

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.

Question Paper Name :	Botany 19th Oct 2022 Shift 1
Duration :	120
Total Marks :	140
Display Marks:	No
Share Answer Key With Delivery Engine :	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Research Methodology

Section Id :	549470385
Section Number :	1
Mandatory or Optional :	Mandatory
Number of Questions :	59
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 : 54947027392 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 independent variable in the process of teaching learning?

Options :

Student

1. ✘

Parents

2. ✘

Teacher

3. ✔

Education Institution

4. ✘

Question Number : 2 Question Id : 54947027393 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 pioneer in the concept of micro-teaching?

Options :

Oxford University

1. ✘

Stanford University

2. ✔

Delhi University

3. ✘

Madras University

4. ✘

Question Number : 3 Question Id : 54947027394 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

When a student asks a question for which the teacher has no direct, correct answer, he should

Options :

Ask the student to find out the answer himself from the library

1. ✘

Tell the student not to put irrelevant questions

2. ✘

Provide some vague answer to satisfy the student

3. ✘

Tell the student that he would tell correct answer later

4. ✔

Question Number : 4 Question Id : 54947027395 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 appropriate in the context of teacher- student relationship?

Options :

Informal and intimate

1. ✘

Cordial and peaceful

2. ✔

Indifferent

3. ✘

Restricted to classroom dynamic

4. ✘

Question Number : 5 Question Id : 54947027396 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Assertion (A): Formative learning tends to accelerate the process of learning.

Reason (R): As against summative evaluation formative evaluation is highly reliable.

Choose the correct answer from the following code:

Options :

Both (A) and (R) are true, and (R) is not the correct explanation of (A).

1. ✘

Both (A) and (R) are true, and (R) is the correct explanation of (A).

2. ✘

(A) is true, but (R) is false.

3. ✔

(A) is false, but (R) is true.

4. ✘

Question Number : 6 Question Id : 54947027397 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

During which year, Educational T V was introduced in India?

Options :

1. ✘ 1971

2. ✘ 1961

3. ✔ 1968

4. ✘ 1978

Question Number : 7 Question Id : 54947027398 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The primary objective of N C T E – is _____

Options :

1. ✔ To maintain standards in education colleges.

2. ✘ To open education colleges.

3. ✘ To provide grant aid to education colleges.

4. ✘ To promote research in education.

Question Number : 8 Question Id : 54947027399 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 research is primarily adjudicated on the basis of

Options :

1. ✔ The rigour with which it was carried out .

2. ✘ The place of publication

3. ✘ The manner in which the action is taken on recommendations.

Quantitative aspects.

4. ✖

Question Number : 9 Question Id : 54947027400 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A research which has explored ideas based on the new facts through the study of the past is called.

Options :

Historical research

1. ✔

Mythological research

2. ✖

Content analysis

3. ✖

Philosophical research

4. ✖

Question Number : 10 Question Id : 54947027401 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 not a research method?

Options :

Historical

1. ✘

Survey

2. ✘

Philosophical

3. ✘

Observation

4. ✔

Question Number : 11 Question Id : 54947027402 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

_____ is not required in experimental researches.

Options :

Manipulation

1. ✘

Controlling

2. ✘

Content analysis

3. ✔

Observation

4. ✘

**Question Number : 12 Question Id : 54947027403 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, a satisfactory statistical quantitative method should not possess?

Options :

Measurability

1. ✘

Flexibility

2. ✔

Appropriateness

3. ✘

Comparability

4. ✖

Question Number : 13 Question Id : 54947027404 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 specifically related to a research design?

- A. Designing Hypothesis
- B. Choice of field inquiry
- C. Sample selection
- D. Formulation of plan
- E. Deciding the tools to be employed in data collection

Options :

B, C, and D

1. ✖

A, B, and C

2. ✖

3. ✓ C, D, and E

4. ✘ B, D and E

Question Number : 14 Question Id : 54947027405 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The acronym SPSS stands for:

Options :

1. ✘ Software Package for Social Sciences

2. ✓ Statistical Package for Social Sciences

3. ✘ Statistical Package for Studies in sociology

4. ✘ Statistical Package for social studies

Is Section Default? :

null

Question Id : 54947027406 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 : (15 to 21)

Read the following passage carefully and answer the questions from 15 to 21:

For the mobility-impaired, highly trained canines called ‘service dogs’ can pick up dropped keys, open and close drawers, retrieve prepared meals, help a person in and out of bathtub, dial 911, push and pull wheelchairs, help operate a car or van and pull off gloves, shoes, socks and jackets. Other dogs provide specific assistance to those who suffer seizures (sudden attacks of illness) and require special medication. And, of course, the helping dogs provide companionship, play and give unconditional love to the people they assist. It is thirty odd years now since the placement of the first assistance dog. But only in recent years, with the rising independent movement among disabled people has the idea begun to sored widely. While most service-dogs are trained to work with people who rely on wheelchairs, other categories of helping dogs include hearing –dogs who alert their owners to sounds, such as doorbells, phones, cooking times, alarm clocks, smoke alarms and seizure dogs which carry medication in their packs and are trained to dial 911 on large keypad phones.

Sub questions

Question Number : 15 Question Id : 54947027407 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which kind of dogs, alerts their owners to sounds, such as doorbells and phones?

Options :

1. ✘ Service dogs

2. ✘ Canines

3. ✘ Seizure dogs

4. ✔ Hearing dogs

Question Number : 16 Question Id : 54947027408 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The service-dogs are

Options :

1. ✘ Paid highly

2. ✘ Less in number

3. ✔ Multiple taskers

Employees

4. ✖

Question Number : 17 Question Id : 54947027409 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 assistance dogs became popular due to

Options :

1. ✔

Independent movement among the disabled

2. ✖

awareness in hospitals

3. ✖

Independence of the country

4. ✖

Both independent movement among the disabled and awareness in hospitals

Question Number : 18 Question Id : 54947027410 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The categorie of helping –dogs is

Options :

domestic, service and seizure dogs

1. ✘

service, hearing and seizure dogs

2. ✔

hunting and domestic dogs

3. ✘

hearing and domestic dogs

4. ✘

**Question Number : 19 Question Id : 54947027411 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The passage makes a distinct difference between

Options :

service and helping dogs

1. ✔

service dogs and canines

2. ✘

canines and ordinary dogs

3. ✘

Both service dogs and canines and canines and ordinary dogs

4. ✘

Question Number : 20 Question Id : 54947027412 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

State the noun form of ‘ trained’

Options :

train

1. ✘

trainer

2. ✘

training

3. ✔

trainee

4. ✖

Question Number : 21 Question Id : 54947027413 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which dogs are trained to work with people who rely on wheelchairs?

Options :

Hearing dogs

1. ✖

Siezure dogs

2. ✖

Service dogs

3. ✔

Street dogs

4. ✖

Is Section Default? : null

Question Number : 22 Question Id : 54947027414 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 Berol's Linear Model of communication?

Options :

1. ✘ S-M-R-C
2. ✘ S-R-M-C
3. ✔ S-M-C-R
4. ✘ S-R-C-M

Question Number : 23 Question Id : 54947027415 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Communication which has no beginning or end is known as _____

Options :

1. ✔ Process
2. ✘ Meditation

Interaction

3. ✘

Transaction

4. ✘

**Question Number : 24 Question Id : 54947027416 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 contribute to effective communication?

Options :

Adequate medium

1. ✘

Clarity in language

2. ✘

Listen poorly

3. ✔

Home communication skill

4. ✘

Question Number : 25 Question Id : 54947027417 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 channel communication.

Options :

Face – to – face conversation

1. ✓

Noise

2. ✘

Feedback

3. ✘

Context

4. ✘

Question Number : 26 Question Id : 54947027418 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Among the following, which indicates the problem arising from expression?

Options :

Wrong assumption

1. ✘

Cultural barriers

2. ✘

Selecting perception

3. ✘

Semantic problems

4. ✔

Question Number : 27 Question Id : 54947027419 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In India, _____ is not the concern for mass media.

Options :

Privacy

1. ✘

Manipulation

2. ✘

Integration of society

3. ✔

Security

4. ✘

Question Number : 28 Question Id : 54947027420 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

2, 9, 28, 65, 126, 217, 344, _____

Options :

361

1. ✘

362

2. ✘

369

3. ✘

513

4. ✔

Question Number : 29 Question Id : 54947027421 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

B, D, G, I, L, N _____

Options :

1. ✘ N
2. ✘ O
3. ✔ Q
4. ✘ P

Question Number : 30 Question Id : 54947027422 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

When “PAT” is coded as “QRBCUV”, then how will you code “GRACE”?

Options :

1. ✘ HISTBCDEGF
2. ✔ HISTBCDEFG
3. ✘ HISBTCDEFG

HISTBCEDFG

4. ✘

Question Number : 31 Question Id : 54947027423 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

E is the son of A; D is the son of B; E is married to C; C is the daughter of B. How is D related to E?

Options :

Brother

1. ✘

Uncle

2. ✘

Brother-in-law

3. ✔

Father-in-law

4. ✘

Question Number : 32 Question Id : 54947027424 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

$\frac{1}{5}$ th of Eiffel tower is painted with bronze, $\frac{1}{4}$ th maroon and the rest, golden. If the height of golden-colored part is 450m, what is the height of Eiffel tower?

Options :

2,250m

1. ✘

750m

2. ✔

1000m

3. ✘

1,250m

4. ✘

Question Number : 33 Question Id : 54947027425 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Pankaj from the home with a speed of 30km/h, reaches the school late by 20 minutes. Next day by increasing the speed by 15km/h, reached the school late by 8 minutes. How far is the school from home?

Options :

35 km

1. ✘

2. ✓ 18 km

3. ✘ 20km

4. ✘ 27km

Question Number : 34 Question Id : 54947027426 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If 30 men carry out a piece of work in 27 days, how many days is required for 18 men to perform another piece of work, which is 3 times bigger

Options :

1. ✓ 135 days

2. ✘ 120 days

3. ✘ 150 days

180 days

4. ✘

Question Number : 35 Question Id : 54947027427 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If two liters of water is evaporated by boiling 8 liters of sugar solution with 5% sugar, findout the percentage of sugar in the remaining solution?

Options :

1. ✘ 8%

2. ✔ $6\frac{2}{3}\%$

3. ✘ 9%

4. ✘ 10%

Question Number : 36 Question Id : 54947027428 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A reasoning started with a particular statement and concluded with a universal statement is known as _____

Options :

Deductive reasoning

1. ✘

Transcendental reasoning

2. ✘

Inductive reasoning

3. ✔

Abnormal reasoning

4. ✘

Question Number : 37 Question Id : 54947027429 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 not an argument?

Options :

Devadutt does not eat during day, so he must be eating at night.

1. ✘

Devadutt eats in the night, so he does not eat during the day

2. ✘

If Devadutt is growing fat and if he does not eat during the day, he will be eating at night.

3. ✔

Since Devadutt does not eat in the day, he must be eating in the night.

4. ✘

Question Number : 38 Question Id : 54947027430 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Two propositions with the same subject and predicate terms, but different in quality are termed as:

Options :

Contrary

1. ✘

Subaltern

2. ✘

Subalternation

3. ✘

Contradictory

4. ✓

Question Number : 39 Question Id : 54947027431 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Inductive reasoning presupposes _____

Options :

God created the world

1. ✘

Uniformity of nature

2. ✘

Law of the nature

3. ✘

Unity of nature.

4. ✓

Question Number : 40 Question Id : 54947027432 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Venn diagram is a kind of diagram to

Options :

1. ✘ Represent but not assess the validity of elementary inferences of syllogistic form.
2. ✔ Represent and assess the validity of elementary inferences of syllogistic form.
3. ✘ Represent and assess the truth of elementary inferences of syllogistic form.
4. ✘ Assess but not represent the truth of elementary inferences of syllogistic form.

Question Number : 41 Question Id : 54947027433 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Indian school of logic uses _____pramana to prove the existence of God.

Options :

1. ✘ Arthapatti
2. ✔ Anumana

Upamana

3. ✖

Pratyaksha

4. ✖

Question Number : 42 Question Id : 54947027434 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

_____ Concept of Indian logic system denotes circumstantial implication.

Options :

Upamana

1. ✖

Anupalabdi

2. ✖

Pratyaksa

3. ✖

Arthapatti

4. ✔

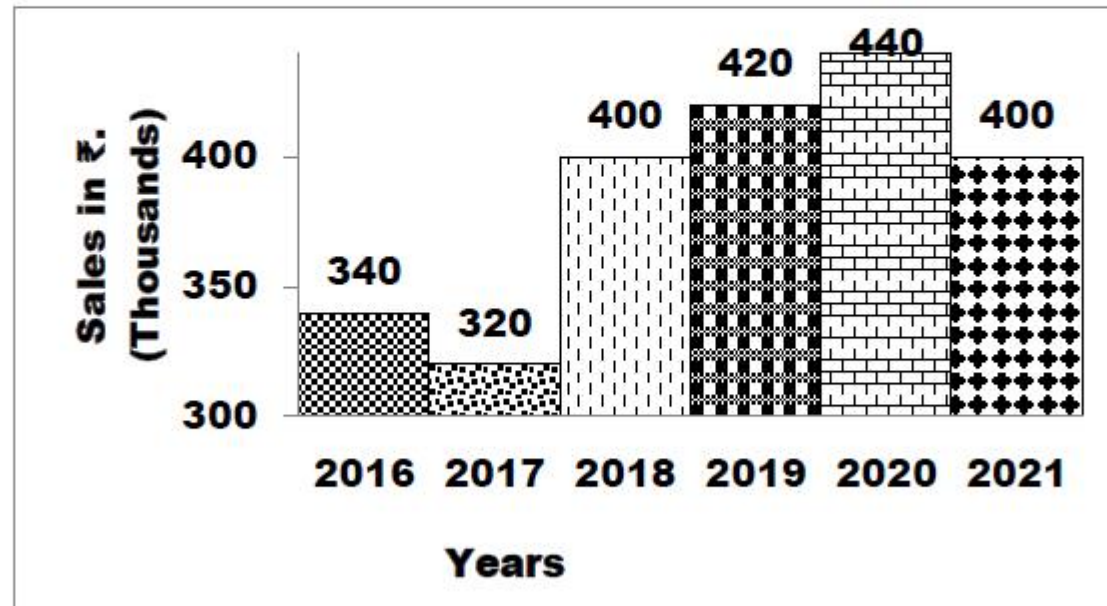
Is Section Default? :

null

Question Id : 54947027435 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 : (43 to 45)

Note:

Study the following bar chart carefully and answer the questions 43 to 45. It gives sales (in thousands) of a product over years 2016 - 2021.



Sub questions

Question Number : 43 Question Id : 54947027436 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What are the average sales for the period 2018 to 2021?

Options :

- 1. ✘ 425
- 2. ✘ 430
- 3. ✘ 420
- 4. ✔ 415

Question Number : 44 Question Id : 54947027437 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The sales of 2017 are _____ times of sales 2018.

Options :

- 1. ✘ 1.25
- 2. ✔ 0.8
- 3. ✘ 8.25

8

4. ✖

Question Number : 45 Question Id : 54947027438 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In which year, the percentage of increase over the previous year is the least?

Options :

1. ✖ 2016

2. ✔ 2020

3. ✖ 2018

4. ✖ 2019

Is Section Default? : null

Question Id : 54947027439 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 : (46 to 49)

Note:

Study the following table carefully and answer the questions from 46 to 49. It consists of data on marks obtained by various candidates in different subjects

Students	Subjects (Max Marks)					
	Maths (150)	Chemistry (130)	Physics (120)	Geography (100)	History (100)	Comp Science (100)
Ayush	90	50	90	60	70	80
Aman	100	80	80	40	80	70
Sajal	90	60	70	70	90	70
Rohit	80	65	80	80	60	60
Muskan	80	65	85	95	50	90
Tanvi	70	75	65	85	40	60
Tarun	65	35	50	77	80	80

Sub questions

Question Number : 46 Question Id : 54947027440 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Who among the following has obtained the highest aggregate marks?

Options :

1. ✘ Ayush

2. ✘ Aman

3. ✘ Sajal

4. ✔ Muskan

Question Number : 47 Question Id : 54947027441 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 of marks obtained by all candidates in Physics?

Options :

1. ✘ 62.85

2. ✔ 74.28

3. ✘ 78.52

4. ✘ No answer

Question Number : 48 Question Id : 54947027442 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 of marks obtained by Aman for all subjects?

Options :

1. ✘ 72

2. ✔ 75

3. ✘ 80

4. ✘ 85

Question Number : 49 Question Id : 54947027443 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 approximate percentage of marks obtained by Ayush?

Options :

1. ✘ 72

2. ✔ 73

3. ✘ 75

4. ✘ 78

Is Section Default? : null

Question Number : 50 Question Id : 54947027444 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 employs asynchronous communication?

- A) Video conferencing
- B) Email
- C) Forums
- D) Instant messaging

Choose the correct option.

Options :

1. ✘ A and C

2. ✘ B and D

3. ✔ B and C

4. ✘ A and D

Question Number : 51 Question Id : 54947027445 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Read the following two statements:

A) ICT is considered a subset of IT.

B) The “right to use” a piece of software is termed as copyright.

Which of the above statements(s) is/are correct?

Options :

1. ✔ Neither (A) nor (B)

2. ✘ Both (A) and (B)

3. ✘ (B) only

4. ✘ (A) only

Question Number : 52 Question Id : 54947027446 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 can be taken the digital library for education?

Options :

1. ✘ Swayam

2. ✘ MOOC

3. ✘ Sakshat

4. ✔ NPTEL

Question Number : 53 Question Id : 54947027447 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 lists computer memory sequentially from highest to lowest speed?

Options :

1. ✘ Secondary storage; Main Memory (RAM); Cache Memory; CPU Registers
2. ✘ CPU Registers; Cache Memory; Secondary storage; Main Memory (RAM)
3. ✘ Cache Memory; CPU Registers; Main Memory (RAM); Secondary Storage
4. ✔ CPU Registers; Cache Memory; Main Memory (RAM); Secondary Storage

Question Number : 54 Question Id : 54947027448 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Each computer connected to the internet should

Options :

1. ✘ Be an IBM PC
2. ✔ Have a unique IP address
3. ✘ Have a modern connection
4. ✘ Be internet compatible

Question Number : 55 Question Id : 54947027449 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 exact format of Email address?

Options :

1. ✔ name@website.info
2. ✘ name@website@info
3. ✘ www.nameofebsite.com

name.website.com

4. ✖

**Question Number : 56 Question Id : 54947027450 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

_____ is the oldest soap opera telecasted in India.

Options :

Kahani Ghar Ghar Ki

1. ✖

Buniyaad

2. ✖

Kyunki Saas Bhi Kabhi Bahu Thee

3. ✖

Hum Log

4. ✔

**Question Number : 57 Question Id : 54947027451 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Indicate the name of the research station established for conducting research at Antarctica by Government of India

Options :

Yamunotri

1. ✘

UttariGangotri

2. ✘

DakshinGangotri

3. ✔

None of these.

4. ✘

Question Number : 58 Question Id : 54947027452 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 are priority areas related to the sustainable development Goals?

- i. No poverty
- ii. Peace, Justice and strong institutions
- iii. Zero hunger
- iv. Reducing urbanization

Choose the correct answer from the options given below.

Options :

(i) , (iii), (iv)

1. ✘

(ii), (iii), (iv)

2. ✘

(i), (ii), (iv)

3. ✘

(i), (ii), (iii)

4. ✔

Question Number : 59 Question Id : 54947027453 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The common feature between NO_2 , SO_2 , CO and SPM is _____

Options :

Are greenhouse gases

1. ✘

Are classified as secondary pollutants

2. ✘

Are classified as primary pollutants

3. ✔

Have equal role in causing acid rain

4. ✘

**Question Number : 60 Question Id : 54947027454 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Given below are an assertion and a reason:

Assertion (A):

Methaemoglobinaemia is a condition wherein blood is unable to carry and deliver enough oxygen to the body.

Reason (R):

Consumption of drinking water with high nitrate level may lead to Methaemoglobinaemia.

Choose the correct answer from the options given below:

Options :

1. ✘ Both (A) and (R) are true but (R) is not the correct explanation of (A).
2. ✔ Both (A) and (R) are true and (R) is the correct explanation of (A).
3. ✘ (A) is true, but (R) is false
4. ✘ (A) is false, but (R) is true.

Which of the following gases has the highest global warming potential?

Options :

Carbon dioxide

1. ✘

Sulphur hexafluoride

2. ✔

Chlorofluorocarbon

3. ✘

Methane

4. ✘

Question Number : 62 Question Id : 54947027456 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 percentage occurrence of earthquakes at plate boundaries?

Options :

90

1. ✔

2. ✘ 50

3. ✘ 80

4. ✘ 75

Question Number : 63 Question Id : 54947027457 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In which year, India Government has announced the National Action plan on Climate Change?

Options :

1. ✘ 2005

2. ✘ 2009

3. ✔ 2008

4. ✘ 2012

Question Number : 64 Question Id : 54947027458 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Radhakrishnan Commission, opined that the aim of Higher Education should be

Options :

1. ✘ To inculcate values Peace and harmony.

2. ✘ To develop great personalities who can contribute to politics, administration, industry and commerce

3. ✘ To impart traditional education to students.

4. ✔ To inculcate values Peace and harmony, and also develop great personalities who can contribute to politics, administration, industry and commerce

Question Number : 65 Question Id : 54947027459 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Value education makes a student.

Options :

Successful businessman

1. ✘

Good teacher

2. ✘

Able manager

3. ✘

Good citizen.

4. ✔

Question Number : 66 Question Id : 54947027460 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Among the appointees of the Governor, _____ can be removed by the President of India only?

Options :

Vice-Chancellor of a State University

1. ✘

Advocate-General

2. ✘

A member of the State Public Service Commission

3. ✓

Chief Minister of a State.

4. ✘

**Question Number : 67 Question Id : 54947027461 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Where and when was the Second Buddhist Council held?

Options :

Sri Lanka in the first century BCE

1. ✘

Vaishali in 383 BCE

2. ✓

Pataliputra in 250 BCE

3. ✘

Mandalay in 1871 CE

4. ✘

Question Number : 68 Question Id : 54947027462 Display Question Number : Yes Is Question Mandatory : No Calculator : None

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

In which of the following year, the Universities in the presidency towns were established in India?

Options :

1858

1. ✘

1857

2. ✔

1900

3. ✘

1909

4. ✘

Question Number : 69 Question Id : 54947027463 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

According to National Educational Policy, 2020, the Gross Enrolment Ratio in higher education would increased to _____ percent by 2035.

Options :

40

1. ✘

2. ✓ 50

3. ✘ 60

4. ✘ 70

Question Number : 70 Question Id : 54947027464 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In which of the following states, 50th Central University was established?

Options :

1. ✘ Tamil Nadu

2. ✓ Telangana

3. ✘ Tripura

4. ✘ Andhra Pradesh.

Botany

Section Id :	549470386
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 : 54947027465 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Any attribute referring to form, structure or behaviour which the taxonomist separates from the whole organism for a particular purpose such as comparison or interpretation is called

Options :

1. ✘ Genotype
2. ✘ Phenecotype
3. ✘ Population
4. ✔ Taxonomic character

Question Number : 72 Question Id : 54947027466 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

When few of amino acid of protein are joined by various peptide linkage then it is called?

Options :

1. ✘ Monopeptides
2. ✔ Oligopeptide
3. ✘ Tripeptides
4. ✘ Dipeptides

Question Number : 73 Question Id : 54947027467 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Consider the following indicating the name of scientists coupled with their contributions

- a. JD Watson and FHC Crick unravel the double helical structure of DNA
- b. F. Griffith discover the type transformation of Pneumococci
- c. HG Khorana and his coworkers used polynucleotides with known repeat sequences to solve the genetic code
- d. OT Avery, CM MacLeod and Mc Carty describe the Pneumococcus transferring principle

Arrange the above events in the chronological order begin from ancient to the latest

Options :

1. ✘ b, c, a, d
2. ✔ b, d, a, c
3. ✘ a, d, c, b
4. ✘ b, a, d, c

Question Number : 74 Question Id : 54947027468 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The overall reaction in conversion of biological nitrogen to ammonia is

Options :

1. ✔
$$\text{N}_2 + 8\text{e}^- + 8\text{H}^+ + 16 \text{ATP} \rightarrow 2\text{NH}_3 + \text{H}_2 + 16 \text{ADP} + 16 \text{Pi}$$
2. ✘
$$\text{N}_2 + 8\text{e}^- + 8\text{H}^+ + 10 \text{ATP} \rightarrow 2\text{NH}_3 + \text{H}_2 + 10 \text{ADP} + 10 \text{Pi}$$
3. ✘
$$\text{N}_2 + 8\text{e}^- + 8\text{H}^+ + 8 \text{ATP} \rightarrow 2\text{NH}_3 + \text{H}_2 + 8 \text{ADP} + 8 \text{Pi}$$
4. ✘
$$\text{N}_2 + 8\text{e}^- + 8\text{H}^+ + 16 \text{ATP} \rightarrow 2\text{NH}_3 + 4 \text{H}_2 + 16 \text{ADP} + 16 \text{Pi}$$

Question Number : 75 Question Id : 54947027469 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

With reference to the sex determination in *Melandrium album* consider the following and indicate the correct statements?

- I. Y chromosome and X chromosome form a heteromorphic bivalent at meiosis
- II. It is the presence of a single Y chromosome rather than any number of X chromosomes or autosomes that give a male individual
- III. The Y chromosome is longer than X chromosome

Options :

- 1. ✓ II and III only
- 2. ✗ I, II and III
- 3. ✗ I and III only
- 4. ✗ I and II only

Question Number : 76 Question Id : 54947027470 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The changed names of the families of Compositae and Leguminosae in the light of nomenclature rules are

Options :

- 1. ✗ Asteraceae and Fabaceae (*s.s.*) respectively

2. ✓ Asteraceae and Fabaceae (*s.l.*) respectively
3. ✘ Apiaceae and Fabaceae (*s.l.*) respectively
4. ✘ Apiaceae and Fabaceae (*s.s.*) respectively

Question Number : 77 Question Id : 54947027471 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Left-handed DNA

Options :

1. ✘ A – DNA
2. ✘ B – DNA
3. ✓ Z – DNA
4. ✘ C – DNA

Question Number : 78 Question Id : 54947027472 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 pairs serve as “biofertilisers”?

Options :

1. ✘ Albugo & Nostoc
2. ✘ Aspergillus & Actinomyces
3. ✔ Frankia & Nostoc
4. ✘ Pseudomonas & E. coli

Question Number : 79 Question Id : 54947027473 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 fat-soluble vitamin?

Options :

1. ✘ Vitamin B
2. ✘ Vitamin C
3. ✘ Vitamin B₁₂
4. ✔ Vitamin K

Question Number : 80 Question Id : 54947027474 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which one provides the correct sequence of events in origin of species according to Darwinism?

- I. Natural selection
- II. Variations and their inheritance
- III. Survival of fittest
- IV. Struggle for existence

Options :

- 1. ✘ II, III, I, IV
- 2. ✘ II, III, IV, I
- 3. ✔ IV, II, III, I
- 4. ✘ I, II, III, IV

Question Number : 81 Question Id : 54947027475 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The proteinaceous substance involved in Sporophytic Self Incompatibility (SSI) and stored in the exine is derived from

Options :

- 1. ✘ Stigmatic papillae

2. ✓ Tapetum

3. ✘ Anther locule

4. ✘ Microspore

Question Number : 82 Question Id : 54947027476 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Microfilaments are composed of

Options :

1. ✘ Mosaic protein

2. ✘ Tubulin protein

3. ✘ Chitin protein

4. ✓ Actin protein

Question Number : 83 Question Id : 54947027477 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Using tissue culture technique, the secondary metabolite 'shikomine' is obtained from

Options :

1. ✘ Digitalis lanata
2. ✘ Sapindus emarginatus
3. ✘ Lagerstroemia indica
4. ✔ Lithospermum erythrorhizon

Question Number : 84 Question Id : 54947027478 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The cultivation of vegetable yielding plants, called

Options :

1. ✔ Olericulture
2. ✘ Floriculture
3. ✘ Pomiculture

Silviculture

4. ✖

Question Number : 85 Question Id : 54947027479 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Centrosome duplication takes place in this phase

Options :

1. ✔ S phase

2. ✖ G1 phase

3. ✖ G0 phase

4. ✖ M phase

Question Number : 86 Question Id : 54947027480 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 main cause of the lower yield of F_2 generation than the F_1 generation following hybridization between two inbred lines of maize?

Options :

1. ✖ Heterobeltiosis

2. ✘ Heterosis
3. ✔ Inbreeding depression
4. ✘ Luxuriance

Question Number : 87 Question Id : 54947027481 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The endemic plant of Seshachalam hills in Eastern Ghats which is also labelled as endangered species

Options :

1. ✘ *Plumbago zeylanica*
2. ✘ *Peltophorum pterocarpum*
3. ✘ *Pterocarpus marsupium*
4. ✔ *Pterocarpus santalinus*

Question Number : 88 Question Id : 54947027482 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 used to grow bacterial cultures continuously?

Options :

1. ✓ Chemostat
2. ✘ Coulter counter
3. ✘ Hemostat
4. ✘ Petroff-Hausser chamber

Question Number : 89 Question Id : 54947027483 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Transposable elements which are mobilized through RNA form are called

Options :

1. ✘ Is elements
2. ✘ FB elements
3. ✘ Copia- like elements
4. ✓ Retroposons

Question Number : 90 Question Id : 54947027484 Display Question Number : Yes Is Question Mandatory : No Calculator : None

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

Cotton, flax, jute, kenaf, Sun hemp and Manila hemp fibres were given to a taxonomist. He/She can accommodate them in

Options :

1. ✘ Six families
2. ✔ Five families
3. ✘ Four families
4. ✘ Three families

**Question Number : 91 Question Id : 54947027485 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Inverted omega-shaped organization of vascular bundles is seen in

Options :

1. ✘ Cycas root
2. ✘ Cycas stem
3. ✘ Cycas leaflet

4. ✓ **Cycas rachis**

Question Number : 92 Question Id : 54947027486 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Match list I with list II and select the correct answer using the codes given below the lists

- List – I**
- I. Vascular cryptogams
 - II. Heterotrophic thallophytes
 - III. Pathogenic macromolecules
 - IV. Most primitive group of embryophytes

- List – II**
- a. Bryophytes
 - b. Viruses
 - c. Fungi
 - d. Gymnosperms
 - e. Pteridophytes

Options :

- 1. ✓ I-e II-c III-b IV-a
- 2. ✘ I-e II-c III-b IV-d
- 3. ✘ I-e II-d III-b IV-a
- 4. ✘ I-a II-c III-b IV-a

Question Number : 93 Question Id : 54947027487 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Neo-Adansonian taxonomy is also known as

Options :

1. ✘ Cladistics
2. ✘ Phylogenetic taxonomy
3. ✘ Omega taxonomy
4. ✔ Numerical taxonomy

Question Number : 94 Question Id : 54947027488 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Genus represents

Options :

1. ✘ An individual plant or animal
2. ✘ A collection of plants or animals
3. ✔ A group of closely related species of plants or animals
4. ✘ A group of different plants

Question Number : 95 Question Id : 54947027489 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 absent in male gametophyte of angiosperms?

Options :

1. ✓ Generative cell
2. ✗ Vegetative cell
3. ✗ Prothallial cell
4. ✗ None of them

Question Number : 96 Question Id : 54947027490 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Goldbeater skin test is used for identification of

Options :

1. ✗ Alkaloids
2. ✗ Glycosides
3. ✓ Tannins

4. ✖ Resins

Question Number : 97 Question Id : 54947027491 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Assertion (A): RED data book mainly concentrates on Rare, Endemic and Endangered species.

Reason (R): Conservation strategies are essential to protect the Rare, Endemic and Endangered/Threatened species.

Options :

1. ✖ (A) and (R) are correct and (R) is the correct reason for (A)
2. ✔ (A) and (R) are correct but (R) is not the correct reason for (A)
3. ✖ (A) is true but (R) is false
4. ✖ Both (A) and (R) are false

Question Number : 98 Question Id : 54947027492 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The natural ecosystem which is disturbed by man for his own benefit is called

Options :

1. ✘ Niche
2. ✔ Cibernetics
3. ✘ Convivium
4. ✘ Homeostasis

Question Number : 99 Question Id : 54947027493 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Green revolution refers to

Options :

1. ✘ Use of green manure
2. ✘ Grow more crops
3. ✔ High Yield Variety Programme
4. ✘ Green Vegetation

Question Number : 100 Question Id : 54947027494 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Fossils are of great value in support of

Options :

1. ✘ Inheritance of acquired characters
2. ✘ Mutations
3. ✔ Organic evolution
4. ✘ Use and disuse

Question Number : 101 Question Id : 54947027495 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Anthocyanin pigment is present in

Options :

1. ✘ Chloroplast
2. ✘ Chromoplast
3. ✘ Leucoplast
4. ✔ Vacuole

Question Number : 102 Question Id : 54947027496 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An enzyme that contains Mo as cofactor

Options :

1. ✓ Nitrogenase
2. ✘ Amylase
3. ✘ Urease
4. ✘ Cytochrome oxidase

Question Number : 103 Question Id : 54947027497 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In case of incomplete dominance in F₂ generation

Options :

1. ✘ The phenotypic ratio is 3:1
2. ✓ The phenotypic ratio is equal to genotypic ratio
3. ✘ The phenotypic ratio is not equal to genotypic ratio

4. ✘ The genotypic ratio is 3:1

Question Number : 104 Question Id : 54947027498 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The diagrammatic representation of Karyotype (morphological representation of chromosome) of a species is known as

Options :

1. ✘ Cladogram

2. ✘ Ecogram

3. ✘ Chromogram

4. ✔ Idiogram

Question Number : 105 Question Id : 54947027499 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Hollow self-assembling polymers of the cytoskeleton are

Options :

1. ✘ Cisternae tubules of ER

2. ✘ Microfilaments

3. ✓ Microtubules and microfibrils

4. ✘ Endomembrane system

Question Number : 106 Question Id : 54947027500 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The bacterium that causes 'botulism' belongs to the genus

Options :

1. ✘ Bacillus

2. ✘ Pseudomonas

3. ✘ Staphylococcus

4. ✓ Clostridium

Question Number : 107 Question Id : 54947027501 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 has the largest number of chromosomes?

Options :

1. ✘ Haplopappus gracilis
2. ✔ Ophioglossum reticulatum
3. ✘ Pisum sativum
4. ✘ Gaint redwood tree

Question Number : 108 Question Id : 54947027502 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Absence of sexual union and failure of meiosis is called

Options :

1. ✘ Anisospory
2. ✘ Anisogamy
3. ✔ Apomixis
4. ✘ Amphimixis

Question Number : 109 Question Id : 54947027503 Display Question Number : Yes Is Question Mandatory : No Calculator : None

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

Euploidy is a chromosomal variation in

Options :

1. ✘ Size
2. ✘ Position
3. ✔ Number
4. ✘ Structure

**Question Number : 110 Question Id : 54947027504 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Adenine, Guanine, Uracil and Cytosine are usual bases present in RNA, in addition, some unusual bases are also common in this RNA

Options :

1. ✘ Genetic RNA
2. ✔ Soluble RNA
3. ✘ Ribosomal RNA

4. ✖ m RNA

Question Number : 111 Question Id : 54947027505 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Ti plasmid used in genetic engineering is obtained from

Options :

1. ✖ Bacillus thuringensis
2. ✔ Agrobacterium tumifaciens
3. ✖ Agrobacterium rhizogenes
4. ✖ E. coli

Question Number : 112 Question Id : 54947027506 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A genomic DNA possesses functioning units, a group of genes under the influence of promoter is known as

Options :

1. ✖ Genes

2. ✓ Operon

3. ✘ Anticodon

4. ✘ Codon

Question Number : 113 Question Id : 54947027507 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

RNA and histone proteins are synthesized during which of the following phase of cell cycle

Options :

1. ✘ S – phase

2. ✘ D – phase

3. ✓ G₁ – phase

4. ✘ G₂ – phase

Question Number : 114 Question Id : 54947027508 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Consider the following

- i. *Colletotrichum falcatum* - red rot of sugarcane – 1939-'42 – Bihar & UP in India
- ii. *Pyricularia oryzae* – blast of paddy – 1837 AD – First recorded in China
- iii. *Helminthosporium oryzae* – brown leaf spot - the great Bengal famine – 1942-'43
- iv. *Phytophthora infestans* – great Irish famine – late potato blight disease - 1945

Pickup the correct combinations from the above.

Options :

1. ✓ i and iii only
2. ✗ i, ii and iii only
3. ✗ ii and iv only
4. ✗ ii, iii and iv only

Question Number : 115 Question Id : 54947027509 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The mapping of the chromosome segment is

A 30 B 20 C

with 40% interference the frequency of double cross over will be

Options :

1. ✘ 6.0%

2. ✔ 3.6%

3. ✘ 2.4%

4. ✘ 36%

Question Number : 116 Question Id : 54947027510 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Analysis of variance is a statistical method of comparing the _____ of several populations

Options :

1. ✔ Means

2. ✘ Variances

3. ✘ Standard Deviations

4. ✘ Standard error

Question Number : 117 Question Id : 54947027511 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Assertion (A): Based on formation of mucilage due to partial dissolution of outer pectin wall in water, *Spirogyra* is also called 'pond silk'

Reason (R): In a matured cell of *Spirogyra* the cytoplasm is peripheral with a central vacuole

Options :

1. ✘ Both (A) and (R) are true and (R) is the correct reason for (A)
2. ✔ Both (A) and (R) are true but (R) is not the correct reason for (A)
3. ✘ (A) is false but (R) is true
4. ✘ (A) is true but (R) is false

Question Number : 118 Question Id : 54947027512 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Gene pool reveals

Options :

1. ✘ Totality of genes in an organism
2. ✘ Totality of genes in a chromosome

3. ✘ Total genes in biotic world

4. ✔ Total genes in a population

Question Number : 119 Question Id : 54947027513 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 enzyme remove super coiling in replicating DNA ahead of the replication fork?

Options :

1. ✘ DNA polymerases

2. ✘ Helicases

3. ✘ Primases

4. ✔ Topoisomerases

Question Number : 120 Question Id : 54947027514 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Conversion of xylulose 5-phosphate to ribulose 5-phosphate is catalyzed by

Options :

1. ✓ Phosphopentose epimerase
2. ✘ Transaldolase
3. ✘ Transketolase
4. ✘ Phosphopentose isomerase

Question Number : 121 Question Id : 54947027515 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Thigmotropism is a directional curvature movement of growth which is produced in response to

Options :

1. ✓ Stimulus of contact
2. ✘ Stimulus of poison
3. ✘ Stimulus of water
4. ✘ Chemical stimulus

Question Number : 122 Question Id : 54947027516 Display Question Number : Yes Is Question Mandatory : No Calculator : None

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

Match an item given in list-I with an item in the list-II

List – I

- I. H.J.Muller
- II. Bateson & Punnet
- III. C. Stern

- IV. J.W.S. Haldane

List – II

- a. First evidence on Chiasma interference
- b. Density transfer experiments
- c. Relationship between recombination frequencies and additive map distances
- d. First evidence on effects of Linkage
- e. First cytological evidence on exchange of homologous chromosomes during crossing over

Options :

1. ✘ I-a II-d III-c IV-e

2. ✔ I-c II-d II-e IV-b

3. ✘ I-b II-d II-c IV-e

4. ✘ I-a II-d II-e IV-c

Question Number : 123 Question Id : 54947027517 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 function of the filiform apparatus?

Options :

1. ✓ Guide the entry of pollen tube
2. ✘ Recognize the suitable pollen at the stigma
3. ✘ Produce nectar
4. ✘ Stimulate division of the generative cell

Question Number : 124 Question Id : 54947027518 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Cabbage, custard apple, ladies finger, radish, sweet lime and wood apple belong to

Options :

1. ✘ Four different families
2. ✘ Three different families
3. ✓ Five different families
4. ✘ Six different families

Question Number : 125 Question Id : 54947027519 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Match an item given in list-I with an item in the list-II

List – I

- I. R.Okazaki
- II. Meselson & Stahl
- III. Hershy & Chase
- IV. Watson & Crisk

List – II

- a. Density gradient centrifugation
- b. Double helical DNA strand
- c. DNA as the genetic material
- d. Rolling circle replication of DNA
- e. Coupling and repulsion

Options :

1. ✓ I-d II-a III-c IV-b

2. ✘ I-c II-a III-e IV-b

3. ✘ I-d II-e III-c IV-b

4. ✘ I-c II-a III-e IV-d

Question Number : 126 Question Id : 54947027520 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

How many biogeographic zones are there in India?

Options :

1. ✘ Five

2. ✓ Ten

3. ✘ Fifteen

4. ✘ Twenty

Question Number : 127 Question Id : 54947027521 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Arrange the given items in the order of spices obtained from root & rootstock, bark, flower and fruit

- a. Turmeric
- b. Cinnamon
- c. Saffron
- d. Caraway

Options :

1. ✓ a, b, c and d respectively

2. ✘ a. b. d and c respectively

3. ✘ a, d, c and b respectively

4. ✘ a. c. b and d respectively

Question Number : 128 Question Id : 54947027522 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a diploid plant with $2n = 14$, all the chromosomes form a ring like structure during meiotic prophase. The reason for this is

Options :

1. ✘ Buckling effect
2. ✔ Multiple reciprocal translocations
3. ✘ Intercalary deletions
4. ✘ Gene mutations

Question Number : 129 Question Id : 54947027523 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Consider the following statements

- i. Traveller's palm belongs to the family Musaceae
- ii. Aleurone layer is triploid in nature
- iii. The oil extracted from the seeds of groundnut or sunflower is a phospholipid
- iv. Citric acid is used in soft drinks
- v. Caffeine, a constituent of tea and coffee is a diuretic

Pick up the correct statements from the above

Options :

1. ✓ i, ii, iv and v only
2. ✘ i, ii, iii and iv only
3. ✘ i, ii and iii only
4. ✘ i and iv only

Question Number : 130 Question Id : 54947027524 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 diversity index?

Options :

1. ✘ Upright index
2. ✘ Inverted index
3. ✘ Bell shaped index
4. ✓ Simpson's index

Question Number : 131 Question Id : 54947027525 Display Question Number : Yes Is Question Mandatory : No Calculator : None

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

The production of secondary metabolites requires the use of

Options :

1. ✘ Meristem
2. ✘ Protoplast
3. ✘ Axillary bud
4. ✔ Cell suspension

**Question Number : 132 Question Id : 54947027526 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Cedar oil, an important mounting medium and used in oil immersion lenses for microscopic studies, is obtained from

Options :

1. ✘ *Cedrus deodora*
2. ✔ *Juniperus virginiana*
3. ✘ *Oianthus disciflorus*

4. ✘ Ottelia alismoides

Question Number : 133 Question Id : 54947027527 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Match an item given in list-I with an item in the list-II

- List – I
- i. Monohybrid cross
 - ii. Test cross
 - iii. Alleles
 - iv. Homozygous tall

- List – II
- a. tt
 - b. TT
 - c. Tt x Tt
 - d. Tt x tt
 - e. T and t

Options :

1. ✘ I-d II-c III-e IV-b

2. ✘ I-c II-d III-a IV-b

3. ✔ I-c II-d III-e IV-b

4. ✘ I-d II-a III-e IV-b

Question Number : 134 Question Id : 54947027528 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 chemicals are most widely used for protoplast fusion?

Options :

1. ✘ Mannitol
2. ✔ Polyethylene glycol
3. ✘ Sorbitol
4. ✘ Mannol

Question Number : 135 Question Id : 54947027529 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The major interaction responsible for stabilizing plasma membrane

Options :

1. ✔ Hydrophobic interactions
2. ✘ Hydrophilic interactions
3. ✘ Covalent bonds
4. ✘ Ionic bonds

Question Number : 136 Question Id : 54947027530 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

X-ray diffraction is an analytical technique used for examining

Options :

1. ✘ Liquid
2. ✔ Crystalline solid
3. ✘ Gases
4. ✘ Powder samples

Question Number : 137 Question Id : 54947027531 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A typical DLS instrument is based on

Options :

1. ✔ Scattering
2. ✘ Diffraction
3. ✘ Reflection

4. ✘ Interference

Question Number : 138 Question Id : 54947027532 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 function is not associated with phytochrome?

Options :

1. ✘ Circadian rhythms
2. ✘ Seed germination in lettuce
3. ✘ Nyctinastic movement in *Mimosa*
4. ✔ Stomatal opening

Question Number : 139 Question Id : 54947027533 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 amphibian of the plant kingdom?

Options :

1. ✘ Pteridophytes
2. ✔ Bryophytes

3. ✘ Gymnosperms

4. ✘ Angiosperms

Question Number : 140 Question Id : 54947027534 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An applied branch of botany in which principles of genetics are applied

Options :

1. ✘ Cell biology

2. ✘ Palyno taxonomy

3. ✔ Plant breeding

4. ✘ Alpha taxonomy