

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 :	Bio chemistry 17th Oct 2022 Shift 2
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 :	549470318
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 : 54947022597 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 most advantage of giving homework to students?

Options :

1. ✘ Remain busy at home
2. ✘ Study at home
3. ✘ May be checked for their progress
4. ✔ May develop the habit of self study

Question Number : 2 Question Id : 54947022598 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Who is regarded as Father of Computers?

Options :

1. ✘ Pascal
2. ✘ Bill Gates
3. ✔ Charles Babbage
4. ✘ J. V. Neumen

Question Number : 3 Question Id : 54947022599 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

National literary Mission was established in the year _____.

Options :

1. ✘ 1996
2. ✔ 1988

3. ✖ 1999

4. ✖ 2000

Question Number : 4 Question Id : 54947022600 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Who advocated the idea of basic education in India ?

Options :

1. ✖ Dr. Zakir Hussain

2. ✖ Dr. Rajendra Prasad

3. ✔ Mahatma Gandhi

4. ✖ Rabindranath Tagore.

Question Number : 5 Question Id : 54947022601 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The best remedy of the student's problems relating with learning is _____.

Options :

1. ✘ Suggestion for hard work
2. ✘ Supervised study in study hours
3. ✘ Suggestion for private tuition
4. ✔ Diagnostic study

Question Number : 6 Question Id : 54947022602 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Traditional teaching method is known as _____.

Options :

1. ✔ Chalk and teach
2. ✘ Brainstorming

3. ✖ Group discussion

4. ✖ Demonstration

Question Number : 7 Question Id : 54947022603 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which organization initiated the MOOCs in India?

Options :

1. ✖ CSIR

2. ✖ DST

3. ✔ AICTE

4. ✖ UGC

Question Number : 8 Question Id : 54947022604 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The conceptual framework to carry out research is known as _____ of research.

Options :

1. ✘ Objectives
2. ✘ Synopsis
3. ✔ Design
4. ✘ Hypothesis

Question Number : 9 Question Id : 54947022605 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Evaluation of the depth of any research is based on

Options :

1. ✔ Objectives
2. ✘ Time period

Money spent

3. ✖

Topic

4. ✖

Question Number : 10 Question Id : 54947022606 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which technique is used when the population is fixed or restricted to sampling?

Options :

Purpose

1. ✖

Cluster

2. ✖

Systematic

3. ✔

Stratified

4. ✖

Question Number : 11 Question Id : 54947022607 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 considered as most comprehensive source of population data?

Options :

Sampling

1. ✘

Census

2. ✔

NSS

3. ✘

Primary Health Studies

4. ✘

Question Number : 12 Question Id : 54947022608 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The following characteristic is not covered in descriptive research.

Options :

What

1. ✘

Where

2. ✘

3. ✘ When

4. ✔ Why

Question Number : 13 Question Id : 54947022609 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The basic characteristic of experimental research is _____

Options :

1. ✔ The independent variable is manipulated

2. ✘ Goals

3. ✘ A hypothesis

4. ✘ Design

Question Number : 14 Question Id : 54947022610 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following aspects, which one is not considered in research ethics?

Options :

1. ✘ Respect intellectual property
2. ✘ Objectivity
3. ✔ Cut and paste
4. ✘ Honesty

Is Section Default? : null

Question Id : 54947022611 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:

Throughout human history the leading causes of death have been infection and trauma. Modern medicine has scored significant victories against both, and the major causes of ill health and death are now the chronic degenerative disease, such as coronary artery disease, arthritis, cataract and cancer. These have a long latency period before symptoms appear and a diagnosis is made. It follows that the majority of apparently healthy people are pre-ill.

Many national surveys reveal that malnutrition is common in developing countries. This is not the calorie or micronutrient deficiency associated with developing nation; but multiple micronutrients depletion, usually combined with calorific balance or excess. The incidence and severity of Type B malnutrition will be shown to be worse if newer micronutrients groups such as the essential fatty acids and flavonoids are included in the surveys.

However, the pharmaceutical model has also created an unhealthy dependency culture, in which relatively few of us accept responsibility for maintaining our own health. Instead, we have handed over this responsibility to health professional who knows very little about health maintenance or disease prevention.

Based on pharmaceutical thinking, most intervention studies have attempted to measure the impact of a single micronutrient on the incidence of disease. The classical approach says that if you give a compound formula to test subjects and obtain positive results, you cannot know which ingredient is exerting the benefit, so you must test each ingredient individually.

So do we need to analyze each individual's nutritional status and then tailor a formula specifically for him or her? While we do not have the resources to analyze millions of individual cases and there is no need to do so. The vast majority of people are consuming suboptimal amounts of most micronutrients and most of the micronutrients concerned are very safe. Accordingly, a comprehensive and universal program of micronutrient support is probably the most cost-effective and safest way of improving the general health of the nation.

Sub questions

Question Number : 15 Question Id : 54947022612 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Type B malnutrition will be worse if

Options :

1. ✘
Micronutrients groups are included
2. ✔
Fatty acids and flavonoids are included
3. ✘
Both Micronutrients groups and Fatty acids and flavonoids are included
4. ✘
Fatty acids added

Question Number : 16 Question Id : 54947022613 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 process to know which ingredient is exerting the benefit?

Options :

1. ✘
Give compound formula to test subjects
2. ✔
Test each ingredient individually

3. ✘ Study the impact of single micronutrients

4. ✘ None of these

Question Number : 17 Question Id : 54947022614 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Pharmaceutical model created

Options :

1. ✘ Business improvement

2. ✘ Nutritional status

3. ✔ Most unhealthy dependency culture

4. ✘ None of these

Question Number : 18 Question Id : 54947022615 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is required to improve general health of the nation?

Options :

1. ✘ A comprehensive program
2. ✘ Universal program of micronutrient support system
3. ✔ All options
4. ✘ Give money to households

Question Number : 19 Question Id : 54947022616 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What does classical approach say to measure the impact of a single micronutrient on the incidence of disease?

Options :

1. ✔ You must test each ingredient individually
2. ✘ Those who know very little about health maintenance or disease prevention

A diagnosis is made

3. ✖

Test all the aspects at a time

4. ✖

Question Number : 20 Question Id : 54947022617 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Malnutrition is common in _____.

Options :

Western countries

1. ✖

South Asian countries

2. ✖

East Asian countries

3. ✖

Developing countries

4. ✔

Question Number : 21 Question Id : 54947022618 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Micronutrient support is

Options :

Most cost-effective

1. ✘

Safest

2. ✘

Both cost-effective and safest

3. ✔

Not desirable

4. ✘

Is Section Default? :

null

Question Number : 22 Question Id : 54947022619 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Encoding refers to _____.

Options :

Creating disturbance

1. ✘

Referring the message

2. ✘

3. ✓ With the assistance of symbols to express an idea

4. ✘ To interpret a message

Question Number : 23 Question Id : 54947022620 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the progress of two- way communication, the sender is at one end while the _____ is at the other end

Options :

1. ✓ Receiver

2. ✘ Message

3. ✘ Transform

4. ✘ Make ready

Question Number : 24 Question Id : 54947022621 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What type of communication is being followed in Video conferencing?

Options :

1. ✘ Only visual
2. ✘ Two way visual
3. ✔ Two way Audio-visual
4. ✘ One way audio- visual

Question Number : 25 Question Id : 54947022622 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the communication, conversation comes under the category of _____.

Options :

1. ✘ Non- verbal
2. ✔ Verbal

Drafted

3. ✖

Facial

4. ✖

Question Number : 26 Question Id : 54947022623 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following, which one is considered as semantic barrier of communication?

Options :

Attention of the receiver is diverted

1. ✖

Humming

2. ✖

Signal is lost before reaching the receiver

3. ✖

Receiver is not able to understand the meaning of the message

4. ✔

Question Number : 27 Question Id : 54947022624 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

It is desirable to start the class room communication with _____.

Options :

1. ✘ Commands
2. ✔ Narration
3. ✘ Authority
4. ✘ Variability

Question Number : 28 Question Id : 54947022625 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following, which agency in India is announcing the central government programs and policies?

Options :

1. ✘ PTI
2. ✘ AIR

3. ✓ PIB

4. ✗ UTI

Question Number : 29 Question Id : 54947022626 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Who is considered as father of reasoning?

Options :

1. ✓ Aristotle

2. ✗ Plato

3. ✗ Rossow

4. ✗ Mantesquo

Question Number : 30 Question Id : 54947022627 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Find out the missing element in the following series: ABD, EFH, IJL, MNP and QRT.

Options :

1. ✘ ZXB

2. ✘ XYZ

3. ✘ WXY

4. ✔ UVX

Question Number : 31 Question Id : 54947022628 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Find out the wrong number in the following number series: 583, 643, 800 and 691.

Options :

1. ✘ 583

2. ✘ 643

3. ✓ 800

4. ✘ 691

Question Number : 32 Question Id : 54947022629 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

For example, in certain language, CLASS is written as DMBTT. What will be the code for BLUE?

Options :

1. ✘ DMVG

2. ✓ CMVF

3. ✘ CNWH

4. ✘ DNWG

Question Number : 33 Question Id : 54947022630 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following, which is the largest amongst $\frac{5}{8}$, $\frac{2}{3}$, $\frac{7}{9}$, $\frac{3}{5}$?

Options :

1. ✘ $\frac{5}{8}$

2. ✘ $\frac{2}{3}$

3. ✘ $\frac{3}{5}$

4. ✔ $\frac{7}{9}$

Question Number : 34 Question Id : 54947022631 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Suppose the length and breadth of a rectangle are in the ratio 3:1. If the breadth is 7 cm, then the length of the rectangle should be _____.

Options :

1. ✔ 21 cm

2. ✘ 18 cm

16 cm

3. ✘

14 cm

4. ✘

Question Number : 35 Question Id : 54947022632 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the average of the 12 numbers is 15. Suppose a number 41 is also included, then what will be the average of these 13 numbers?

Options :

16

1. ✘

18

2. ✘

19

3. ✘

17

4. ✔

Question Number : 36 Question Id : 54947022633 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

‘ Should India make efforts to exploit renewable energy to fulfill its energy requirements’?

I. Yes, most of the non- renewable sources of using at present are exhaustible.

II. No, exploiting renewable energy requires a huge investment and India is not in a position to invest that much amount of money.

Options :

Only argument I is strong

1. ✓

Only argument II is strong

2. ✗

Either I or II is strong

3. ✗

Neither I nor II is strong

4. ✗

Question Number : 37 Question Id : 54947022634 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Induction reasoning consists the following.

Options :

Starts with a general idea and reaches to specific conclusion

1. ✘

'If' and 'then' statements are figured

2. ✘

Drawing a general conclusion from a set of specific observations

3. ✔

'Top -down' thinking

4. ✘

Question Number : 38 Question Id : 54947022635 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Deduction reasoning involves

Options :

Conclusions are drawn from a set of specific observations

1. ✘

It quick way to make decisions

2. ✘

' Bottom- up' logic

3. ✘

Moving from general to the specific

4. ✓

Question Number : 39 Question Id : 54947022636 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Flow: River:: Stagnant : ?

Options :

Stream

1. ✘

Rain

2. ✘

Pool

3. ✓

Canal

4. ✘

Question Number : 40 Question Id : 54947022637 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In Indian logic 'Anumana' refers to _____.

Options :

1. ✘ Perception

2. ✔ Inference

3. ✘ Implication

4. ✘ Comparison

Question Number : 41 Question Id : 54947022638 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 meaning of 'Anupalabdhi'?

Options :

1. ✘ Postulation

2. ✘ Verbal testing

3. ✔ Non-apprehension

Inference

4. ✘

Question Number : 42 Question Id : 54947022639 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which one of the following 'Hetvabhasa' is associated in the argument " sound is eternal because it is caused"?

Options :

Viruddha or contradictory

1. ✔

Satpratipaksa or inferentially contradicted

2. ✘

Sandyasama or the unproved

3. ✘

Badhita or non- inferentially contradicted

4. ✘

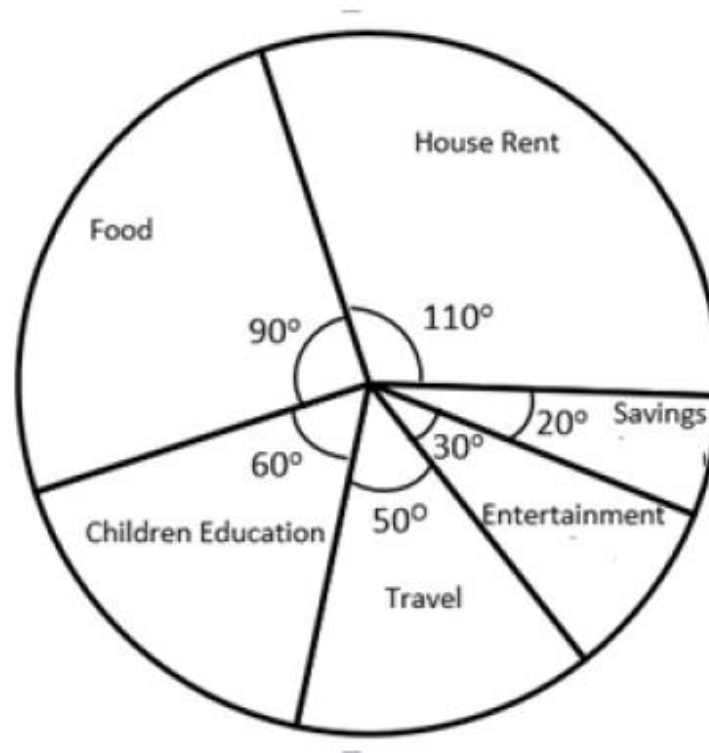
Is Section Default? :

null

Question Id : 54947022640 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 Pie-chart carefully and answer the questions 43 – 45. It gives data on how the monthly income of a person is allocated to different heads.



Sub questions

Question Number : 43 Question Id : 54947022641 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the house rent paid in a month is Rs.16500, then the amount allocated on travel in that month, in rupees, is

Options :

1. ✘ 6500

2. ✔ 7500

3. ✘ 8500

4. ✘ 9500

Question Number : 44 Question Id : 54947022642 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the amount spent in a month on travel is Rs 8000, then total income in that month is

Options :

1. ✘ 60,600

2. ✔ 57,600

3. ✘ 54,400

57,000

4. ✘

Question Number : 45 Question Id : 54947022643 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the total income in a month is Rs. 54,000, then the difference in the amounts spent on food and travel in that month, in rupees, is

Options :

6000

1. ✔

7500

2. ✘

9000

3. ✘

10500

4. ✘

Is Section Default? : null

Question Id : 54947022644 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 gives data on marks obtained by students in different subjects during 2007-2010.

Year	English		Maths		Science		Social Science	
	High.	Ave.	High.	Ave.	High.	Ave.	High.	Ave.
2007	80	70	94	60	89	70	65	55
2008	82	65	85	62	95	64	66	58
2009	71	56	92	68	97	68	68	48
2010	75	52	91	64	92	75	77	58

Sub questions

Question Number : 46 Question Id : 54947022645 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 overall average of marks in the four subjects in the year 2009?

Options :

1. ✖ 63

2. ✖ 64

3. ✘ 65

4. ✔ 60

Question Number : 47 Question Id : 54947022646 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Suppose that there were 40 students in science in the year 2009, how much total marks did they receive when combined together?

Options :

1. ✘ 2800

2. ✔ 2720

3. ✘ 2560

4. ✘ 3000

Question Number : 48 Question Id : 54947022647 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 difference between the highest and the average marks in Maths was maximum?

Options :

1. ✘ 2009

2. ✘ 2010

3. ✔ 2007

4. ✘ 2008

Question Number : 49 Question Id : 54947022648 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 difference between the highest and the average marks in social sciences was least ?

Options :

1. ✘ 2009

2. ✘ 2010

3. ✘ 2007

4. ✔ 2008

Is Section Default? : null

Question Number : 50 Question Id : 54947022649 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following acronyms, data is transferred securely across the world wide web.

Options :

1. ✘ HTTP

2. ✔ HTTPS

3. ✘ POP

4. ✘ IMAP

Question Number : 51 Question Id : 54947022650 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which software is needed to create slideshows?

Options :

1. ✘ Paint
2. ✘ Microsoft Word
3. ✘ Windows X P
4. ✔ Micro Soft Power Point

Question Number : 52 Question Id : 54947022651 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Joystick _____ device.

Options :

1. ✔ Input
2. ✘ Output

3. ✖ Storage

4. ✖ Network

Question Number : 53 Question Id : 54947022652 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Python is _____.

Options :

1. ✖ An operating system

2. ✔ Programming Language

3. ✖ An application program

4. ✖ A compiler

Question Number : 54 Question Id : 54947022653 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Speed of internet is measured in _____.

Options :

1. ✘ GHZ
2. ✔ GBPS
3. ✘ GB
4. ✘ DPI

Question Number : 55 Question Id : 54947022654 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

VIDWAN scheme of MHRD is aimed at _____.

Options :

1. ✔ Creating a database to national research network
2. ✘ Making available e-resources

3. ✘ Promoting entrepreneurship among faculty

4. ✘ Awarding National professorship to faculty

Question Number : 56 Question Id : 54947022655 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The UGC portal ' e-SARTS is for _____.

Options :

1. ✘ Special Assistance for Research in Technology and Sciences

2. ✘ Special Assistance for Research and Training in Sciences

3. ✘ Support for Academic and Research Training in Social Sciences

4. ✔ Scholarship – Fellowship Award Registration Tracking System

Question Number : 57 Question Id : 54947022656 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following millennium goals , which one is not considered?

Options :

Achieve Universal Primary education

1. ✘

Ensure healthy lives and promote well being for all at all ages

2. ✔

Ensure environmental sustainability

3. ✘

Eradicate extreme poverty and hunger

4. ✘

Question Number : 58 Question Id : 54947022657 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The sustainable goals proposed by the United Nations will be achieved by the end of year.

Options :

2045

1. ✘

2040

2. ✘

3. ✘ 2035

4. ✔ 2030

Question Number : 59 Question Id : 54947022658 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 most adverse consequence of modern agriculture ?

Options :

1. ✘ Decrease in animals and their natural habitats

2. ✔ Water pollution due to usage of chemical fertilizers and pesticides

3. ✘ Soil erosion

4. ✘ Employment opportunities increase

Question Number : 60 Question Id : 54947022659 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following, which gas is occurring abundantly in the air naturally?

Options :

Water vapor

1. ✘

Carbon dioxide

2. ✘

Nitrogen

3. ✔

Oxygen

4. ✘

Question Number : 61 Question Id : 54947022660 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In India, the first nuclear reactor was set up at _____.

Options :

Bombay

1. ✔

Kalpakam

2. ✘

Hyderabad

3. ✖

Tarapur

4. ✖

Question Number : 62 Question Id : 54947022661 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following , which one is not considered as natural disaster ?

Options :

Cyclone

1. ✖

Earthquake

2. ✖

Tsunami

3. ✖

Short circuit fire

4. ✔

Question Number : 63 Question Id : 54947022662 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The species whose population has been reduced considerably and is at the verge of extinction, is called as _____ species.

Options :

1. ✘ Rare
2. ✔ Endangered
3. ✘ Vulnerable
4. ✘ Indeterminate

Question Number : 64 Question Id : 54947022663 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the following traditional Universities, which one is not established in the year 1857?

Options :

1. ✘ Bombay
2. ✔ Delhi

Calcutta

3. ✘

Madras

4. ✘

Question Number : 65 Question Id : 54947022664 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which organization is established in India to promote, review, encourage, assist, and coordinate social science research

Options :

NCAR

1. ✘

NCERT

2. ✘

CSIR

3. ✘

ICSSR

4. ✔

Question Number : 66 Question Id : 54947022665 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 first Open University in India was established?

Options :

1. ✘ 1986
2. ✘ 1980
3. ✔ 1982
4. ✘ 1985

Question Number : 67 Question Id : 54947022666 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The NCTE established in India to strengthen _____.

Options :

1. ✔ Teacher education
2. ✘ Technical education

Computer education

3. ✘

Medical education

4. ✘

Question Number : 68 Question Id : 54947022667 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 purpose of establishing the National Skills qualification framework in the country ?

Options :

Technology development

1. ✘

Social development

2. ✘

To develop competencies at different levels

3. ✔

Rural development

4. ✘

Question Number : 69 Question Id : 54947022668 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 main purpose of establishing National program for Technology Enhanced Learning (NPTEL) by the MHRD?

Options :

To promote Engineering education

1. ✓

To promote higher education

2. ✘

To promote technology in agriculture

3. ✘

To develop pollution free technologies

4. ✘

Question Number : 70 Question Id : 54947022669 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 explicit objective of value education?

Options :

To inculcate economic values

1. ✘

To inculcate political values

2. ✘

To inculcate cultural values

3. ✘

To inculcate moral values

4. ✔

Bio chemistry

Section Id :	549470319
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 : 54947022670 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Macromolecular mass determinations were made using the

Options :

1. ✔ Analytical ultracentrifuge

2. ✘ Preparative ultracentrifuge

3. ✖ Zonal ultracentrifugation

4. ✖ Equilibrium density gradient ultracentrifugation

Question Number : 72 Question Id : 54947022671 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a protein molecule, normal glutamic acid is substituted to valine. Both normal and mutated proteins are electrophoresed at pH 8.6. The mobility will be

Options :

1. ✖ Mutated protein moves faster than normal protein towards positive pole

2. ✔ Mutated protein moves slower than normal protein towards positive pole

3. ✖ Mutated protein remains at the point of application

4. ✖ Mutated protein moves to negative pole and normal protein towards positive pole

Question Number : 73 Question Id : 54947022672 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 molarity of 245.0g of H_2SO_4 dissolved in 1.000L of solution?

Options :

1. ✘ 2.408M
2. ✘ 2.508M
3. ✘ 2.598M
4. ✔ 2.498M

Question Number : 74 Question Id : 54947022673 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

TLC is

Options :

1. ✘ Partition chromatography
2. ✔ Adsorption chromatography
3. ✘ Electric mobility of ionic species
4. ✘ Two-dimensional chromatography

Question Number : 75 Question Id : 54947022674 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The atomic number is not changed by the radioactive decay of?

Options :

1. ✖ Alpha rays
2. ✖ Beta rays
3. ✔ Gamma rays

4. ✖ The atomic number is affected by all forms of radioactive decay

Question Number : 76 Question Id : 54947022675 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The centrifugal technique used for separation of subcellular organelles is

Options :

1. ✖ Isopycnic centrifugation
2. ✖ Rate zonal centrifugation
3. ✔ Differential centrifugation
4. ✖ Ultra centrifugation

Question Number : 77 Question Id : 54947022676 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 true for electron microscopy?

Options :

1. ✘ In Electron microscope, light source is replaced by a beam of very fast moving photon
2. ✘ Electron microscope is an invention that uses the beam of proton
3. ✘ Electron microscope is an optical microscope
4. ✔ For Electron microscope specimen should be thin and dry, Image is obtained on a Phosphorescent screen and electron beam must pass through evacuated chamber

Question Number : 78 Question Id : 54947022677 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Amylopectin has

Options :

1. ✘ β -1-4 and β -1-6 linkage
2. ✘ β -1-2 linkage
3. ✔ α -1-4 and α -1-6 linkage

4. ✖ α -1-2 linkage

Question Number : 79 Question Id : 54947022678 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Fatty acids can be transported into and out of the mitochondria through

Options :

1. ✖ Non-facilitated transfer

2. ✔ Active transport

3. ✖ Facilitated transfer

4. ✖ Passive transport

Question Number : 80 Question Id : 54947022679 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The time required to kill 90% of the microorganisms in a samples at a specific temperature is referred as?

Options :

1. ✔ D value

2. ✖ Thermal death point

3. ✖ F Value

4. ✖ Decimal reduction

Question Number : 81 Question Id : 54947022680 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In bacterial growth, the growth rate slowed down due to toxic products or depletion of nutrient the resulting phase is known as

Options :

1. ✖ Log phase
2. ✖ Lag phase
3. ✔ Stationary phase
4. ✖ Death phase

Question Number : 82 Question Id : 54947022681 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which one of the following is α -imino acid?

Options :

1. ✖ Tungsten lamp
2. ✖ Xenon mercury arc lamp

3. ✓ Hydrogen or deuterium discharge lamp

4. ✘ Hollow cathode lamp

Question Number : 83 Question Id : 54947022682 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Propionyl CoA is formed by oxidation of

Options :

1. ✘ Monosaturated fatty acids

2. ✘ Poly unsaturated fatty acids

3. ✓ Fatty acids with odd number of carbon atoms

4. ✘ Omega 3 fatty acids

Question Number : 84 Question Id : 54947022683 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Activation of fatty acids in β oxidation takes place in

Options :

1. ✘ Nucleus

2. ✓ Cytoplasm
3. ✗ Mitochondria
4. ✗ Plasma membrane

Question Number : 85 Question Id : 54947022684 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 molarity of 20 %(w/v) H_2SO_4 solution?

Options :

1. ✗ 0.51 M
2. ✗ 1.02M
3. ✗ 4.08M
4. ✓ 2.04M

Question Number : 86 Question Id : 54947022685 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 resting potential of Neuron?

Options :

1. ✗ +50mV

2. ✘ + 70mV

3. ✘ -50mV

4. ✔ -70mV

Question Number : 87 Question Id : 54947022686 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The primary function of the slit in Uv-Visible spectroscopy?

Options :

1. ✘ Resolving the monochromatic radiation to polychromatic radiation.

2. ✔ Resolving the polychromatic radiation to monochromatic radiation

3. ✘ Resolving the monochromatic radiation to polychromatic radiation and
Resolving the polychromatic radiation to monochromatic radiation

4. ✘ To control the absorbance of the spectrometer

Question Number : 88 Question Id : 54947022687 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 hormones has the highest effect on blood osmolality?

Options :

1. ✘ Aldosterone
2. ✔ Vasopressin
3. ✘ Cortisol
4. ✘ PTH

Question Number : 89 Question Id : 54947022688 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 amino acid is specified by only a single codon?

Options :

1. ✘ Glutamine
2. ✘ Asparagine
3. ✔ Tryptophan
4. ✘ Isoleucine

Question Number : 90 Question Id : 54947022689 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

To which of the following group 'composite transposons' belongs

Options :

1. ✘ Class I transposons
2. ✔ Class II transposons
3. ✘ Class III transposons
4. ✘ No Option

Question Number : 91 Question Id : 54947022690 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 characteristic of reverse phase chromatography?

Options :

1. ✔ The mobile phase is polar and stationary phase is non-polar
2. ✘ The mobile phase is non-polar and stationary phase is polar
3. ✘ Both mobile phase and stationary phase are organic
4. ✘ The mobile phase is inorganic and stationary phase is organic

Question Number : 92 Question Id : 54947022691 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In Kreb's cycle which step involves substrate level phosphorylation

Options :

1. ✘ Conversion of oxalosuccinate to α -ketoglutarate
2. ✘ Conversion of succinate to fumarate
3. ✘ Conversion of α -ketoglutarate to succinyl-CoA
4. ✔ Conversion of succinyl-CoA to succinate

Question Number : 93 Question Id : 54947022692 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Interferons are

Options :

1. ✘ Antibodies
2. ✘ Complement components
3. ✔ Anti viral proteins
4. ✘ Adjuvants

Question Number : 94 Question Id : 54947022693 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. SA node | 1. Initiates nerve impulses |
| B. AV node | 2. Located at the interventricular septum |
| C. bundle of HIS | 3. Situated in the interatrial septum |
| D Purkinje fibers | 4. Supplies the ventricles with conduction impulses |

Options :

1. ✓ A – 1 : B – 3: C – 2 : D – 4

2. ✗ A – 4 : B – 1: C – 2 : D – 3

3. ✗ A – 2 : B – 3: C – 1 : D – 4

4. ✗ A – 1 : B – 2: C – 3 : D – 4

Question Number : 95 Question Id : 54947022694 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

ATP synthase can produce ATP using as a direct energy source:

Options :

1. ✓ Energy from a proton gradient established in mitochondria

2. ✘ Energy from the oxidation of pyruvate producing CO_2 and H_2O
3. ✘ Energy from the conversion of glucose to pyruvate
4. ✘ Energy derived from the breakdown of NADH and FADH_2

Question Number : 96 Question Id : 54947022695 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of these statements is not true regarding polysaccharides?

Options :

1. ✔ Inulin is a heteropolymer
2. ✘ Cellulose has linear structure
3. ✘ Glycogen has a branched structure
4. ✘ Polysaccharide chains have a non-reducing left end

Question Number : 97 Question Id : 54947022696 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The metabolism of protein is integrated with that of carbohydrate and lipid through

Options :

1. ✖ Malate
2. ✖ Citrate
3. ✔ Oxaloacetate
4. ✖ Isocitrate

Question Number : 98 Question Id : 54947022697 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 involved in glycosylation of polypeptide?

Options :

1. ✖ Signal peptidone
2. ✖ Signal peptide
3. ✖ Hormones
4. ✔ Dolichol phosphate

Question Number : 99 Question Id : 54947022698 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of these process require energy?

Options :

1. ✘ Formation of acetic acid from Cholesterol
2. ✘ Formation of Pyruvate from glucose
3. ✘ Formation of glucose from glycogen
4. ✔ Formation of protein from aminoacids

Question Number : 100 Question Id : 54947022699 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

When substrate concentration is equal to K_m value

Options :

1. ✘ Maximum velocity is achieved
2. ✔ Half of the enzyme molecules are bound to the substrate molecules and the other half are free
3. ✘ The reaction is now at equilibrium
4. ✘ No answer

Question Number : 101 Question Id : 54947022700 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 sequence in which organic compounds are used by the body during prolonged fasting?

Options :

Carbohydrates first, proteins and then lipids

1. ✘

Carbohydrates first, lipids and then proteins

2. ✔

Proteins first, lipids and then carbohydrates

3. ✘

Fats first, carbohydrates and then proteins

4. ✘

Question Number : 102 Question Id : 54947022701 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Glycine is used for the synthesis of all the following compounds, except

Options :

1. ✘ Heme

2. ✘ Creatine

3. ✘ Serine

4. ✔ Pyrimidine ring

Question Number : 103 Question Id : 54947022702 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The nutritional quality of a protein is dependent on the following except

Options :

1. ✘ Relative proportion of amino acids

2. ✔ Energy yield from the protein

3. ✘ Digestibility

4. ✘ Content of essential amino acids

Question Number : 104 Question Id : 54947022703 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 untrue about Essential Fatty Acids (EFAs)?

Options :

1. ✘ EFAs are also called Vitamin F

2. ✓ EFAs can be synthesized by the body
3. ✗ EFAs cannot be synthesized by the body
4. ✗ Omega-3 and Omega-6 are the two families of EFAs

Question Number : 105 Question Id : 54947022704 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Numerous techniques are available for use in Electron microscopy. Which of the following techniques are used in TEM for examining cellular structure?

Options :

1. ✗ Shadow Casting
2. ✗ Ultrathin Sectioning
3. ✗ Negative staining
4. ✓ Negative staining, Ultrathin Sectioning, Shadow casting and Free-Etching

Question Number : 106 Question Id : 54947022705 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

How many nephrons are present in each kidney approximately?

Options :

1. ✓ One million
2. ✘ One billion
3. ✘ One trillion
4. ✘ One lakh

Question Number : 107 Question Id : 54947022706 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A person with 60kg weight, was given food containing 65 g of protein per two weeks. After the experiment, his weight was found to be 60 kg itself. His nitrogen balance is said to be.

Options :

1. ✘ Plus 2.5 grams
2. ✘ Minus 2.5 grams
3. ✘ Minus 5 grams
4. ✓ 0.0 grams

Question Number : 108 Question Id : 54947022707 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The food stuffs having the protein-sparing effect is/are

Options :

1. ✘ Carbohydrates
2. ✘ Lipids
3. ✔ Both Carbohydrates and Lipids
4. ✘ Nucleic acids

Question Number : 109 Question Id : 54947022708 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a competitive inhibition

Options :

1. ✔ K_m is increased and V_{max} is normal
2. ✘ K_m is decreased and V_{max} is increased
3. ✘ K_m is increased and V_{max} is increased

4. ✘ Km is decreased and Vmax is normal

Question Number : 110 Question Id : 54947022709 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which one of the following factors for growth of microorganisms cannot be exploited during food processing to prevent microbial growth on its own?

Options :

1. ✘ Control of temperature

2. ✘ Removal of water

3. ✔ Removal of oxygen

4. ✘ Control of pH conditions.

Question Number : 111 Question Id : 54947022710 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Complement fixation refers to

Options :

1. ✘ The binding of complement components by antigen-antibody complexes

2. ✘ The destruction of complement in serum by heating at 56°C for 30 minutes.

3. ✓ The ingestion of C3b-coated bacteria by macrophages.

4. ✘ The interaction of C3b with mast cells.

Question Number : 112 Question Id : 54947022711 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 statements regarding splenic function in humans is incorrect?

Options :

1. ✘ The specific immune function of the spleen is principally related to its antigen processing role

2. ✓ The spleen is the major site of synthesis of complement pathway proteins

3. ✘ The spleen is more efficient than the liver at removal of incompletely opsonized bacteria

4. ✘ The spleen serves as a principal source of nonspecific opsonins

Question Number : 113 Question Id : 54947022712 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 facilitates reabsorption of water by nephron?

Options :

1. ✘ Cortex
2. ✘ Pelvis
3. ✔ Loop of nephron
4. ✘ Medulla

Question Number : 114 Question Id : 54947022713 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Renin is secreted by

Options :

1. ✘ Cells in Proximal convoluted tubule
2. ✘ Cells in Distal convoluted tubule
3. ✔ Juxta glomerular cells
4. ✘ Zona glomerulosa cells

Question Number : 115 Question Id : 54947022714 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response

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

After binding to its specific antigen, a B lymphocyte may switch its

Options :

1. ✘ Immunoglobulin light-chain isotype.
2. ✔ Immunoglobulin heavy-chain class.
3. ✘ Variable region of the immunoglobulin heavy chain.
4. ✘ Constant region of the immunoglobulin light chain.

Question Number : 116 Question Id : 54947022715 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Tyrosinemia type 1 is an inherited disorder, which is due to the deficiency of the enzyme

Options :

1. ✘ Tyrosine aminotransferase.
2. ✘ 4-hydroxyphenylpyruvate dioxygenase (HPPD)
3. ✘ Tyrosinase

4. ✓ Fumarylacetoacetate hydrolase (FAH)

Question Number : 117 Question Id : 54947022716 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the human eye, the photosensitive compound is composed of

Options :

1. ✘ Guanosine and retinol
2. ✘ Transducin and retinine
3. ✘ Opsin and retinol
4. ✓ Opsin and retinal

Question Number : 118 Question Id : 54947022717 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

How are gram positive and gram negative cell walls different?

Options :

1. ✓ Gram-negative cells have a single layer of peptidoglycan and an outer membrane and gram-positive cells have a thick layer with teichoic acids

2. ✘ Gram-positive cells have a single layer of peptidoglycan and a periplasmic space while gram-negative cells have a thick layer with teichoic acid
3. ✘ Gram-negative cell walls have a thick layer of peptidoglycan and gram-positive cells have no peptidoglycan but have teichoic and mycolic acids
4. ✘ Gram-negative cell walls have a thick layer of peptidoglycan and gram-positive cells have peptidoglycan but have mycolic acids

Question Number : 119 Question Id : 54947022718 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Each of the following statements concerning haptens is correct, except?

Options :

1. ✘ A hapten can combine with (bind to) an antibody.
2. ✘ A hapten cannot induce an antibody by itself; rather, it must be bound to a carrierprotein to be able to induce antibody
3. ✘ In both penicillin-induced anaphylaxis and poison ivy, the allergens are haptens.
4. ✔ Haptens must be processed by CD8+ cells to become immunogenic.

Question Number : 120 Question Id : 54947022719 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 responsible for the formation of pseudogenes?

Options :

1. ✘ Polymerase
2. ✔ Reverse transcriptase
3. ✘ Topoisomerase
4. ✘ Primase

Question Number : 121 Question Id : 54947022720 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A polysaccharide that helps the bacteria in adherence to the surface named as

Options :

1. ✘ Inulin
2. ✔ Glycocalyx
3. ✘ Chitin
4. ✘ Glycomax

Question Number : 122 Question Id : 54947022721 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Why do you think that antibiotics such as penicillin cannot be used with bacteria like Mycobacterium tuberculosis, the causative agent of TB?

Options :

1. ✓ The cell walls of these organisms are not affected by penicillin
2. ✗ The spores that are produced by TB cannot be killed by antibiotics
3. ✗ The bacterium encysts within the body and cannot be killed with penicillin
4. ✗ The bacterium is gram negative which are not killed as easily with penicillin

Question Number : 123 Question Id : 54947022722 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The following co-workers proposed that T cells recognize antigens only when they are presented together with MHC.

Options :

1. ✓ Doherty and Zinkernagel
2. ✗ Daussat and J.Bennet

3. ✘ Susumu Tonegawa and R.E Cone

4. ✘ J.J Marchalonis and R.E Cone

Question Number : 124 Question Id : 54947022723 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

According to Bergey's manual of systematic bacteriology, the prokaryote with a complex cell-wall structure (Gram-negative bacteria) belong to the group?

Options :

1. ✘ Mendosicutes

2. ✘ Firmicutes

3. ✘ Tenericutes

4. ✔ Gracilicutes

Question Number : 125 Question Id : 54947022724 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What does t_{ii} represents in the equation of the productivity of a batch culture

Options :

1. ✘ The organism is growing at μ_{max}

2. ✓ The organism is not growing at μ_{\max}

3. ✘ Includes acceleration phase

4. ✘ Includes the stationary phase

Question Number : 126 Question Id : 54947022725 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Down's syndrome involves Trisomy for which chromosome

Options :

1. ✘ Chromosome 19

2. ✓ Chromosome 21

3. ✘ Chromosome 13

4. ✘ Chromosome 15

Question Number : 127 Question Id : 54947022726 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. Parathyroid

B. Pancreas

C. Thyroxine

D. Thymus

1. Hypoactivity in young children causes cretinism.

2. Starts undergoing atrophy after puberty.

3. Secretes parathormone, which promotes movement of calcium ions from blood into bones during calcification

4. Beta cells of the 'islets of Langerhans' secrete a hormone, which stimulates glycolysis in liver.

Options :

1. ✘ A-4; B-2; C-1; D-3

2. ✘ A-2; B-3; C-1; D-4

3. ✘ A-2; B-4; C-3; D-1

4. ✔ A-3; B-4; C-1; D-2

Question Number : 128 Question Id : 54947022727 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

LINEs and SINEs belong to one of the following group

Options :

1. ✘ LTR retrotransposons

2. ✘ Composite transposons

3. ✘ Ac-Ds elements

4. ✔ Non-LTR retrotransposons

Question Number : 129 Question Id : 54947022728 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the growth pattern of a bacterial colony, which phase involves the rapid increase in numbers of bacterial cells?

Options :

1. ✘ The stationary phase

2. ✔ The log phase

3. ✘ The decline phase

4. ✘ The lag phase

Question Number : 130 Question Id : 54947022729 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

According to the phenotypic characters of pneumococcus considered in Griffiths experiment' of transformation, which of the following statements are correct.

- I. Presence of slime layer
- II. Presence of Capsule
- III. Absence of capsule
- IV. Type of adhesion
- V. Molecular makeup of capsule

Options :

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

Question Number : 131 Question Id : 54947022730 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Duchene muscular dystrophy, a neuromuscular disease, result from faulty or missing dystrophin gene, which is inherited as

Options :

- 1. ✓ X linked recessive pattern
- 2. ✗ Y linked recessive pattern

3. ✘ Autosomal dominant pattern

4. ✘ Autosomal recessive pattern

Question Number : 132 Question Id : 54947022731 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If an antibody injected into the human for the protection against the foreign agent the resulting immunity is called as

Options :

1. ✔ Passive immunity

2. ✘ Drug therapy

3. ✘ Defence mechanism

4. ✘ Active immunity

Question Number : 133 Question Id : 54947022732 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A sudden increase in the number of people having the disease is called

Options :

1. ✘ Pandemic

2. ✘ Endemic

3. ✘ Prodemie

4. ✔ Epidemie

Question Number : 134 Question Id : 54947022733 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Ti Plasmid vectors include

Options :

1. ✔ Binary vector and cointegrated vectors

2. ✘ Ti Plasmid based Vectors

3. ✘ Multiple Vectors and Binary Vectors

4. ✘ Cointegrated vectors and Binary vectors

Question Number : 135 Question Id : 54947022734 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Each Histone octamer is composed of the following combination proteins?

Options :

1. ✘ H1A, H2B, H3 & H4
2. ✔ H2A, H2B, H3 & H4
3. ✘ H1A, H3, H2 B & H4
4. ✘ H4, H2B, H3 & H1A

Question Number : 136 Question Id : 54947022735 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 primary objective of Human genome project?

Options :

1. ✘ To find out the exact functions of proteins in humans
2. ✘ To sequence all the 3 million base pairs of human DNA and identifying all human genes
3. ✔ To sequence all the 3 billion base pairs of human DNA and identifying all human genes
4. ✘ To find out the active genes in the human genome

Question Number : 137 Question Id : 54947022736 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The test cross involves the breeding of a phenotypically dominant individual with a phenotypically

Options :

1. ✓ Recessive individual
2. ✗ Dominant individual
3. ✗ Can be with any individual
4. ✗ Co-dominance individual

Question Number : 138 Question Id : 54947022737 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Hybrid dysgenesis is caused by which of the following transposable element

Options :

1. ✗ Composite transposons
2. ✗ Alu elements
3. ✗ Ac-Ds elements

4. ✓ P- element

Question Number : 139 Question Id : 54947022738 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The sequence of structural gene in *lac* operon is

Options :

1. ✘ lacA-lacY-lac Z
2. ✓ lacZ-lacY-lacA
3. ✘ lacZ-lacA-lacY
4. ✘ lacA -lacZ-lacY

Question Number : 140 Question Id : 54947022739 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The restriction enzyme is having a defence mechanism in the bacterial system against foreign DNA such as virus. But how it is able to protect its own DNA.

Options :

1. ✓ By methylation of bacterial DNA by restriction enzyme
2. ✘ By methylation of foreign DNA by restriction enzyme

3. ✖ By Phosphorylation of bacterial DNA by restriction enzyme

4. ✖ By Phosphorylation of foreign DNA by restriction enzyme