

# Andhra Pradesh State Council of 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.

<b>Question Paper Name :</b>	Botany 2nd May 2024 Shift 1
<b>Duration :</b>	120
<b>Total Marks :</b>	140
<b>Display Marks:</b>	No
<b>Share Answer Key With Delivery Engine :</b>	Yes
<b>Calculator :</b>	None
<b>Magnifying Glass Required? :</b>	No
<b>Ruler Required? :</b>	No
<b>Eraser Required? :</b>	No
<b>Scratch Pad Required? :</b>	No
<b>Rough Sketch/Notepad Required? :</b>	No
<b>Protractor Required? :</b>	No
<b>Show Watermark on Console? :</b>	Yes
<b>Highlighter :</b>	No
<b>Auto Save on Console?</b>	Yes
<b>Change Font Color :</b>	No
<b>Change Background Color :</b>	No
<b>Change Theme :</b>	No
<b>Help Button :</b>	No
<b>Show Reports :</b>	No

Show Progress Bar :	No
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

## Research Methodology

Section Id :	971036387
Section Number :	1
Mandatory or Optional :	Mandatory
Number of Questions :	66
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Is Section Default? :	null

Question Number : 1 Question Id : 97103627214 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The acronym MOOCS stands for

Options :

1. ✘ Modular Open Online Courses
2. ✘ Mass Online Offline Class
3. ✘ Multi-media Open Online Classes
- 4.

✓ Massive Open Online Courses

**Question Number : 2 Question Id : 97103627215 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The idea of making students watch an education video at home and participate in discussion during the class is known as

**Options :**

1. ✘ Diverse class room
2. ✓ Flipped class room
3. ✘ Multi-media class room
4. ✘ Google class room

**Question Number : 3 Question Id : 97103627216 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The term 'Zoom' in the context of ICT refers to

**Options :**

1. ✘ Learning Management System
2. ✘ Flipped class room

3. ✓ Video conferencing tool
4. ✘ Online data collection system

**Question Number : 4 Question Id : 97103627217 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

One of the following is a popular method of feedback in ICT based learning

**Options :**

1. ✘ WhatsApp web
2. ✘ Dropbox
3. ✘ Google Drive
4. ✓ Google form

**Question Number : 5 Question Id : 97103627218 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A commonly used BYOD (Bring Your Own Device) in ICT supported learning process is

**Options :**

1. ✓ Laptop

2. ✘ Smartphone

3. ✘ Interactive white board

4. ✘ LCD projector

**Question Number : 6 Question Id : 97103627219 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The method of dividing students into small groups to learn parts of a topic is known as

**Options :**

1. ✘ Round-Robin method

2. ✘ Numbered heads together

3. ✘ Think-pair-share method

4. ✔ Jigsaw method

**Question Number : 7 Question Id : 97103627220 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Microsoft Teams is one ICT tool that supports

**Options :**

1. ✘ Web-based slides
2. ✔ Real time communication and collaboration
3. ✘ LMS
4. ✘ Remote Learning

**Question Number : 8 Question Id : 97103627221 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which platform is widely recognized as one of the first MOOC providers?

**Options :**

1. ✘ Coursera
2. ✘ Udemy
3. ✘ Khan Academy
4. ✔ edX

**Question Number : 9 Question Id : 97103627222 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The system of securing academic credit through optional and elective courses was made possible by

**Options :**

1. ✘ MOOCS
2. ✘ Semester System
3. ✔ Choice Based Credit System
4. ✘ Distance Education

**Question Number : 10 Question Id : 97103627223 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

One of the following types of questions cannot be easily auto-graded by LMS software.

**Options :**

1. ✘ True-false type questions
2. ✔ Subjective questions
3. ✘ Multiple Choice questions
4. ✘ Matching type questions

**Question Number : 11 Question Id : 97103627224 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

An example of data measured on nominal scale is

**Options :**

1. ✘ Actual age of a person
2. ✘ Body Weight
3. ✔ Gender
4. ✘ Shoe length

**Question Number : 12 Question Id : 97103627225 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Review of relevant literature is the vital step in the following stage of research

**Options :**

1. ✘ Data collection
2. ✔ Problem formulation stage
3. ✘ Sampling design



4. ✘ Interpretation of results

Question Number : 13 Question Id : 97103627226 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following style is commonly used in thesis writing for humanities ?

Options :

1. ✔ MLA style

2. ✘ APA style

3. ✘ IEEE style

4. ✘ Chicago style

Question Number : 14 Question Id : 97103627227 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the expansion of the acronym APA in the style of references?

Options :

Associated Printers Architecture

1. ✘

American Psychological Association

2. ✓

Advanced Psychological Appendix

3. ✘

Authenticated Publishing Act

4. ✘

**Question Number : 15 Question Id : 97103627228 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Every published paper/article in a journal is expected to have completed the stage

**Options :**

Publisher's review

1. ✘

Editorial review

2. ✘

Public review

3. ✘

Peer review

4. ✓

**Question Number : 16 Question Id : 97103627229 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The 'bottom-up method' approach in research is known as '

**Options :**

1. ✓ Inductive method
2. ✗ Hypothesis method
3. ✗ Pattern method
4. ✗ Interview method

**Question Number : 17 Question Id : 97103627230 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The audio-visual communication among researchers across the globe using ICT is called

**Options :**

1. ✗ Web hosting
2. ✗ Podcasting
3. ✓ Tele-conferencing
4. ✗ Telecasting

**Question Number : 18 Question Id : 97103627231 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

One of the following is a powerful tool to seek content on a topic from internet resources

**Options :**

1. ✘ GPS
2. ✘ Alta Vista
3. ✔ ChatGPT
4. ✘ Skype

**Question Number : 19 Question Id : 97103627232 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The acronym CARE in UGC-CARE stands for

**Options :**

1. ✘ Committee on Academic Research Ethics
2. ✔ Consortium for Academic Research and Ethics
3. ✘ Consortium for Academic Regulatory Ethics

## Core Academic Research Ethics

4. ✘

**Question Number : 20 Question Id : 97103627233 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

By group discussion one can evaluate the ability of a participant to

**Options :**

1. ✘ Dominate others

2. ✘ Control other participants

3. ✔ Confer with other participants

4. ✘ Lead over others

**Is Section Default? :** null

**Question Id : 97103627234 Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**  
**Question Numbers : (21 to 25)**

Read the following passage and answer the questions below:

According to the World Health Organization cancer is the second leading cause of death globally. The cancer burden continues to grow globally. However, survival rates are improving with the help of advanced diagnosis and treatment. Regular screenings and early detection are two main key factors that help improve survival rates. "Lung, prostate, colorectal, stomach and liver cancer are the most common types of cancer in men, while breast, colorectal, lung, cervical and thyroid cancer are the most common among women," mentions the WHO website. Tobacco use alone accounts for around one-third of deaths from cancers. Other risk factors include high body mass index, alcohol consumption, family history, some health conditions, environment, infections by certain viruses and more. Common treatment options include surgery, chemotherapy, radiation therapy, bone marrow transplant, targeted drug therapy and more.

### Sub questions

**Question Number : 21 Question Id : 97103627235 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which among the following is not the treatment options for Cancer ?

**Options :**

1. ✘ Chemotherapy

2. ✘ Radiation therapy

3. ✔ PRP

4. ✘ Bone marrow transplant

Question Number : 22 Question Id : 97103627236 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Survival rate of cancer increases with

Options :

1. ✘ Stomach and liver cancer
2. ✔ Regular screening and early detection
3. ✘ Tobacco use
4. ✘ Infections by certain viruses

Question Number : 23 Question Id : 97103627237 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following is not commonly found cancer specific to women

Options :

1. ✘ Lung
2. ✘ Cervical
- 3.

✓ Prostate

4. ✘ Colorectal

Question Number : 24 Question Id : 97103627238 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The following is not known risk factor for cancer

Options :

1. ✘ High body mass index

2. ✓ High glucose levels

3. ✘ Alcohol consumption

4. ✘ Chewing tobacco

Question Number : 25 Question Id : 97103627239 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Common therapy to treat cancer includes

Options :



1. ✘ Physiotherapy
2. ✘ Laser therapy
3. ✘ Palliative care
4. ✔ Chemotherapy

**Is Section Default? :** null

**Question Number : 26 Question Id : 97103627240 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is an element of evaluation in the Choice Based Credit System (CBCS)?

**Options :**

1. ✔ Continuous assessment
2. ✘ Multiple-choice questions
3. ✘ Final exams only
4. ✘ No grading system

**Question Number : 27 Question Id : 97103627241 Display Question Number : Yes Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

During lecturing the class room teacher shall be highly cognizant about

**Options :**

1. ✘ Fixed posture
2. ✘ Proximity
3. ✘ Frequent pausing
4. ✔ Voice modulation

**Question Number : 28 Question Id : 97103627242 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A majority of communication problems arise due to

**Options :**

1. ✔ Poor oral communication
2. ✘ Physical appearance
3. ✘ Facial expressions
4. ✘

✘ Body language

Question Number : 29 Question Id : 97103627243 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The following is an example of non-verbal communication

Options :

1. ✘ Question paper

2. ✘ Google form

3. ✘ SMS on mobile

4. ✔ Facial expression

Question Number : 30 Question Id : 97103627244 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

India's largest public sector broadcasting agency is

Options :

1. ✘ Doordarshan

2. ✘ PTI

3. ✔ Prasar Bharathi

4. ✘ TRAI

**Question Number : 31 Question Id : 97103627245 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Among the options below, which one is not primarily used as a social networking platform

**Options :**

1. ✔ Dropbox

2. ✘ X

3. ✘ Reddit

4. ✘ Pinterest

**Question Number : 32 Question Id : 97103627246 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The process of creating knowledge by transforming experiences is known as

**Options :**

1. ✘ Abstraction

2. ✘ Conceptualization

3. ✔ Learning

4. ✘ Experimentation

**Question Number : 33 Question Id : 97103627247 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

An assertive communication (either written or spoken) will be powerful when it is given as \_\_\_\_\_

**Options :**

1. ✔ 'I' message

2. ✘ 'We' message

3. ✘ 'You' message

4. ✘ 'They' message

**Question Number : 34 Question Id : 97103627248 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Two numbers are respectively 20% and 50% more than a third number.

The ratio of the two numbers is

**Options :**

1. ✓ 4:5

2. ✗ 2:5

3. ✗ 3:5

4. ✗ 6:7

**Question Number : 35 Question Id : 97103627249 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The cost price of 25 articles is the same as the selling price of  $x$  articles. If the profit is 30%, then the value of  $x$  is

**Options :**

1. ✗ 15

2. ✓ 20

3. ✖ 18

4. ✖ 25

**Question Number : 36 Question Id : 97103627250 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A fruit seller sold 40% of watermelons available with him and still left with 420 fruits. How many fruits had he originally ?

**Options :**

1. ✖ 588

2. ✖ 600

3. ✖ 143

4. ✔ 700

**Question Number : 37 Question Id : 97103627251 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Suppose the simple average of 20 numbers is zero. How many of these numbers can be greater than zero?

**Options :**

1. ✘ 0

2. ✘ 20

3. ✘ 10

4. ✔ 19

**Question Number : 38 Question Id : 97103627252 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A man purchased a cow for Rs. 3000 and sold it the same day for Rs. 3600, allowing the buyer credit for 2 years. If the rate of interest is 10% per annum, then the man has a gain of

**Options :**

1. ✔ 0%

2. ✘ 5%

3. ✘ 7.5%

4. ✘ 10%

**Question Number : 39 Question Id : 97103627253 Display Question Number : Yes Is Question**



**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. At what speed it should travel in order to cover the same distance in 2 hours ?

**Options :**

1. ✘ 300 Kmph
2. ✘ 360 Kmph
3. ✘ 720 Kmph
4. ✔ 600 Kmph

**Question Number : 40 Question Id : 97103627254 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What decimal of an hour is a second?

**Options :**

1. ✘ 0.0025
2. ✘ 0.0256
3. ✔ 0.00027

0.0002

4. ✖

**Question Number : 41 Question Id : 97103627255 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The process of drawing general conclusions from a set of specific observations is called

**Options :**

1. ✔ Inductive logic

2. ✖ Analogy

3. ✖ Speculative logic

4. ✖ Evidence-based logic

**Question Number : 42 Question Id : 97103627256 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Reasoning is an instrument whose purpose is to

**Options :**

1. ✖ Spread knowledge

Live in imaginary world

2. ✘

Anticipate unknown things

3. ✘

Grasp the unknown from the known

4. ✔

**Question Number : 43 Question Id : 97103627257 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A statement that asserts all or some members of one category are included in the other category is called

**Options :**

Speculative statement

1. ✘

Predictive statement

2. ✘

Categorical statement

3. ✔

Non-deniable statement

4. ✘

**Question Number : 44 Question Id : 97103627258 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Study the following table and answer the questions based on it.

Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

What is the average amount of interest per year which the company had to pay during this period?

Options :

1. ✘ 32.43

2. ✘ 33.72

3. ✘ 34.18

4. ✔ 36.66

Question Number : 45 Question Id : 97103627259 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.

Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
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2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?

**Options :**

1. ✘ 0.10

2. ✘ 0.50

3. ✔ 1.0

4. ✘ 1.25

Question Number : 46 Question Id : 97103627260 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.

Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

Total expenditure on all these items in 1998 was approximately what percent of the total expenditure in 2002?

Options :

1. ✘ 62

2. ✘ 66

3. ✔ 69

4. ✘ 71

Question Number : 47 Question Id : 97103627261 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.

Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

The total expenditure of the company over these items during the year 2000 is?

Options :

1. ✓ 544.44

2. ✗ 501.11

3. ✗ 446.46

4. ✗ 478.87

Question Number : 48 Question Id : 97103627262 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.

Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

The ratio between the total expenditure on Taxes for all the years and the total expenditure on Fuel and Transport for all the years respectively is approximately?

Options :

1. ✘ 4:7

2. ✔ 10:13

3. ✘ 15:18

4. ✘ 5:8

Question Number : 49 Question Id : 97103627263 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0



One of the following is not a search engine

Options :

1. ✘ Google
2. ✘ Yahoo
3. ✔ One-drive
4. ✘ Bing

Question Number : 50 Question Id : 97103627264 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The standard protocol for internet is

Options :

1. ✘ Java
2. ✘ HTML
3. ✘ FTTP
4. ✔ TCP/IP

**Question Number : 51 Question Id : 97103627265 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A popular term related to the design of a digital learning environment is

**Options :**

1. ✘ LMS
2. ✔ E-kalpa
3. ✘ E-commerce
4. ✘ E-tendering

**Question Number : 52 Question Id : 97103627266 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The Government of India created an initiative to encourage scientific temper among students, known as ATL, whose full expansion is

**Options :**

1. ✘ Atal Technology Lab
2. ✔ Atal Tinkering Lab
- 3.

✘ Applied Techno Lab

4. ✘ Applied Technology Lab

**Question Number : 53 Question Id : 97103627267 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

One of the following is a web browser

**Options :**

1. ✘ Microsoft Windows

2. ✘ Google Drive

3. ✔ Google Chrome

4. ✘ HTML

**Question Number : 54 Question Id : 97103627268 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Online courses through NPTEL platform are offered by

**Options :**

1. ✘ NITs

2. ✘ IIPA

3. ✘ IIMs

4. ✔ Jointly IITs and IISc

**Question Number : 55 Question Id : 97103627269 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The chief objective of the PARAM Shavak of the Government of India is to provide

**Options :**

1. ✘ MOOCs in all subjects

2. ✘ Database of theses and dissertations

3. ✔ Affordable supercomputing facilities for research

4. ✘ Knowledge base for start-ups

**Question Number : 56 Question Id : 97103627270 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The movement of topsoil and litter from one place to another is known as

**Options :**

1. ✓ Soil erosion
2. ✘ Soil submersion
3. ✘ Soil pollution
4. ✘ Soil pulling

**Question Number : 57 Question Id : 97103627271 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The hearing sensitivity of human ear is

**Options :**

1. ✘ 3-6 kHz
2. ✓ 2-5 kHz
3. ✘ 10-50 kHz
4. ✘ 50-100 kHz

**Question Number : 58 Question Id : 97103627272 Display Question Number : Yes Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The organic material in solid waste is decomposed by

**Options :**

1. ✘ Soil particles
2. ✘ Oxidation
3. ✘ Flow of water
4. ✔ The action of microorganisms

**Question Number : 59 Question Id : 97103627273 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The oldest commonly followed method to dump solid waste is

**Options :**

1. ✔ Landfill
2. ✘ Burning
3. ✘ River flow
4. ✘ Drying in open air

Question Number : 60 Question Id : 97103627274 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The harmful pollutant released by petrol/diesel vehicles is

Options :

1. ✘ Carbon Dioxide
2. ✘ Ozone
3. ✔ Carbon Monoxide
4. ✘ Nitrogen Oxide

Question Number : 61 Question Id : 97103627275 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following is not a result of global warming

Options :

1. ✘ Melting glaciers
2. ✔ Population growth
3. ✘ Raising sea levels

Heat waves

4. ✖

Question Number : 62 Question Id : 97103627276 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is mostly responsible to global warming?

Options :

1. ✖ Deforestation

2. ✖ Erosion of sea coasts

3. ✔ Fossil fuel combustion

4. ✖ Agriculture

Question Number : 63 Question Id : 97103627277 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0



Sort the following countries in the decreasing order of carbon dioxide emissions

- A. North America
- B. Africa
- C. Europe
- D. Asia

**Options :**

1. ✘ DBCA

2. ✘ ADCB

3. ✔ DACB

4. ✘ BADC

**Question Number : 64 Question Id : 97103627278 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The international agreement on reducing greenhouse emissions, is known as

**Options :**

1. ✘ NATO

2. ✘ COP 21 agreement

3. ✓ Convention on Biological Diversity

4. ✘ Montreal agreement

**Question Number : 65 Question Id : 97103627279 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The Montreal Protocol on ozone layer protection came into effect in the year

**Options :**

1. ✓ 1989

2. ✘ 1998

3. ✘ 1978

4. ✘ 1987

**Question Number : 66 Question Id : 97103627280 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The first earth summit on biological diversity was held in

**Options :**

1. ✘

India

2. ✘ USA

3. ✘ South Africa

4. ✔ Brazil

**Question Number : 67 Question Id : 97103627281 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is a conventional learning programme in India?

**Options :**

1. ✘ Yoga

2. ✔ Agriculture

3. ✘ Journalism

4. ✘ Artificial Intelligence

**Question Number : 68 Question Id : 97103627282 Display Question Number : Yes Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The 24-hour educational programme launched in 2020 and telecast in India is termed as

**Options :**

1. ✓ Gyan Darshan

2. ✘ NPTEL

3. ✘ SASTRA

4. ✘ SWAYAM

**Question Number : 69 Question Id : 97103627283 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The quality of Technical and Management education in India is monitored by

**Options :**

1. ✘ ICMR

2. ✘ NAAC

3. ✘ UGC

4. ✓ AICTE

Question Number : 70 Question Id : 97103627284 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Medical Council of India is recently renamed as

Options :

Indian Medical Association

1. ✘

ICMR

2. ✘

3. ✓ National Medical Commission

Pharmacy Council of India

4. ✘

## Botany

Section Id :	971036388
Section Number :	2
Mandatory or Optional :	Mandatory
Number of Questions :	70
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes

Maximum Instruction Time :

0

Is Section Default? :

null

Question Number : 71 Question Id : 97103627285 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the maximum number of shared electron pairs in a single covalent bond between two atoms

Options :

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

Question Number : 72 Question Id : 97103627286 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which is the most abundant biomolecule on earth?

Options :

1. ✘ Mineral salts
2. ✘ Proteins
3. ✘ Lipids

4. ✓ Carbohydrates

Question Number : 73 Question Id : 97103627287 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Most abundant RNA in the cell is

Options :

1. ✓ rRNA

2. ✗ mRNA

3. ✗ tRNA

4. ✗ siRNA

Question Number : 74 Question Id : 97103627288 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is the weakest bond?

Options :

1. ✗ Ionic bond

2. ✗ Metallic bond

3. ✗ Covalent bond

4. ✓ Van der Waals force

Question Number : 75 Question Id : 97103627289 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A single letter abbreviation for Tryptophan is

Options :

1. ✓ W

2. ✗ T

3. ✗ R

4. ✗ Y

Question Number : 76 Question Id : 97103627290 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Buffers are mixtures of

Options :

1. ✗ Strong acid and strong base

2. ✗ Strong acid and weak base

3. ✓ Weak acid and their conjugate base



4. ✘ Weak base and weak acid

**Question Number : 77 Question Id : 97103627291 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Pyruvate generated by glycolysis, is converted to acetyl-coenzyme A, which is metabolized by citric acid cycle, generating energy rich molecules. From the choices given below, select the right combination of these molecules produced from one molecule of acetyl -co A

**Options :**

1. ✘  $2 \text{ NADH} + 2 \text{ FADH}_2 + 1 \text{ GTP}$

2. ✔  $3 \text{ NADH} + 1 \text{ FADH}_2 + 1 \text{ GTP}$

3. ✘  $3 \text{ NADH} + 1 \text{ GTP}$

4. ✘  $4 \text{ NADH} + 1 \text{ FADH}_2 + 1 \text{ GTP}$

**Question Number : 78 Question Id : 97103627292 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The general mechanism is that an enzyme acts by

**Options :**

1. ✔ Reducing the activation energy

2. ✘ Increasing activation energy

3. ✘ Decreasing pH value

4. ✘ Increasing the pH value

**Question Number : 79 Question Id : 97103627293 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Ramachandran plot can be used to predict the following structure

**Options :**

1. ✘ Quaternary structure

2. ✘ Tertiary structure

3. ✘ Primary structure

4. ✔ Secondary structure

**Question Number : 80 Question Id : 97103627294 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The structure of DNA is closely related to its biological function. Which of the following statements regarding the structure of DNA is correct?

**Options :**

1. ✘ All base pairs interact by forming three hydrogen bonds

- DNA is comprised of nucleotide subunits each containing a base, a ribose sugar and a phosphate group.
2. ✓

- The double helix of DNA is stabilized by interactions between adjacent ribose sugars.
3. ✗

- Each DNA sequence folds into a unique and complex three-dimensional structure.
4. ✗

**Question Number : 81 Question Id : 97103627295 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The melting temperature of DNA ( $T_m$ ) is higher when the content of

**Options :**

1. ✗ A : T base pairs is higher
2. ✓ G : C base pairs is higher
3. ✗ G : C base pairs is lower
4. ✗ A : T base pairs is same as G:C base pairs

**Question Number : 82 Question Id : 97103627296 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the average molecular weight of an amino acid residue in a protein?

**Options :**

1. ✓ 110 Da

2. ✗ 130 Da

3. ✗ 150 Da

4. ✗ 90 Da

**Question Number : 83 Question Id : 97103627297 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Most abundant lipid in cell membrane is

**Options :**

1. ✗ Sphingolipid

2. ✗ Glycolipid

3. ✓ Phospholipid

4. ✗ Cholesterol

**Question Number : 84 Question Id : 97103627298 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

All are plant derived alkaloids except

**Options :**

1. ✓ Menthol

2. ✗ Nicotine

3. ✗ Quinine

4. ✗ Morphine

**Question Number : 85 Question Id : 97103627299 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The golgi bodies are absent in

**Options :**

1. ✗ Higher plants

2. ✓ Blue green algae

3. ✗ Yeast

4. ✗ Liver cells

**Question Number : 86 Question Id : 97103627300 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Histone protein synthesis takes place in \_\_\_\_\_.

**Options :**

1. ✓ S Phase
2. ✗ G2 Phase
3. ✗ G1 Phase
4. ✗ M Phase

**Question Number : 87 Question Id : 97103627301 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Microtubules are composed of \_\_\_\_\_.

**Options :**

1. ✗ Actin
2. ✓ Tubulin
3. ✗ Myosin
4. ✗ Niacin

**Question Number : 88 Question Id : 97103627302 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A species inhabiting different geographical areas is known as

**Options :**

1. ✓ Allopatric
2. ✗ Sympatric
3. ✗ Biospecies
4. ✗ Sibling species

**Question Number : 89 Question Id : 97103627303 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Color blindness is caused by a mutation in the \_\_\_\_\_ gene in males.

**Options :**

1. ✗ Y-chromosome
2. ✓ X-chromosome
3. ✗ Both X and Y chromosome
4. ✗ Either X-chromosome or Y-chromosome

**Question Number : 90 Question Id : 97103627304 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is a function of cryoprotectant agents?

**Options :**

1. ✘ For short-term preservation of cultures
2. ✘ Increases ice crystal formation
3. ✔ Prevents ice crystal formation
4. ✘ To trap the liquid nitrogen

**Question Number : 91 Question Id : 97103627305 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A species which has a large impact on the ecosystem relative to its population is called

**Options :**

1. ✘ Indicator species
2. ✘ Generalist species
3. ✘ Endemic species
4. ✔ Keystone species

**Question Number : 92 Question Id : 97103627306 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

An exchange of segments between the two non-homologous chromosomes is called



**Options :**

1. ✘ Polyploidy
2. ✘ Chromosomal aberration
3. ✔ Translocation
4. ✘ Inversion

**Question Number : 93 Question Id : 97103627307 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Kelps are which of the following type of algae?

**Options :**

1. ✘ Blue algae
2. ✘ Yellow algae
3. ✔ Brown algae
4. ✘ Green algae

**Question Number : 94 Question Id : 97103627308 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following does not belong to endomembrane system in plant cell?

**Options :**

1. ✘ Nuclear membrane
2. ✘ Endoplasmic reticulum
3. ✔ Peroxisomal membrane
4. ✘ Golgi complex

**Question Number : 95 Question Id : 97103627309 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

One of the following bears reticulate chloroplast

**Options :**

1. ✘ Ulothrix
2. ✘ Spirogyra
3. ✘ Vaucheria
4. ✔ Oedogonium

**Question Number : 96 Question Id : 97103627310 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which one is the living mechanical tissue ?

**Options :**

1. ✓ Collenchyma
2. ✗ Parenchyma
3. ✗ Sclerenchyma
4. ✗ Xylem

**Question Number : 97 Question Id : 97103627311 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Citrus canker is caused by

**Options :**

1. ✓ Xanthomonas
2. ✗ Salmonella
3. ✗ Lactobacillus
4. ✗ Hay bacillus

**Question Number : 98 Question Id : 97103627312 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

*Puccinia* infection from Barberry to Wheat occurs through

**Options :**

1. ✘ Teleutospores
2. ✘ Uredospores
3. ✔ Aeciospores
4. ✘ Pycnospores

**Question Number : 99 Question Id : 97103627313 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Pseudoelators are found in

**Options :**

1. ✘ Riccia
2. ✔ Anthoceras
3. ✘ Moss
4. ✘ Marchantia

**Question Number : 100 Question Id : 97103627314 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Peat moss is used for transporting plants to distant places because

**Options :**

1. ✓ It is hygroscopic
2. ✗ It reduces transpiration
3. ✗ It is easily available
4. ✗ It serves as a disinfectant

**Question Number : 101 Question Id : 97103627315 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A method to detect whether two mutations are located on the same gene or different genes is

**Options :**

1. ✗ Generalized transduction
2. ✓ Complementation analysis
3. ✗ *hfr* mapping
4. ✗ Karyotyping

**Question Number : 102 Question Id : 97103627316 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Calcium oxalate crystals form bunches of needle like structures called \_\_\_\_\_

**Options :**

1. ✘ Phytoliths
2. ✔ Raphides
3. ✘ Druses
4. ✘ Spines

**Question Number : 103 Question Id : 97103627317 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Megasporophyll of Pteridophytes is equivalent to angiospermic

**Options :**

1. ✔ Carpel
2. ✘ Ovule
3. ✘ Gynoecium
4. ✘ Androecium

**Question Number : 104 Question Id : 97103627318 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The carrying capacity of a population is determined by its

**Options :**

1. ✘ Immigration
2. ✘ Emigration
3. ✔ Limited resources
4. ✘ Unlimited resources

**Question Number : 105 Question Id : 97103627319 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The area of the coastal zone affected by waves is called \_\_\_\_\_.

**Options :**

1. ✘ Intertidal zone
2. ✔ Littoral zone
3. ✘ Pelagic zone
4. ✘ Benthic zone

**Question Number : 106 Question Id : 97103627320 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Cinnamon belongs to family

**Options :**

1. ✘ Anacardiaceae
2. ✘ Poaceae
3. ✘ Rosaceae
4. ✔ Lauraceae

**Question Number : 107 Question Id : 97103627321 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Each individual replicating unit on the DNA is known as

**Options :**

1. ✘ Replisome
2. ✔ Replicon
3. ✘ Pre initiation complex
4. ✘ Open reading fame

**Question Number : 108 Question Id : 97103627322 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**



Leaf like structure in *Acacia* plant is

Options :

1. ✘ Cladophyll
2. ✘ Cladode
3. ✘ Phylloclade
4. ✔ Phyllode

Question Number : 109 Question Id : 97103627323 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The most common forms of ovule in angiosperms are

Options :

1. ✔ Anatropus
2. ✘ Campylotropous
3. ✘ Hemitropous
4. ✘ Circinotropous

Question Number : 110 Question Id : 97103627324 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Plants are great indicators of pollution. Petunia and Chrysanthemum are indicators of

**Options :**

1. ✘ SO<sub>2</sub> pollution
2. ✔ Nitrate pollution
3. ✘ Flouride pollution
4. ✘ Heavy metal contamination

**Question Number : 111 Question Id : 97103627325 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Companion cells are absent in

**Options :**

1. ✘ Halophytes
2. ✘ Xerophytes
3. ✔ Gymnosperms
4. ✘ Pteridophytes

**Question Number : 112 Question Id : 97103627326 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**

**Time : 0**

Plant cooling occurs due to

**Options :**

1. ✓ Transpiration
2. ✗ Guttation
3. ✗ Photorespiration
4. ✗ Assimilation

**Question Number : 113 Question Id : 97103627327 Display Question Number : Yes Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**

**Time : 0**

Match the following.

- |                     |                        |
|---------------------|------------------------|
| A Cytokinin         | (i) Ethylene           |
| B Bolting hormone   | (ii) Zeatin            |
| C Synthetic hormone | (iii) Gibberellic acid |
| D Stress hormone    | (iv) NAA               |
| E Ageing in plants  | (v) Abscisic acid      |

**Options :**

1. ✗ A - (ii), B - (iii), C - (v), D - (iv), E - (i)
2. ✗ A - (iv), B - (ii), C - (iii), D - (i), E - (v)
3. ✓ A - (ii), B - (iii), C - (iv), D - (v), E - (i)

4. ✘ A - (iii), B - (ii), C - (iv), D - (v), E - (i)

Question Number : 114 Question Id : 97103627328 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Ultraviolet radiation from sunlight cause a reaction producing

Options :

1. ✘ Carbon monoxide

2. ✔ Ozone

3. ✘ Fluorides

4. ✘ Sulphur dioxide

Question Number : 115 Question Id : 97103627329 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Minerals absorbed by roots move upward to the leaves through

Options :

1. ✔ Xylem

2. ✘ Phloem

3. ✘ Sieve tube

4. ✘ Companion cell

Question Number : 116 Question Id : 97103627330 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which is the largest cell of the embryo sac?

Options :

1. ✘ Chalazal cells

2. ✘ Micropylar cells

3. ✘ Synergids

4. ✔ Central cell

Question Number : 117 Question Id : 97103627331 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The entry of pollen tube through the micropyle is known as

Options :

1. ✔ Porogamy

2. ✘ Chalazogamy

3. ✘ Mesogamy

4. ✘ Psuedogamy

Question Number : 118 Question Id : 97103627332 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Leaf having stomata equally distributed on both the leaf surface of

Options :

1. ✔ Triticum aestivum
2. ✘ Tobacco sp.
3. ✘ Hibiscus sp.
4. ✘ Solanum tuberosum

Question Number : 119 Question Id : 97103627333 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In operon model, RNA polymerase binds to

Options :

1. ✘ Structural gene
2. ✔ Promoter
3. ✘ Regulator

#### 4. ✘ Operator

**Question Number : 120 Question Id : 97103627334 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

During DNA Replication, the term leading strand is applied to the one which replicates in

**Options :**

1. ✘  $5' - 3'$  direction discontinuously
2. ✘  $3' - 5'$  direction continuously
3. ✔  $5' - 3'$  direction continuously
4. ✘  $3' - 5'$  direction discontinuously

**Question Number : 121 Question Id : 97103627335 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The non-sense codons helps in

**Options :**

1. ✘ Termination of anticodons
2. ✘ Formation of long polypeptide chain

3. ✘ Inhibition of toxic proteins

4. ✔ Termination of polypeptide chain

**Question Number : 122 Question Id : 97103627336 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The T-DNA present in *Agrobacterium tumefaciens* is transferred and integrated into the genome of plant cells by

**Options :**

1. ✘ *nif* genes

2. ✘ *nod* genes

3. ✔ *vir* genes

4. ✘ *cry* genes

**Question Number : 123 Question Id : 97103627337 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Cybrids are produced by

**Options :**

1. ✔ The nucleus of one species but cytoplasm from both the parent species

2.



- ✘ The fusion of two same nuclei from the same species
- 3. ✘ The fusion of two different nuclei from different species
- 4. ✘ The fusion of three different nuclei from same species

**Question Number : 124 Question Id : 97103627338 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Root pressure develops due to

**Options :**

- 1. ✘ Low osmotic pressure in soil
- 2. ✘ Decrease in transpiration
- 3. ✓ Active absorption
- 4. ✘ Passive absorption

**Question Number : 125 Question Id : 97103627339 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The function of heart wood in stem?

**Options :**

- 1. ✓ Mechanical support

2. ✘ Conduction of water
3. ✘ Transport of minerals
4. ✘ Transport of food material

**Question Number : 126 Question Id : 97103627340 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Persistent calyx is found in the members of

**Options :**

1. ✘ *Euphorbiaceae*
2. ✘ *Malvaceae*
3. ✔ *Solanaceae*
4. ✘ *Lamiaceae*

**Question Number : 127 Question Id : 97103627341 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The term which denotes the specific position of a species in a community is

**Options :**

1. ✘ Ecotype

2. ✓ Niche

3. ✗ Ecotone

4. ✗ Hierarchy

**Question Number : 128 Question Id : 97103627342 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Exudation of water droplets or fluid occurs through specialized plant organs known as

**Options :**

1. ✗ Nectaries

2. ✗ Oil glands

3. ✓ Hydathodes

4. ✗ Resin duct

**Question Number : 129 Question Id : 97103627343 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

In *Dracaena*, the xylem surrounds the phloem. This type of vascular bundle is called as

**Options :**

1. ✗ Amphicribal

2. ✓ Amphivasal

3. ✗ Radial

4. ✗ Conjoint

Question Number : 130 Question Id : 97103627344 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Late blight of potato is caused by

Options :

1. ✗ *Ustilago maydis*

2. ✗ *Alternaria solani*

3. ✗ *Fusarium oxysporum*

4. ✓ *Phytophthora infestans*

Question Number : 131 Question Id : 97103627345 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Haploid plants can be produced by

Options :

1. ✓ Anther culture

2. ✘ Meristem culture

3. ✘ Bud culture

4. ✘ Embryo culture

**Question Number : 132 Question Id : 97103627346 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following refers to the uptake of naked DNA into bacteria from the surrounding environment?

**Options :**

1. ✘ Conjugation

2. ✘ Generalized transduction

3. ✘ Specialized transduction

4. ✔ Transformation

**Question Number : 133 Question Id : 97103627347 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

DEAE-cellulose column is used for

**Options :**

1. ✘ Gel-filtration chromatography

2. ✓ Ion exchange chromatography

3. ✗ Affinity chromatography

4. ✗ HPLC

**Question Number : 134 Question Id : 97103627348 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Polymorphism in RAPD is observed because \_\_\_\_\_

**Options :**

1. ✗ DNA used is from different chromosomes of same species

2. ✗ DNA used is from same chromosomes of same species

3. ✓ DNA used is from different chromosomes of different species

4. ✗ DNA used is from complementary chromosomes of same species

**Question Number : 135 Question Id : 97103627349 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Electron Spin Resonance Spectroscopy uses -----radiation.

**Options :**

1. ✗ Visible

2. ✓ Microwave

3. ✗ Radio wave

4. ✗ UV

**Question Number : 136 Question Id : 97103627350 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The following vectors are useful for generation of genomic DNA libraries

**Options :**

1. ✓ YACs and BACs

2. ✗ Plasmid vectors

3. ✗ Binary vectors

4. ✗ Integrated vectors

**Question Number : 137 Question Id : 97103627351 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Resolving power of a microscope is a function of \_\_\_\_\_

**Options :**

1. ✘ Wavelength of light used
2. ✘ Numerical aperture of lens system
3. ✘ Refractive index
4. ✔ Wavelength of light used and numerical aperture of lens system

**Question Number : 138 Question Id : 97103627352 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Isotopes of an element have a different number of

**Options :**

1. ✘ Protons
2. ✘ Electrons
3. ✔ Neutrons
4. ✘ Atoms

**Question Number : 139 Question Id : 97103627353 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**



Among the four reaction mixtures that were prepared for Sanger's dideoxy sequencing, one of the reaction mixtures contained \_\_\_\_\_

**Options :**

1. ✘ dCTP, dTTP, dGTP, dATP
2. ✘ dCTP, ddTTP, dGTP, ddATP
3. ✘ ddCTP, dTTP, ddGTP, dATP
4. ✔ dCTP, ddTTP, dGTP, dATP

**Question Number : 140 Question Id : 97103627354 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

In SDS-PAGE, protein sample is first treated with detergent sodium dodecyl sulfate (SDS), in order to

**Options :**

1. ✔ Make the protein become negatively charged
2. ✘ Make the protein become positively charged
3. ✘ Renature the protein
4. ✘ Adjust the pH of protein