help Button :	No
Show Reports :	No
Show Progress Bar :	No
Bio Technology 3rd Aug 2022 Shift 1	No
Bio Technology	No
2022-08-0315:05:1	No
120	No
120	

Bio Technology

Group Number :	
Group Id :	34058045
Group Maximum Duration :	
Group Minimum Duration :	120

Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	
Group Marks :	120
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Mathematics

Section Id :	34058082
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	10
Enable Mark as Answered Mark for Review and	Yes
Clear Response :	
Maximum Instruction Time :	
Sub-Section Number :	1
Sub-Section Id :	34058082
Question Shuffling Allowed :	Yes
Question Number : 1 Question Id : 3405805281 Question Type : MCQ Option Shuffling :	Yes
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time	

: N.A Think Time : N.A Minimum Instruction Time : O
Correct Marks : 1 Wrong Marks : O

The rank of the $\begin{bmatrix} 1 & -2 & 3 & -4 \\ 4 & -5 & 2 & 1 \\ 3 & -3 & & \\ 7 & -1 & -15 & -1 \\ & & 3 & \end{bmatrix}$ matrix is

Options :

34058021 121. 8 1

34058021 122. 2

34058021 123.

34058021 124. 4

Question Number : 2 Question Id : 3405805282 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : O

Correct Marks : 1 Wrong Marks : O

The vectors (1, 3, -1), (a, -5, 5), (4, 7, -1) to be linearly dependent the value of a should
be

Options :

5

2

34058021 125.

2

34058021 126. 5

3

2 34058021

127.

2

34058021 128. 3

Question Number : 3 Question Id : 3405805283 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks :

If $a_{n+1} = n + a_n$, then $a_{10} =$

Options :

34058021 129. 285

34058021 130. e 286

34058021 131. 8 287

34058021 132. 8 288

Question Number : 4 Question Id : 3405805284 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The maximum value of $4x^2 + 3xy - 4y^2 - x^2 + xy - y^2$ is

Options :

25

34058021 133. 6

25

34058021 134. 3

25

34058021 1 35. 8 4

34058021 1 36. 8 5

Question Number : 5 Question Id : 3405805285 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If a curve $y = f(x)$ passes through the point $(0, 1)$ and satisfies $f'(x) = xf(x)$, then the

curve is

Options :

34058021 1 37. ✘ $y = -e^{-x^2/2}$

$x^2/2$ 34058021 1 38. ✘ $y = -e$

$-x^2/2$ 34058021 1 39. ✘ $y = e$

34058021 140. ✔ $y = e^{x^2/2}$

Question Number : 6 Question Id : 3405805286 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The particular integral of $Y'+Y = \sin 2x$ is

Options :

$\frac{1}{2} \sin 2x$ 34058021

141. ✘ 3

-1

34058021 142. $\frac{1}{5} \sin 2x$

$\sin 2x$

34058021 143.

-

34058021 144. $\sin 2x$

Question Number : 7 Question Id : 3405805287 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Two fair dice are thrown. Then the probability that the sum on their faces is a prime is

Options :

5

34058021 145. 12

7

34058021 146. ✖ 18

1

34058021 147. ✖ 6

1

34058021 148. ✖ 9

Question Number : 8 Question Id : 3405805288 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The probability distribution of a random variable X is given by

x	1	2	3	4	5
	c			16c	25c

Then its mean is

Options :

34058021 149.

45

34058021 150.

11

10

34058021 151.

3

15

34058021 152. ✖ 4

Question Number : 9 Question Id : 3405805289 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The sum of the series $\sum_{n=1}^{\infty} \frac{2^n}{(2n+1)!}$ is

Options :

34058021 153. —e

34058021 154. 8

-2

34058021 155. 8

-1

e

34058021 156.

Question Number : 10 Question Id : 3405805290 Question Type : MCQ Option Shuffling :
 Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
 Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Solving $x^3 - 3 = 0$ using secant method the iterative formula gives us

$$(x_{n-1} - x_n) \left(\frac{x_{n-1}^3 + x_{n-2}^3}{x_{n-1}^2 + x_{n-2}^2} \right) -$$

Options :

$$-3$$

34058021 157. $x_{n-1}^3 - x_n^3$

$$\frac{x_{n-1}^3 - x_n^3}{x_{n-1}^2 + x_n^2}$$

34058021 158.

$$\frac{x_{n-1}^3 - x_{n-2}^3}{x_{n-1}^2 + x_{n-2}^2}$$

159. 8

$$\frac{x_n^3 - x_{n-2}^3}{x_n^2 + x_{n-2}^2}$$

34058021 160.

Bio Technology

Section Id :	34058083
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	110
Number of Questions to be attempted :	110
Section Marks :	110
Enable Mark as Answered Mark for Review and	Yes
Clear Response :	
Maximum Instruction Time :	

Sub-Section Number : 1

Sub-Section Id : 34058083

Question Shuffling Allowed : Yes

Question Number : 11 Question Id : 3405805291 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Separation of proteins through a semi-permeable membrane that retains proteins and allows small molecules to pass through is called

Options :

34058021 161. SDS PAGE

34058021 162. Dialysis

34058021 163. 8 Chromatography

34058021 164. 8 Ultracentrifugation

Question Number :

:

12 Question Id : 3405805292 Question Type MCQ Option Shuffling :

Yes

Display Question Number : Yes Is Question Mandatory : No Calculator

: None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The hormone that regulates the reabsorption of sodium ions and excretion of potassium ions by kidney tubules is

Options :

34058021 165. s: Glucagon

34058021 166. Adrenaline

✘ Cortisol 34058021

167.

Aldosterone

34058021 168.

Question Number : 13 Question Id : 3405805293 Question Type : MCQ Option Shuffling :

Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The type of reaction catalyzed by transferase group of enzymes is

Options :

8 Transfer of electrons

34058021 169.

Transfer ✘ of groups within molecules 34058021 170.

Question Number : :

Transfer of functional groups

34058021 171.

✖ Cleavage of bonds present 34058021

172.

14 Question Id : 3405805294 Question Type MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The major type of antibody secreted in response to allergic reactions is

Options :

34058021 173. IgE

174 ✖ IgA 34058021

174.

✖ IgM

34058021 175.

34058021 176. 8 IgD

Question Number : 15 Question Id : 3405805295 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The nucleotides present in the DNA molecules are covalently linked together by

Options :

34058021 177. ✓ 3—5' phosphodiester bond

Question Number : :

☒ 5' — 3' phosphodiester bond 34058021
178.

☒ 2' — 5' phosphodiester bond
34058021 179.

34058021 180. ☒ 5' — 2' phosphodiester bond

Question Number : 16 Question Id : 3405805296 Question Type : MCQ Option Shuffling :
Yes Display Yes Is Question Mandatory : No Calculator None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Western blot is performed for the detection of

Options :

34058021 181. Proteins

DNA 34058021
182.

34058021 183. RNA

☒ Lipids
34058021 184.

Question Number : 17 Question Id : 3405805297 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Question Number : :

The antigen-binding site present in an antibody is called as

Options :

34058021 185. Epitope

Paratope

34058021 186.

Antigenic determinant

34058021 187.

Isotope

34058021 188.

Question Number : 18 Question Id : 3405805298 Question Type : MCQ Option Shuffling :

Yes Display Yes Is Question Mandatory : No Calculator None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Glycolysis occurs in

Options :

34058021 189. Mitochondria

34058021 190. Cytoplasm

Endoplasmic reticulum

34058021 191.

Nucleus

34058021 192.

Question Number : :

Question Number : 19 Question Id : 3405805299 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The midpoint of the temperature range over which 50 % of DNA is melted or

denatured to single strands is called as

Options :

Annealing

34058021 193.temperature

34058021 194.Melting temperature

Denaturation temperature

34058021 195. 8

Extension temperature

34058021 196.

Question Number : :

20

N.A

During cell division, the replication of chromosomal DNA happens in

Options :

34058021 197. ✖ M phase

34058021 198. S phase

34058021 199, ✖ G1 phase

34058021200. s: Go phase

Question Number : 21 Question Id : 3405805301 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The consensus sequence in the nucleic acid that acts as a recognition site for

RNA polymerase for the initiation of transcription is

Options :

34058021201. 8 Kozak sequence

34058021202. ✖ Shine Dalgarno sequence

34058021203. Pribnow box

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

34058021204. 8 Okazaki fragments

22 Question Id : 3405805302 Question Type MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A long-distance positive control sequence present either upstream or downstream of a gene
is called

Options :

34058021205. Enhancer

34058021206. ✖ Repressor

34058021207. ✖ Silencer

Promoter

34058021208.

Question Number : 23 Question Id : 3405805303 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The technique used to study conformational changes of proteins is

Options :

Question Number : :

34058021209. Mass spectrometry

34058021210. ❖ Chromatography

34058021211. Circular dichroism spectroscopy

34058021212. Light microscopy

24

N.A

Which one of the following is not a stop codon

Options :

34058021213. UAG

34058021214. UAA

UGG

34058021215.

34058021216. UGA

Question Number : 25 Question Id : 3405805305 Question Type : MCQ Option Shuffling :

Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response

Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes IS Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In protein synthesis, the peptide bond formation between amino acids is catalyzed by
a part of ribosomal unit called

Options :

34058021217. ✖ Aminoacyl-tRNA synthetase

34058021218. Translocase

34058021219. Elongation factor EF-G

34058021220. Peptidyl transferase

Question Number : 26 Question Id : 3405805306 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The v-mi genes that lead to transformation and cell proliferation are called

Options :

34058021221. Oncogenes

Tumor suppressor genes

34058021222. 8

Neogenes

34058021223.

34058021224. Progenes

Question Number : 27 Question Id : 3405805307 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

How many ATPs are utilized in the glycolysis pathway for one molecule of glucose

Options :

34058021225.

1

34058021226.

3

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

34058021227. 8

34058021228. 4

28

N.A

Purines and pyrimidines are nitrogen bases having and carbon-nitrogen links
respectively

Options :

34058021229. 1 and I

34058021230. I and 2

34058021231. e 2 and I

1 and 3

34058021232.

Question Number : 29 Question Id : 3405805309 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Phosphorylation of glucose by the conversion of ATP to ADP is catalyzed by

Options :

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes IS Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Hexokinase

34058021233.

34058021234. 8 Phosphoglucoisomerase

34058021235. Aldolase

34058021236. Phosphofructokinase

30

N.A

Proteins are purified in gel filtration chromatography on the basis of

Options :

34058021237. 8 Ligand specificity

34058021238. ✘ Affinity

✔ Size and shape

34058021239.

Net charge

34058021240. s:

Question Number : 31 Question Id : 3405805311 Question Type : MCQ Option Shuffling :

Yes

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Pick out the structural polysaccharide

Options :

34058021241. Starch

34058021242. ✘ Dexü'in

Chitin

34058021243.

Inulin

34058021244. ✘

32

N.A

Full form of SCAR is

Options :

8 Sequence colony amplified region

34058021245.

34058021246. ✘ Simple characterized amplified region

34058021247. ✔ Sequence charactelized amplified region

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

34058021248. Simple chain amplified region

Question Number : 33 Question Id : 3405805313 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

D-Glucose and D-Galactose are

Options :

Epimers

34058021249.

Anomers

34058021250.

34058021251. Isomers

34058021252. 8 Ketosugars

34

N.A

A groupmg of plant ecosystems Into a large distinct group occupying a major
tenestrial region

Options :

✘ Community

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

34058021253.

✘ Colony

34058021254.

34058021255. Estua1Y

Biome

34058021256.

Question Number : 35 Question Id : 3405805315 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The metabolic precursor for de novo synthesis of nucleotides is

Options :

Ribose-5-phosphate

34058021257.

✘ Ribulose-5-phosphate

34058021258.

34058021259. 8 Glucose-I-phosphate

34058021260. Fructose-I-phosphate

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

36

N.A

Sesquiterpenes contain_____carbon atoms

Options :

34058021261. e 15

34058021262. 30

34058021263. 10

34058021264. 8 20

Question Number : 37 Question Id : 3405805317 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

DNA replication in eukaryotes is

Options :

34058021265. ✖ Dispersive

34058021266. 8 Conservative

34058021267. 8 Non-conservative

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes IS Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

34058021268.Semi conservative

Question Number : 38 Question Id : 3405805318 Question Type : MCQ Option Shuffling :

Yes

Question Number : :

Display Yes Is Question Mandatory : No Calculator None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The rate at which a given solute molecule suspended in less dense solvent sediments in a field of centrifugal force is

Options :

34058021269. ✖ Velocity

34058021270. 8 Relative centrifugal force

Rotation per minute

34058021271. ✖

34058021272. Svedberg unit

Question Number : 39 Question Id : 3405805319 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Shikimic acid pathway is involved in the synthesis of

Options :

34058021273. Aromatic amino acids

34058021274. ✖ Terpenes

Alkaloids

34058021275.

34058021276. Steroids

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

40

N.A

The rate of a reaction is proportional to the square of the concentration of one reactant
or to the product of the concentrations of two reactants

Options :

34058021277. s: Zero-order

First-order

34058021278.

Second-order

34058021279.

Mixed order

34058021280. 8

Question Number : 41 Question Id : 3405805321 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Question Number : :

A product containing viable and defined microorganisms in sufficient numbers, which alter the micro flora and exert beneficial effects in the host is called

Options :

34058021281. Probiotics

34058021282. Prebiotics

34058021283. Synbiotics

34058021284. * Dietary proteins

42 Question Id : 3405805322 Question Type MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the nucleotide composition (%) of a viral genome is A = 20, U = 10. C = 20 and

G = 30, which one of the following is this

Options :

34058021285. Double stranded RNA

34058021286. Single stranded RNA

34058021287. Double stranded DNA

34058021288. s: Single stranded DNA

Question Number : Question Id : 3405805300 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Question Number : 43 Question Id : 3405805323 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Tryptophan is the precursor of _____plant growth regulator

Options :

Auxin

34058021289.

34058021290. Cytokinin

34058021291. ✖ Ethylene

34058021292. Gibbrelins

Question Number : 44 Question Id : 3405805324 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The secretory proteins that are synthesized in ribosomes present in endoplasmic reticulum traverse to plasma membrane through_____

Options :

34058021293. Mitochondria

34058021294. Nucleus

Peroxisomes

34058021295. s:

34058021296. Golgi bodies

Question Number : 45 Question Id : 3405805325 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The introns present in mRNA are removed by a process called

Options :

34058021297. Polyadenylation

34058021298. Splicing

Tennination
34058021299.

34058021300. ✖ RNA editing

Question Number : 46 Question Id : 3405805326 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The character-based method used for the consüuction of a phylogenetic tree is

Options :

Sampling

34058021301.

✖ Neiglbor joining

34058021302.

Maximum likelihood

34058021303.

✖ Bootstrapping

34058021304.

Question Number : 47 Question Id : 3405805327 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In animal cell culture, which of the pH indicator is used

Options :

34058021305. ✖ Acridine orange

Coomasive blue

34058021306. 8

Phenol red

34058021307.

34058021308. s: Crystal violet

Question Number : 48 Question Id : 3405805328 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

DNA staining is done by

Options :

8 Cystal violet

34058021309.

34058021310. 8 Giemsa staining

34058021311. ✖ Methylene blue

34058021312. Feulgen staining

Question Number : 49 Question Id : 3405805329 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Hydrogen bonds are

Options :

Weaker than Vander waals force

34058021313.

34058021314. e Result Of electrostatics interactions

34058021315. s: Stronger than covalent bonds

34058021316. Non directional

Question Number : 50 Question Id : 3405805330 Question Type : MCQ Option Shuffling :

Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response

Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

To purify a recombinant protein of your interest, using which of the following molecule will you tag the protein to purify using nickel chromatography columns

Options :

34058021317. 8 GST

34058021318. Hexa histidine

8 Histamine

34058021319.

Proline

34058021320.

Question Number : 51 Question Id : 3405805331 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is suitable for cloning 140kb eukaryotic DNA fragments for constructing genomic library

Options :

Phage

34058021321.

Plasmid

34058021322.

34058021323. eBAC

YAC

34058021324.

Question Number : 52 Question Id : 3405805332 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0 Which sequence of events occurs in the

process of making a transgenic animal

Options :

Isolation of target gene Micromjection into pronucleus Gene expression →

Infection into vector Protein Purification

34058021325. 8

Gene expression Protein Purification Isolation of target gene Infection

into vector Micromjection into pronucleus

34058021326. 8

Isolation of target gene Insefiion into vector Microinjection into
→ Gene expression Protein Purification pronucleus

34058021327.

Isolation of target gene Insefiion into vector Protein milification Gene

34058021328. ✖ expression Microinjection into pronucleus

Question Number : 53 Question Id : 3405805333 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Wiich of the statement hold tiue for Quantitative PCR

Options :

34058021329. s: Green fluorescent protein (GFP) is used in this PCR

34058021330. 8 A fluorescent dye is used which binds on single stranded DNA molecules

The quantity of DNA is simply measured by measuring the amount of PCR

34058021331. Product

34058021332. This approach is useful if the products are non-specific in nature

Question Number : 54 Question Id : 3405805334 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If two heterozygotes (Aa * Aa) are crossed, the F2 generation will be

Options :

34058021333. 8 I of heterozygous : homozygous

34058021334. ✖ All heterozygous

34058021335. ✓ 1:1 of homozygous : heterozygous

34058021336. 81:3 of homozygous : heterozygous

Question Number : 55 Question Id : 3405805335 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following represents a sexual reproduction form

Options :

34058021337. s: Budding

34058021338. Fission

34058021339. Hennaphroditism

34058021340. 8 Regeneration

Question Number : 56 Question Id : 3405805336 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

How many map units is a recombination frequency of 10 percent equal to

Options :

34058021341. ✖ 2.5 centimorgans

34058021342. 10 centimorgans

34058021343. 8 25 centimorgans

34058021344. ✖ 5 centimorgans

Question Number : 57 Question Id : 3405805337 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The increased intake of sugary foods stimulate the increased production of

Options :

Insulin

34058021345.

✖ Epinephrine

34058021346.

✖ Adrenocorticotropin (ACTH)

34058021347.

✖ Glucagon

34058021348.

Question Number : 58 Question Id : 3405805338 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A gene coding for 40 kDa eukaryotic protein from a eukaryote was cloned in an E.

coli plasmid under the lac promoter and operator. Upon addition of IPTG, the protein was not detected. What might be the reason for this observation

Options :

34058021349. ✖ Cloned sequence lacked the Kozak sequence

34058021350. ✖ E. coli is not suitable for the expression of proteins larger than 30 kDa

Differences in codon preference in translation

34058021351.

40 kDa protein contains a nuclear localization signal

✖
34058021352.

Question Number : 59 Question Id : 3405805339 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0 **Which** one of the following techniques will be

preferred if the task is to find more than 1000 differentially expressed genes in normal

and tumour tissues 111 one single experiment

Options :

34058021353. ✖ Transcriptome analysis

34058021354. ✖ Genome sequencing

34058021355. ✖ ChIP assay

34058021356. ✖ RFLP

Question Number : 60 Question Id : 3405805340 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

E. coli is cultured in a medium containing two carbon sources: Glucose which is the preferred carbon source and Lactose which is a non-preferred source. In this given media, what is the expected growth pattern of E. coli

Options :

34058021357. ✘ Growth curve will be the same as when grown in presence of only glucose

34058021358. 8 Growth curve will be the same as when grown in presence of only lactose.

34058021359. ✔ A lag phase will be observed between the two exponential phases

Two lag phases will be observed between the two exponential phases

34058021360. 8

Question Number : 61 Question Id : 3405805341 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The two male children of the same parents who inherit 50% of the mother genome and 50% from the father show a lot of phenotypic differences. During gametogenesis, what might happen that explains the difference between their phenotypes

Options :

34058021361. 8 Mutation

Recombination

34058021362. 8

34058021363. 8 Independent assortment

Environment

34058021364.

Question Number : 62 Question Id : 3405805342 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which one of the following techniques works on the principle of spin angular momentum of
a photon

Options :

34058021365. CD spectroscopy

Fluorescence spectroscopy

34058021366.

IR spectroscopy

34058021367. 8

34058021368.

FTIR

Question Number : 63 Question Id : 3405805343 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

To develop fed-batch cultivation, what strategy could be followed

Options :

Processes with substrate inhibition

34058021369.

Processes with product inhibition

34058021370.

Ultra-low cell density cultivation

34058021371.

No inhibition strategy should be involved

34058021372. 8

Question Number : 64 Question Id : 3405805344 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0 What is the most suitable type of impeller for
mixing high viscosity fluids (> 105 cP)

Options :

34058021373. Propeller

Helical ribbon
34058021374.

34058021375. s: Paddle

Flat blade turbine
34058021376. s:

Question Number : 65 Question Id : 3405805345 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following does not occur in stationary phase of bacterial growth

Options :

34058021377. 8 The cell number rise stops for all types of bacteria

Cell size increases in some Gram-negative bacteria such as Escherichia coli
34058021378. ✓

✘ Growth rate of bacterial cells nearly equals their death rate
34058021379.

✘ Decrease in peptidoglycan crosslinking
34058021380.

Question Number : 66 Question Id : 3405805346 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

To identify homologs of a genomic DNA query in a protein sequence database, the

BLAST programme used is

34058021368.

Options :

34058021381. ✖ Blastp

34058021382. 8 Blastn

34058021383. Blastx

Tblastn

Question Number : 67 Question Id : 3405805347 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The control of metabolic pathways when an enzyme early on in the pathway is

~~inhibited~~ by an end-product of the metabolic pathway is called

Options :

Dissociation

34058021385.

Transition

34058021386. 8

Competitive inhibition

34058021387. 8

Feedback

inhibition

34058021388.

Question Number : 68 Question Id : 3405805348 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Mmicii enzyme cuts tle IgG molecule to release the two anns of the Y sliaped molecule of Fab

Options :

34058021389M pam

34058021390. ✖ Tlypsin

34058021391. Chymotlypsin

34058021392. 8

Question Number : 69 Question Id : 3405805349 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Human mitocllondria inlierits genetic infonnation from

Options :

34058021393. X linked trait

only Father

34058021394. s:

only Mother

34058021395.

34058021396. ✖ Y chromosome

Question Number : 70 Question Id : 3405805350 Question Type : MCQ Option Shuffling : Yes

34058021368.

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In mustard, the genetically engineered male sterile crops plants have been produced by introducing

Options :

34058021397. ✖ Viral coat protein gene

✖ Chitinase gene

34058021399. ✔ Bamase gene

8 Opaque Z-gene

34058021400.

Question Number : 71 Question Id : 3405805351 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The spindle fibres produced during mitotic cell division are made up of

Options :

34058021401. Chromatin

34058021402. Actin

34058021403. Nucleoprotein

34058021404. 8 Tubulin

Question Number : 72 Question Id : 3405805352 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which statement is true regarding house-keeping genes

Options :

34058021405. s: They are inducible genes

34058021406. s:

They are expressed only in tumor cells

They are expressed in all cells

34058021407.

They do not express at all

34058021408.

Question Number : 73 Question Id : 3405805353 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Millicent is a gene

Options :

Also called as a chromosome.

34058021409.

34058021410. ✓ Basic of heredity and a sequence of nucleotides

34058021411. Made of RNA

34058021368.

34058021412. Made by a ribosome.

Question Number : 74 Question Id : 3405805354 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A scientist found that a mutation had no effect on the polypeptide coded by a gene.

This mutation probably involved

Options :

✖ Deletion of one nucleotide
34058021413.

Alteration of the start codon
34058021414.

Insertion of one nucleotide
34058021415.

34058021416. Substitution of one nucleotide

Question Number : 75 Question Id : 3405805355 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is a Plimate cell line

Options :

HeLa

34058021417. ✖

34058021418. COS-7

MCF-7

34058021419.

34058021420. HL60

Question Number : 76 Question Id : 3405805356 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following techniques is capable of providing a large surface area to cells in small volumes of media

Options :

34058021421. Microcarriers

Macrocarriers

34058021422. 8

Roller culture system

34058021423. ✘

✘ Semi-permeable membrane

34058021424.

Question Number : 77 Question Id : 3405805357 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Downstream processing becomes easy using which of the given methods

Options :

34058021425. 8 Multiplate culture

Roller

34058021426. 8 culture system

✓ Encapsulation

34058021427.

34058021428. ✖ Semi-permeable membrane

Question Number : 78 Question Id : 3405805358 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Overexpression of which gene slows senescence and apoptotic cell death

Options :

34058021429. 11TERT

p21 34058021430. s:

34058021431. s: Bcl-2

34058021432. ✖ c-Myc

Question Number : 79 Question Id : 3405805359 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Immortalization of animal cell lines cannot be achieved by

Options :

34058021433. 8 Irradiation

p53 inactivation

34058021434. s:

34058021435. Transfection with oncogenes

Semm inactivation

34058021436.

Question Number : 80 Question Id : 3405805360 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following chemical is used in the chemical gene transfection method

Options :

34058021437. s: Cu

34058021438. s: FeSO₄

34058021439. s: SO₂

34058021440. s: CaCl₂

Question Number : 81 Question Id : 3405805361 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Lambda phage enters into bacteria through

Options :

34058021441. s: Pili

Lactose receptor

34058021442. s:

✓ Maltose receptor

34058021443.

Conjugation

34058021444. 8

Question Number : 82 Question Id : 3405805362 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

How many DNA duplexes are obtained from one DNA duplex after 5 cycles of PCR

Options :

24

34058021445.

34058021446. s, 20

34058021447. 32

10

34058021448.

Question Number : 83 Question Id : 3405805363 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Short DNA sequence having single occurrence in genome is

Options :

34058021449. ✖ Expressed sequence tag

Sequence tagged site

34058021450.

34058021451. Complex RNA

Complex DNA

34058021452. 8

Question Number : 84 Question Id : 3405805364 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The location of plasmid DNA can be visualized by addition of

Options :

34058021453. 8 Bromophenol blue

Ethidium bromide

34058021454.

34058021455. 8 Oltho xylene

EDTA 34058021456.

Question Number : 85 Question Id : 3405805365 Question Type : MCQ Option Shuffling :
Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A process carried out by nitrifying bacteria to transform soil ammonia into nitrates is

called as

Options :

Nitrification

34058021457.

Denitrification

34058021458. 8

Ammonification

34058021459. 8

Nitrogen fixation

34058021460.

Question Number : 86 Question Id : 3405805366 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the pituitary gland of brain has to send signal to stimulate the production of thyroxine to thyroid gland, what type of cell signaling it follows

Options :

34058021461. s: Paracrine signalling

34058021462. Autocrine signalling

Endocrine signalling

34058021463.

Direct signalling

34058021464.

Question Number : 87 Question Id : 3405805367 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

How many checkpoints are present to monitor the proper cell division to occur

Options :

8 1

34058021465.

34058021466.

34058021467.

8 2

34058021468.

Question Number : 88 Question Id : 3405805368 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The term used to describe the phenomena of traits that are determined by more than
one gene is called as

Options :

Recessive

34058021469.

34058021470. ✖ Pleiotropy

Dominance

34058021471.

Polygenic Inheritance

34058021472.

Question Number : 89 Question Id : 3405805369 Question Type : MCQ Option Shuffling :
Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Hemophilia is caused by a mutation in genes located on the X chromosome. If a mother is a heterozygous with normal and hemophilia alleles and father is hemizygous with normal allele, which statement is false with respect to their offspring in this condition

Options :

34058021473. There is 100 % chance their daughter will get hemophilia

There is 50 % chance their son will get hemophilia

34058021474.

✘ Daughter might be a carrier with a heterozygous alleles

34058021475.

Daughter might be healthy with hemizygous normal alleles

34058021476. 8

Question Number : Question Id : 3405805370 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

90

N.A

Correct Marks : 1 Wrong Marks : 0

The most common phenotype in a natural population is termed as

Options :

34058021477. 8 Genotype

Wild type 34058021478.

Autosome

34058021479.

Mutant phenotype

34058021480. s:

Question Number : 91 Question Id : 3405805371 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is true with regard to both mitochondria and chloroplast

Options :

Present within the nucleus

34058021481.

Question Number : Question Id : 3405805370 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes IS Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

34058021482. Have linear DNA

34058021483. Can extra nuclear genes

34058021484. ✖ Display a Mendelian pattern of inheritance
92

N.A

Correct Marks : 1 Wrong Marks : 0

Which molecular biology technique can be used to study protein-protein interactions
and protein-DNA interactions

Options :

34058021485. Yeast two hybrid

✖ Hybridoma technique

34058021486.

Western blotting

34058021487. 8

PAGE ✖ 34058021488.

Question Number : 93 Question Id : 3405805373 Question Type : MCQ Option Shuffling :
Yes

Question Number : Question Id : 3405805370 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

is a repository for 3D structural data of proteins and nucleic acids

Options :

NDIS

34058021489.8

FASTA

34058021490.

BLAST

34058021491.

PDB

34058021492.

94

N.A

Correct Marks : 1 Wrong Marks : 0

Respiratory quotient is defined as the moles of _____ produced per mole of _____

consumed.

Options :

34058021493. 02, CO2

Question Number : Question Id : 3405805370 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time

: N.A Think Time : Minimum Instruction Time : 0

34058021494. C02, 02

34058021495. ✖ co, 02

34058021496. ✖ 02, co

Question Number : 95 Question Id : 3405805375 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Left handed helix is present in which form of DNA

Options :

34058021497. A form

B form

34058021498.

34058021499. Z form

34058021

Question Question Id : 3405805376 Question Type : MCQ Option Shuffling : Yes

Display : Yes Is Question Mandatory : No Calculator : None Response Time

C fonn 500.

Number : 96

Question Number

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

111 the development of Flavr Savr tomato, genetic transformation was done with an antisense expression cassette of _____ gene

Options :

34058021501. Polygalacturonase

Protease 34058021

502.

Phytoene desaturase

34058021 503. s:

34058021 504.

Question Number : 97 Question Id : 3405805377 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

34058021

Correct Marks : 1 Wrong Marks : 0

The degree of reduction of ethanol is _____

Options :

34058021 505. 4

34058021 506. 2

8 8

34058021 507.

508.

Question Number : 98 Question Id : 3405805378 Question Type : MCQ Option Shuffling :

Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which method is employed for the repeated use of enzymes in

bioprocesses

Options :

34058021 509. ✖ Polymerization

Immobilization

34058021 510.

Ligation ✖ 34058021511.

s, Isomerization

34058021512.

34058021

Question Number : 99 Question Id : 3405805379 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

When two or more different genes (non-allelic) influence the outcome of single trait, this is known as

Options :

Gene interaction

34058021 513.

Interference

34058021514. 8

Mutation

515.

34058021 516. 8 Gene disintegration

Question Number : 100 Question Id : 3405805380 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Involves the modification of the environment to stimulate the existing bacteria capable of bioremediation

Options :

34058021517. 8 Bioaugmentation

34058021518. s: Bioventing

34058021

34058021519. ❄ Biosparging

Biostimulation

34058021 520.

Question Number : 101 Question Id : 3405805381 Question Type : MCQ Option Shuffling

: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response

Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which parameter describes the number of hits one can 'expect' to see by chance when

searching a database of a particular size

Options :

521. 8 Gap score

E-value 34058021

522.

Missing values 34058021 523. ❄

❄ Similarity percent

34058021 524.

Question Number : 102 Question Id : 3405805382 Question Type : MCQ Option Shuffling

: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response

Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the first recombinant pharmaceutical protein produced in plants

Options :

34058021

34058021 525. 8 Growth factor

Interleukins

34058021 526. 8

Human sennn albumin 34058021 527.

34058021 528. 8 Insulin

Question Number : 103 Question Id : 3405805383 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following statements is true regarding the aeration

Options :

As the rate of aeration increase citric acid production decreases
529.

As the rate of aeration decrease citric
34058021 530. ✖ acid production increases

The rate of aeration has no effect on citric acid yield
34058021 531. 8

The rate of aeration either higher or lower than the optimum rate gives lower
yields of citric acid

34058021 532.

Question Number : 104 Question Id : 3405805384 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

34058021

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A microorganism grows in a continuous chemostat culture of 60 working volume with sucrose as the growth limiting nutrient at dilution rate, $D = 0.55 \text{ h}^{-1}$. The steady state biomass concentration is $4.5 \text{ kg dW biomass l}^{-1}$ and the residual sucrose concentration in the incoming feed medium is 10 kg m^{-3} . What would be the yield Y_W (kg biomass/kg substrate)

Options :

34058021 533. 0.562

34058021 534. ✖ 0.462

34058021 535. 8 0.362

34058021 536. 0.162

Question Number : 105 Question Id : 3405805385 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :
None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Wash out (as defined by $D = \mu_{max}$) of a continuous stirred tank fermenter is
characterized by (X = biomass; S = substrate concentration in bioreactor; S_0 =
substrate concentration in feed; P = product concentration in bioreactor)

Options :

$X = 0; S = 0; P = 0$

34058021 537.

$X = 0, S = S_0$

34058021 538.

$X = 0; S < 0; P = 0$

34058021 539.

34058021 540. $X < 0; S < 0; P < 0$

Question Number : 106 Question Id : 3405805386 Question Type : MCQ Option
Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator :
None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0 Which of the following statements best
describes properties of interleukin I (IL-1)

Options :

It is a macrophage derived product

34058021 541.

It does not activate B-cells

34058021 542. 8

34058021 543. It may stimulate cytotoxic B-cells

34058021 544. There is single biologically active form

Question Number : 107 Question Id : 3405805387 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

For PCR amplification of the sequence

ATCTTCTACG..... .AAGCTTGCGG

TAGAAGATGC

TTCGAACGCC

the required primers are

Options :

34058021 545. ATCTTCTA and CGAACGCC

ATCTTCTA and CCGCAAGC

34058021 546.

34058021 547. ✘ TAGAAGAT and CGAACGCC

34058021 548. TAGAAGAT and CCGCAAGC

Question Number : 108 Question Id : 3405805388 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0 wml of the following RNA molecules is con•ectly matched with its function

Options :

34058021 549. ✘ tRNA used to transpon amino acids to ribosomes

rRNA-RNA molecules involved in DNA recombination

34058021 550. s:

34058021 551. ✖ mRNA used as a template for RNA synthesis

34058021 552. ✔ s-RNA involved in the synthesis of proteins in the cytoplasm

Question Number : 109 Question Id : 3405805389 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A man is brought to court in a paternity case. He has blood type B, Rh+ve. The mother has blood group B, Rh -ve. The child's blood type is A, Rh -ve. Which statement about man is correct

Options :

He is the father

34058021 553.

He might ✖ be the father 34058021 554.

He is not the father

34058021 555.

He might not be the father

✖
34058021 556.

Question Number : 110 Question Id : 3405805390 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following relations holds true for the specific growth rate μ of a microorganism in the death phase

Options :

34058021 557. 8

34058021 558. ✓ $\mu < 0$

34058021 559. ✗ $\mu = \mu_{\max}$

$0 \ll g_{\max}$

34058021560.

Question Number : 111 Question Id : 3405805391 Question Type : MCQ Option

Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which effectors can eradicate parasites

Options :

34058021 561. ✗ Macrophages

34058021 562. ✗ Neutrophils

Complement ✗ 34058021 563.

34058021 564. ✓ Eosinophils

Question Number : 112 Question Id : 3405805392 Question Type : MCQ Option

Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which type of cell specifically destroys virally infected body cells

Options :

34058021 565. Cytotoxic T lymphocytes

34058021 566. Activated B lymphocytes

34058021 567. Phagocytic macrophages

34058021 568. Plasma Cells

Question Number : 113 Question Id : 3405805393 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The first vaccine developed from animal cell culture was

Options :

34058021 569. Hepatitis B vaccine

34058021 570. Influenza vaccine

34058021571. Small pox vaccine

34058021 572. Polio vaccine

Question Number : 114 Question Id : 3405805394 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In chemostat under carbon limited conditions, a plot I/Y versus I/D yields

Options :

Straight line with slope m
34058021 573.

34058021 574. 8 Straight line with slope $1/m$

34058021 575. 8 Sigmoid line with slope m

34058021 576. 8 Sigmoid line with slope $1/m$

Question Number : 115 Question Id : 3405805395 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The hormone pairs required for a callus to differentiate are

Options :

34058021 577. Auxin and cytokinin

Auxin and gibberellin 34058021 578.

8

34058021 579. Ethylene and gibberellin

34058021 580. 8 Cytokinin and gibberellin

Question Number : 116 Question Id : 3405805396 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A totipotent cell means

Options :

34058021 581. ✓ An undifferentiated cell capable of developing into a system or entire plant

✘ An undifferentiated cell capable of developing into an organ
34058021 582.

✘ An undifferentiated cell capable of developing into a complete embryo
34058021 583.

✘ Cell which lacks the capability to differentiate into an organ or system
34058021 584.

Question Number : 117 Question Id : 3405805397 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response
Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Prosite is a data base for

Options :

34058021 585. ✓ Searching the pattern

34058021 586. ✘ Searching for ligand

34058021 587. ✘ Searching for RNA

34058021 588. Searching for DNA

Question Number : 118 Question Id : 3405805398 Question Type : MCQ Option Shuffling
: Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A culture of bacteria is infected with bacteriophage at a multiplicity of 0.3. The probability of a single cell infected with 3 phages is

Options :

34058021 589. 0.9

34058021590. ' 27

0.009 34058021
591.

0.027
34058021 592.

Question Number : 119 Question Id : 3405805399 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Hybridoma cells have an application to produce

Options :

34058021 593. 8 Antigens

Antibodies 34058021
594.

8 Cancer cells
34058021 595.

596.

Question Number : 120 Question Id : 3405805400 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The technique used to detect the presence of DNA or RNA in a non-fractionated

DNA sample is

Options :

34058021 597. Colony hybridization

34058021 598. In-situ hybridization

34058021 599. Dot blot technique

34058021 600. Western blotting