Govt of Himachal Pradesh
Himachal Pradesh Rajya Chayan Aayog
हिमाचल प्रदेश राज्य चयन आयोग

Assessment Name	Recruitment for the post of Trained Graduate
Application Id	
Roll No	
Applicant Name	
Category	
Exam Date	
Shift	
Candidate Application Photograph	
Candidate Exam Day Photograph	

16 DEC 2025(1st Shift Himexam)

Section : Trained Graduate Teacher Medical

Q.1 The casparian strips in root endodermis are chemically composed of ______.

Ans
- ✗ A. Cellulose andhemicellulose
- ✗ B. Pectin and extensins
- ✔ C. Suberin and lignin
- ✗ D. Cutin and phenols

Question Type : MCQ
Question ID : 4410091490427
Option 1 ID : 4410095887703
Option 2 ID : 4410095887702
Option 3 ID : 4410095887701
Option 4 ID : 4410095887700
Status : Answered A
Chosen Option :

Q.2 The body of molluscs is covered externally by:

Ans
- ✗ A. Carapace
- ✔ B. Mantle C. Cuticle D.
- ✗ Chitinous exoskeleton
- ✗

Question Type : MCQ
Question ID : 4410091497477
Option 1 ID : 4410095915012
Option 2 ID : 4410095915011
Option 3 ID : 4410095915009
Option 4 ID : 4410095915010
Status : Answered D
Chosen Option :

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Q.3 In an elimination reaction, the Zaitsev product refers to:

Ans
- ✔ A. themore substituted alkene
- ✗ B. always cis
- ✗ C. always trans
- ✗ D. the less substituted alkene

Question Type : MCQ
Question ID : 4410091502691
Option 1 ID : 4410095935072
Option 2 ID : 4410095935074
Option 3 ID : 4410095935075
Option 4 ID : 4410095935073
Status : Answered B
Chosen Option :

Q.4 Which of the following is a unique feature of mammals?

Ans
- ✗ A. Lungs
- ✗ B. Four-chambered heart
- ✔ C. Mammary glands
- ✗ D. Diaphragm

Question Type : MCQ
Question ID : 4410091501741
Option 1 ID : 4410095931369
Option 2 ID : 4410095931371
Option 3 ID : 4410095931370
Option 4 ID : 4410095931368
Status : Answered C
Chosen Option :

Q.5 The sequence of organisms through which energy flows is known as:

Ans
- ✗ A. Ecologicalpyramid
- ✗ B. Food web
- ✔ C. Food chain
- ✗ D. Energy cycle

Question Type : MCQ
Question ID : 4410091499791
Option 1 ID : 4410095924050
Option 2 ID : 4410095924051
Option 3 ID : 4410095924052
Option 4 ID : 4410095924053
Status : Answered A
Chosen Option :

**Q.6 Refer to the following letter series and answer the question that follows. Counting to be done from left to right only.
(Left) R D P U Z B V S P W I D R F M A X P A Y A Y X (Right)
How many such vowels are there which are immediately preceded by a consonant and also immediately followed by a vowel?**

Ans
- ✔ A. None
- ✗ B. Three
- ✗ C. Two
- ✗ D. One

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Question Type : MCQ
Question ID : 4410091784472
Option 1 ID : 4410095091891
Option 2 ID : 4410095091894
Option 3 ID : 4410095091893
Option 4 ID : 4410095091892
Status : Answered A
Chosen Option :

**Q.7 वह: तमुन ेवो आवाज सनुी?
मैं: हाँ कहीं स ेध्विन तो आयी थी।
वह: 'आवाज' ध्विन का एक पयार्यवाची शब्द ह ै।
मैं: अच्छा! और कौन-कौन स ेशब्द इसके पयार्यवाची हैं?
वह:तोष , घोष , नाद, निनाद इत्यादि। ' उपरोक्त बातचीत में एक विकल्प 'आवाज' का पयार्यवाची नहीं ह ै। ध्यानपूर्वक उसकी पहचान करें**

Ans
- ✗ A. निनाद
- ✗ B. घोष
- ✗ C. नाद
- ✔ D. तोष

Question Type : MCQ
Question ID : 4410091515492
Option 1 ID : 4410095985372
Option 2 ID : 4410095985370
Option 3 ID : 4410095985371
Option 4 ID : 4410095985369
Status : Answered D
Chosen Option :

Q.8 Which of the following is a primary pollutant?

Ans
- ✗ A. Peroxyacetyl nitrate
- ✗ B. Tropospheric ozone
- ✗ C. Acid rain
- ✔ D. Carbon monoxide

Question Type : MCQ
Question ID : 4410091510786
Option 1 ID : 4410095967201
Option 2 ID : 4410095967203
Option 3 ID : 4410095967202
Option 4 ID : 4410095967200
Status : Answered D
Chosen Option :

Q.9 Which of the following is NOT a benefit of using multimedia in e-learning?

Ans
- ✔ A. Restricting learnerinteraction
- ✗ B. Improved retention
- ✗ C. Enhanced engagement
- ✗ D. Catering to different learning styles

Question Type : MCQ
Question ID : 4410091520879
Option 1 ID : 4410096006728
Option 2 ID : 4410096006727
Option 3 ID : 4410096006726
Chosen Option :

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Q.10 Which of the following is commonly used as a titrant in redox titrations?

Ans
- ✗ A. $BaCl_2$
- ✔ B. $KMnO_4$
- ✗ C. NaOH
- ✗ D. HCl

Question Type : MCQ
Question ID : 4410091511754
Option 1 ID : 4410095971090
Option 2 ID : 4410095971091
Option 3 ID : 4410095971089
Option 4 ID : 4410095971092
Status : Answered B
Chosen Option :

Q.11 Which of the following is the physiological impact of secretions of Tribolium confusum and T.castaneum on the stored food material?

Ans
- ✗ A. The introduction ofpotent mycotoxins that arecarcinogenictohumans.
- ✗ B. The secretion of proteolytic enzymes that hydrolyze grain proteins, leading to significant nutrient loss.
- ✔ C. The release of quinone compounds that cause product discoloration, foul odour,and render the food unpalatable and unfit for sale.
- ✗ D. The vectoring of pathogenic bacteria like Salmonella into the food matrix, posing a direct microbiological hazard.

Question Type : MCQ
Question ID : 4410091519357
Option 1 ID : 4410096000694
Option 2 ID : 4410096000695
Option 3 ID : 4410096000696
Option 4 ID : 4410096000697
Status : Answered C
Chosen Option :

Q.12 Which statement correctly describes a first-order reaction?

Ans
- ✔ A. Half-life isconstant
- ✗ B. Half-life decreases as concentration decreases
- ✗ C. Rate is independent of concentration
- ✗ D. Rate depends on the square of concentration

Question Type : MCQ
Question ID : 4410091497393
Option 1 ID : 4410095914677
Option 2 ID : 4410095914680
Option 3 ID : 4410095914679
Option 4 ID : 4410095914678
Status : Answered C
Chosen Option :

Q.13 Which of the following statements is NOT correct about catalysis and activation energy?

Ans
- ✗ A. Theeffect ofa catalystis reflectedin the Arrhenius equation asachange in activationenergy.
- ✗ B. Catalysis does not affect the enthalpy change of the reaction products and reactants.
- ✗ C. A catalyst lowers the activation energy and provides an alternative pathway for the reaction.
- ✔ D. Catalysts increase the rate constant by changing the reaction's free energy change (ΔG).

Question Type : MCQ
Question ID : 4410091488782
Option 1 ID : 4410095881309
Option 2 ID : 4410095881308
Option 3 ID : 4410095881306
Option 4 ID : 4410095881307
Status : Answered A
Chosen Option :

Q.14 According to Rutherford's nuclear atomic model, electrons do NOT fall into the nucleus because:

Ans
- ✗ A. Theyarestationaryin fixed orbitsaroundthenucleus.
- ✔ B. The centrifugal force of their revolution balances the electrostatic attraction
- ✗ C. The nucleus repels them due to similar charges.
- ✗ D. The mass of the nucleus prevents electrons from approaching.

Question Type : MCQ
Question ID : 4410091484427
Option 1 ID : 4410095864613
Option 2 ID : 4410095864614
Option 3 ID : 4410095864615
Option 4 ID : 4410095864616
Status : Answered B
Chosen Option :

Q.15 Which enzyme is responsible for the digestion of starch in the small intestine?

Ans
- ✔ A. Pancreaticamylase
- ✗ B. Lipase
- ✗ C. Pepsin
- ✗ D. Trypsin

Question Type : MCQ
Question ID : 4410091490877
Option 1 ID : 4410095889469
Option 2 ID : 4410095889472
Option 3 ID : 4410095889470
Option 4 ID : 4410095889471
Status : Answered C
Chosen Option :

**Q.16 Select the most appropriate option that can be used as a one-word substitute for the highlighted segment in the given sentence.
In almost every religion, God is described as having unlimited power and authority.**

Ans
- ✗ A. magnificent
- ✗ B. invincible
- ✗ C. omniscient
- ✔ D. omnipotent

Question Type : MCQ
Question ID : 4410091484129
Option 1 ID : 4410095863402
Option 2 ID : 4410095863404
Option 3 ID : 4410095863401
Option 4 ID : 4410095863403
Status : Answered A
Chosen Option :

Q.17 Which of the following correctly explains the difference between Union and State taxing powers in India?

Ans
- ✗ A. Statesimposecustomsduties;theUnionleviesexciseonalcohol.
- ✗ B. Both tax the same subjects.
- ✔ C. Union handles interstate taxation; States levy taxes with a local base.
- ✗ D. All tax revenues are shared equally by the Union and the States.

Question Type : MCQ
Question ID : 4410091524009
Option 1 ID : 4410096019321
Option 2 ID : 4410096019319
Option 3 ID : 4410096019320
Option 4 ID : 4410096019322
Status : Answered C
Chosen Option :

Q.18 Which lake in Himachal Pradesh is correctly matched with its characteristic?

Ans
- ✗ A. Govind Sagar–highestlakeofthestate
- ✗ B. Suraj Tal – largest natural freshwater lake of the state
- ✔ C. Renuka Lake – largest natural freshwater lake of the state
- ✗ D. Prashar Lake – largest man-made lake of the state

Question Type : MCQ
Question ID : 4410091529355
Option 1 ID : 4410096040525
Option 2 ID : 4410096040523
Option 3 ID : 4410096040524
Option 4 ID : 4410096040526
Status : Answered C
Chosen Option :

Q.19 निम्निलिखत वाक्य के रखेांकित शब्द का विलोम कौन-सा ह? 'कड़कती धपू के बाद ही वक्ष की शीतल छाया का एहसास होता ह।ै'

Ans
- ✗ A. गमीर्
- ✗ B. ठंडक
- ✔ C. धपू
- ✗ D. सदीर्

Question Type : MCQ
Question ID : 4410091487488
Option 1 ID : 4410095876350
Option 2 ID : 4410095876347
Option 3 ID : 4410095876348
Option 4 ID : 4410095876349
Status : Answered A
Chosen Option :

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Q.20 [illegible] statement.

Ans
- ✗ A. Autotrophs can convert energy fromthesun into kinetic energy.
- ✗ B. Less than 10% energy is lost from one trophic level to another.
- ✗ C. Producers have the greatest population in our world.
- ✔ D. Energy loss happens from one trophic level to another.

Question Type : MCQ
Question ID : 441009624798
Option 1 ID : 4410092453325
Option 2 ID : 4410092453326
Option 3 ID : 4410092453327
Option 4 ID : 4410092453324
Status : Answered B
Chosen Option :

Q.21 Which of the following viruses contains RNA as genetic material but replicates through a DNA intermediate?

Ans
- ✔ A. Retrovirus
- ✗ B. Herpes virus
- ✗ C. Adenovirus
- ✗ D. Influenza virus

Question Type : MCQ
Question ID : 4410091490020
Option 1 ID : 4410095886107
Option 2 ID : 4410095886108
Option 3 ID : 4410095886105
Option 4 ID : 4410095886106
Status : Answered A
Chosen Option :

Q.22 Which of the following has developed Rudrastra, a hybrid Vertical Take-Off and Landing (VTOL) drone?

Ans
- ✗ A. Mahindra Defence Systems
- ✗ B. Defence Research and Development Organisation
- ✗ C. Tata Advanced Systems
- ✔ D. Solar Aerospace and Defence Limited

Question Type : MCQ
Question ID : 4410091039363
Option 1 ID : 4410094107576
Option 2 ID : 4410094107574
Option 3 ID : 4410094107577
Option 4 ID : 4410094107575
Status : Answered D
Chosen Option :

Q.23 Which large breast muscle in a pigeon primarily powers the powerful downstroke that generates most of the lift and thrust during flight?

Ans
- ✗ A. Coracobrachialis muscle
- ✔ B. Pectoralis major muscle
- ✗ C. Latissimus dorsi
- ✗ D. Supracoracoideus muscle

Question Type : MCQ
Question ID : 4410091503682
Option 1 ID : 4410095938943
Option 2 ID : 4410095938941
Option 3 ID : 4410095938942
Option 4 ID : 4410095938940
Status : Answered B
Chosen Option :

Q.24 Which of the following is NOT correct regarding sample preparation for IR spectroscopy?

Ans
- ✗ A. Solidscan be analyzed asKBr pellets or mullswithmineral oil.
- ✗ B. Thin films of neat liquids can be directly analyzed between salt plates.
- ✗ C. Aqueous solutions are generally avoided due to strong IR absorption by water.
- ✔ D. Common glass cells are used because glass is transparent in the IR region.

Question Type : MCQ
Question ID : 4410091491593
Option 1 ID : 4410095892154
Option 2 ID : 4410095892155
Option 3 ID : 4410095892153
Option 4 ID : 4410095892156
Status : Answered A
Chosen Option :

Q.25 Which of the following stages of metamorphosis is NOT a part of the life cycle of a cockroach?

Ans
- ✗ A. Nymph
- ✔ B. Pupa
- ✗ C. Egg case
- ✗ D. Adult

Question Type : MCQ
Question ID : 4410091492141
Option 1 ID : 4410095894266
Option 2 ID : 4410095894267
Option 3 ID : 4410095894265
Option 4 ID : 4410095894268
Status : Answered B
Chosen Option :

Q.26 The bark of the Cinchona is used in the treatment of ______.

Ans
- ✔ A. Malaria
- ✗ B. Dengue
- ✗ C. Typhoid
- ✗ D. Filariasis

Question Type : MCQ
Question ID : 4410091513202
Option 1 ID : 4410095976838
Option 2 ID : 4410095976839
Option 3 ID : 4410095976840
Option 4 ID : 4410095976841
Status : Answered B
Chosen Option :

**Q.27 What is the correct expression for the elevation of boiling points?
(Where ΔT_b = change in boiling point, K_b = ebullioscopic constant, n = no. of mo
m = molality, K_f = cryoscopic constant)**

Ans
- ✗ A. $\Delta T_b = K_b \times$ Molarity
- ✔ B. $\Delta T_b = K_b \times m$
- ✗ C. $\Delta T_b = K_f \times m$
- ✗ D. $\Delta T_b = K_b \times n$

Question Type : MCQ
Question ID : 4410091488046
Option 1 ID : 4410095878323
Option 2 ID : 4410095878320
Option 3 ID : 4410095878321
Option 4 ID : 4410095878322
Status : Answered D
Chosen Option :

Q.28 Chlorophyll b is found in ______.

Ans
- ✗ A. Cyanophyceae
- ✗ B. Phaeophyceae
- ✔ C. Chlorophyceae
- ✗ D. Bacillariophyceae

Question Type : MCQ
Question ID : 4410091504696
Option 1 ID : 4410095943234
Option 2 ID : 4410095943237
Option 3 ID : 4410095943235
Option 4 ID : 4410095943236
Status : Answered C
Chosen Option :

Q.29 Which scheme was introduced in Himachal Pradesh to promote natural farming and reduce chemical fertiliser use?

Ans
- ✗ A. HimAgroVikas Mission
- ✗ B. Krishi Utthan Yojana
- ✔ C. Prakritik Kheti Khushhal Kisan Yojana
- ✗ D. Green HP Initiative

Question Type : MCQ
Question ID : 4410091531991
Option 1 ID : 4410096051021
Option 2 ID : 4410096051020
Option 3 ID : 4410096051019
Option 4 ID : 4410096051022
Status : Answered A
Chosen Option :

Q.30 निम्नलिखित वाक्य के किस शब्द में वर्तनी से संबंधित त्रुटि है? 'रामायण के अनुसार राम का जनम अयोध्या में हुआ था।'

Ans
- ✗ A. अनुसार
- ✔ B. जनम
- C. [illegible]
- D. [illegible]

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Question Type : MCQ
Question ID : 4410091486060
Option 1 ID : 4410095870690
Option 2 ID : 4410095870692
Option 3 ID : 4410095870691
Option 4 ID : 4410095870689
Status : Answered C
Chosen Option :

Q.31 Which of the following correctly represents the number of edges, angles and number of faces in a unit cell of a simple cubic crystal system?

Ans
- ✗ A. 14 edges, 60°, 7 faces
- ✗ B. 8 edges, 120°, 4 faces
- ✔ C. 12 edges, 90°, 6 faces
- ✗ D. 16 edges, 72°, 8 faces

Question Type : MCQ
Question ID : 4410091488569
Option 1 ID : 4410095880481
Option 2 ID : 4410095880480
Option 3 ID : 4410095880479
Option 4 ID : 4410095880482
Status : Answered B
Chosen Option :

Q.32 The metamorphosis in a butterfly is an example of:

Ans
- ✔ A. Holometabolous development
- ✗ B. Neometabolous development
- ✗ C. Ametabolous development
- ✗ D. Hemimetabolous development

Question Type : MCQ
Question ID : 4410091497428
Option 1 ID : 4410095914815
Option 2 ID : 4410095914816
Option 3 ID : 4410095914813
Option 4 ID : 4410095914814
Status : Answered B
Chosen Option :

Q.33 What is the targeted defence production value by 2029 as announced by Rajnath Singh in June 2025?

Ans
- ✗ A. ₹4 lakh crore
- ✗ B. ₹2 lakh crore
- ✔ C. ₹3 lakh crore
- ✗ D. ₹1 lakh crore

Question Type : MCQ
Question ID : 441009884041
Option 1 ID : 4410093490124
Option 2 ID : 4410093490122
Option 3 ID : 4410093490123
Option 4 ID : 4410093490121
Status : Answered C
Chosen Option :

**Q.34 Consider the following amines:
1) Aniline ($C_6H_5NH_2$)
2) p-Nitroaniline (p-$NO_2C_6H_4NH_2$)
3) p-Methoxyaniline (p-$CH_3OC_6H_4NH_2$)
What is the correct order of their basic strength in aqueous solution?**

Ans
- ✔ A. 3 > 1 > 2
- ✗ B. 3 > 2 > 1
- ✗ C. 2 > 1 > 3
- ✗ D. 1 > 3 > 2

Question Type : MCQ
Question ID : 4410091486427
Option 1 ID : 4410095872127
Option 2 ID : 4410095872130
Option 3 ID : 4410095872129
Option 4 ID : 4410095872128
Status : Answered B
Chosen Option :

Q.35 Which of the following is NOT correct regarding the rate of a chemical reaction?

Ans
- ✔ A. Therateof reactionis always constant throughout the process
- ✗ B. Temperature generally affects the rate of reaction significantly
- ✗ C. The rate of reaction depends on the concentration of reactants
- ✗ D. Catalysts can increase the rate of a reaction without being consumed

Question Type : MCQ
Question ID : 4410091488755
Option 1 ID : 4410095881204
Option 2 ID : 4410095881205
Option 3 ID : 4410095881202
Option 4 ID : 4410095881203
Status : Answered C
Chosen Option :

Q.36 In the free radical addition of HBr to 1,3-butadiene (in the presence of peroxide), which product predominates at low temperature and why?

Ans
- ✗ A. 1,4-addition product due to resonancestabilizationofallylradical
- ✔ B. 1,2-addition product due to kinetic control
- ✗ C. 1,4-addition product due to thermodynamic control
- ✗ D. 1,2-addition product due to radical delocalization

Question Type : MCQ
Question ID : 4410091486496
Option 1 ID : 4410095872406
Option 2 ID : 4410095872403
Option 3 ID : 4410095872404
Option 4 ID : 4410095872405
Status : Answered A
Chosen Option :

Q.37 Lac operon has three structural genes; lacZ, lacY and lacA. Which of the following options has the correct proteins encoded by them, respectively?

Ans
- ✗ A. β-galactosidasetransacetylase, β-galactosidepermeaseandβ-galactosidase
- ✗ B. β-galactosidase, β-galactoside transacetylase and β-galactoside permease
- ✗ C. β-galactoside permease, β-galactosidase and β-galactoside transacetylase
- ✔ D. β-galactosidase, β-galactoside permease and β-galactoside transacetylase

Question Type : MCQ
Question ID : 4410091489397
Option 1 ID : 4410095883640
Option 2 ID : 4410095883639
Option 3 ID : 4410095883638
Option 4 ID : 4410095883637
Status : Answered B
Chosen Option :

Q.38 In a certain code language, 'MAPS' is coded as '3527' and 'POET' is coded as '2416'. What is the code for 'P' in the given code language?

Ans
- ✔ A. 2
- ✗ B. 4
- ✗ C. 1
- ✗ D. 5

Question Type : MCQ
Question ID : 4410091484389
Option 1 ID : 4410095864346
Option 2 ID : 4410095864347
Option 3 ID : 4410095864345
Option 4 ID : 4410095864348
Status : Answered A
Chosen Option :

Q.39 The Bharatmala Pariyojana, launched in 2017, primarily aims to:

Ans
- ✗ A. Expand metrorail andsuburban transportnetworks
- ✔ B. Develop highway corridors to optimise freight movement
- ✗ C. Set up coastal industrial zones to boost maritime trade
- ✗ D. Build inland waterways for passenger transport

Question Type : MCQ

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Q1. What is the primary ecological principle that allows cyclones to cause widespread damage to coastal areas?
A) Cyclones always occur in the dry season
B) The ocean's energy is not affected by land, only by sea level
C) Cyclones are powered by the heat released from condensation
D) Mangrove forests are able to withstand strong winds

Q2. The classic case of industrial melanism in the peppered moth (Biston betularia) is a direct demonstration of which key component of Darwin's theory of natural selection?
A) The moths' ability to change color to match their surroundings
B) The environment acts as a selective force, favoring certain traits over others
C) The moths' ability to fly long distances to find new habitats
D) The presence of predators in the environment

Q3. Under British colonial rule, India's economy mainly served as
A) A market for British goods
B) A source of raw materials
C) A center of industrial production
D) A hub for international trade

Q4. Which of the following is correct about the genetic material of viruses?
A) Only DNA is found
B) Only RNA is found
C) Both DNA and RNA are found
D) Either DNA or RNA is found

Q5. Which of the following molecules has sp²d hybridisation?
A) ClF_3
B) XeF_4
C) SF_4
D) NH_3

Q6. In which session was Sardar Patel elected President of the Indian National Congress?
A) Lahore Session
B) Karachi Session
C) Delhi Session
D) Calcutta Session

Q7. When the temperature of gas is raised at constant volume, the pressure of the gas
A) Increases
B) Decreases
C) Is equal, then becomes decreased or increasing
D) Is equal, then becomes increased or decreasing

Q8. Which of the following steps is most critical for ensuring successful artificial insemination in cattle?
A) Giving calves an ice bluestone before insemination
B) Collecting semen from a bull and storing it properly
C) Feeding cows a high-protein diet before insemination
D) Only using bulls from different breeds

Q9. Under what category do butter and whipped cream fall?
A) Monounsaturated fats
B) Polyunsaturated fats
C) Trans fats
D) Saturated fats

Q10. Which of the following compounds is optically active?
A) 2-butyne
B) 2-methylbutane
C) 2-bromobutane
D) 2,3-dimethylbutane

Q11. In Soma, young leaves show chlorosis variation. What is the meaning of chlorosis variation?
A) Young leaves are green
B) Young leaves are more yellowish
C) Young leaves are orange
D) Young leaves are red

Q12. Explain the assertion (A) and Reason (R) based on facts and theories. Assertion (A): Platinum is used in automobile catalytic converters. Catalytic activity increases with an increase in the number of active sites on the catalyst. Reason (R): Surface area is increased in the number of active sites.
A) A is false but R is true
B) Both A and R are true and R is the correct explanation of A
C) Both A and R are true but R is not a correct explanation of A
D) A is true but R is false

Q13. Which flower has been notified as the state flower of Himachal Pradesh?
A) Rhododendron arboreum (Lali Burans)
B) Cedrus deodara (Deodar)
C) Saussurea obvallata (Brahmkamal)
D) Rosa indica (Rosa sharonensis)

Q14. The cultural perspective of knowledge emphasizes
A) Learning is based on experiences and interactions
B) Learning is human behavior
C) Knowledge is a set of rules
D) Knowledge does not exist

Q15. Which of the following set of climatic conditions are best suited for the cultivation of sugarcane?
A) 1. Temperature 21 - 27°C, annual rainfall 100-150 cm and fine drained loamy soils with pH value 6.5 - 7.5
B) 1. Temperature 21 - 27°C, annual rainfall 100-150 cm and fine drained loamy soils with pH value 7.5 - 8.5
C) 1. Temperature 21 - 27°C, annual rainfall 100-150 cm and fine drained loamy soils with pH value 5.5 - 6.5
D) 1. Temperature 21 - 27°C, Annual rainfall 100-150 cm and fine drained loamy soils with pH value 4.5 - 5.5

Q16. Which of the following organelles is directly involved in the synthesis of steroid hormones in animal cells?
A) Golgi apparatus
B) Lysosome
C) Smooth endoplasmic reticulum

Q17. Aromatic compounds differ from aliphatic compounds mainly by
A) Their solubility toward hot reducing agents
B) Their solubility toward hot oxidizing agents
C) Their solubility toward cold reducing agents
D) Their resonance-stabilized lack in aromaticity

Q18. Occupational information includes information about all the following, EXCEPT
A) Work and worker requirements
B) Work and worker activities
C) Work and worker characteristics
D) Work and worker interests

Q19. The major active constituent responsible for the anti-inflammatory property of Ocimum sanctum is
A) Eugenol
B) Linalool
C) Ursolic acid
D) Thymol

Q20. Which government body first pointed out the low participation of girls and boys determines social backwardness?
A) Kothari Education Commission
B) Secondary Education Commission
C) Indian University Commission
D) Mudaliar Education Commission

Q21. Which of the following groups of phenotypes is incorrectly matched?
A) Tall and dwarf
B) Tongue rolling and non-rolling
C) Round and wrinkled
D) Yellow and Blue

Q22. What role does aesthetics play in a holistic curriculum?
A) It is only important for fine arts students
B) It should be regarded from one academic setting
C) It is important for all students in every academic setting
D) It is important for all students in every academic setting

Q23. The type of flowers that can be divided into equal halves when cut along any vertical plane.
A) Cruciate
B) Actinomorphic
C) Zygomorphic

Q24. Select the most appropriate option to fill in the blank.
The child can _____ to his mother.
A) relate
B) talk
C) listen

Q25. Which of the following is the main function of the contractile vacuole in Paramecium?
A) Digestion
B) Excretion
C) Reproduction
D) Osmoregulation

Q26. Binomial nomenclature system has two components
A) Genus and species
B) Kingdom and species
C) Class and species
D) Class and genus

Q27. The fusion of thoracic, lumbar, sacral and some caudal vertebrae into a single unit is known as:
A) Coccyx
B) Sacrum
C) Urostyle

Q28. Without even saying a word, he (like Dev as we so well as well as Devesh) _____ so once were Raju.
A) was
B) is
C) are
D) have

Q29. Arrange the following elements in decreasing order of their atomic radius for Ca, Ba and Ag.
A) Ba > Ca > Ag
B) Ca > Ag > Ba
C) Ag > Ba > Ca
D) Ba > Ag > Ca

Q30. In the titration of Fe^{2+} with $KMnO_4$ in acidic medium, which of the following statements is most correct regarding the reaction stoichiometry?
A) 1 mol $KMnO_4$ reacts with 1 mol Fe^{2+}
B) 1 mol $KMnO_4$ reacts with 5 mol Fe^{2+}
C) 1 mol $KMnO_4$ reacts with 2 mol Fe^{2+}
D) 1 mol $KMnO_4$ reacts with 10 mol Fe^{2+}

Q31. Identify the primary producers in freshwater ecosystems.
A) Algae and macrophytes
B) Zooplankton
C) Fishes
D) Crustaceans

Q32. The first step in urine formation is:
A) Tubular secretion
B) Tubular reabsorption
C) Glomerular filtration

Q33. Which Act in India mandates free and compulsory education for children aged 6 to 14, including those with disabilities?
A) The Right of Children to Free and Compulsory Education Act, 2009
B) The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995
C) The National Policy for Persons with Disabilities, 2006
D) The Rehabilitation Council of India Act, 1992

Q34. Match the following taxonomists with their correct features.

A. Carl Linnaeus	1. Species Plantarum
B. C.F. Gaertner	2. Genera Plantarum
C. Antoine Laurent de Jussieu	3. Genera et species

A) A - 1, B - 2, C - 3
B) A - 2, B - 3, C - 1
C) A - 3, B - 1, C - 2
D) A - 1, B - 3, C - 2

Q35. As per the Economic Survey 2024-25, what are the GVA figures for the tertiary sector in Himachal Pradesh for 2022-23 and 2023-24?
A) ₹ 1,00,000 Cr. and ₹ 1,10,000 Cr.
B) ₹ 1,00,000 Cr. and ₹ 1,10,000 Cr.
C) ₹ 1,00,000 Cr. and ₹ 1,10,000 Cr.
D) ₹ 1,00,000 Cr. and ₹ 1,10,000 Cr.

Q36. Which of the following bones is a constant component of the vertebral girdle in all vertebrates?
A) Clavicle
B) Coracoid
C) Pubis
D) Scapula

Q37. Which salt, when dissolved in water, forms a neutral solution?
A) Copper sulphate
B) Sodium acetate
C) Ammonium chloride
D) Sodium chloride

Q38. Diphenicaryaa is a common plant species found in the
A) Trans-Himalayan region
B) Shivalik region
C) Lower Himalayan region
D) Upper Himalayan region

Q39. Natti is primarily known as which of the following in the cultural tradition of Himachal Pradesh?
A) A traditional dance
B) A type of folk song
C) A traditional fair
D) A religious ritual

Q40. How does the basic structure of the lungs differ between most terrestrial and aquatic vertebrates?
A) Terrestrial vertebrates have lungs with a smaller surface area than aquatic ones
B) Aquatic lungs are often richly folded to increase gas exchange efficiency
C) Terrestrial vertebrates have lungs that are primarily used for storing water
D) Aquatic and terrestrial vertebrates have lungs with identical structures

Q41. Who won the Wimbledon Men's Singles title on 13 July 2025, defeating defending champion Carlos Alcaraz in the final?
A) Novak Djokovic
B) Jannik Sinner
C) Daniil Medvedev
D) Alexander Zverev

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Q87. **In the context of electrical energy usage in households, industries and commercial establishments, 1 'unit' is equivalent to:**

(a) 1 watt-second
(b) 1 kilowatt-hour
(c) 1 watt
(d) 1 kilowatt

Q88. **The part of the blastocyst that initiates implantation is:**

(a) Lumen of uterus
(b) Zona pellucida
(c) Trophoblast cells
(d) Blastula

Q89. **What is the scientific name for the Woolpack Baobab (the new State Bird of Himachal Pradesh)?**

(a) Adansonia digitata
(b) Adansonia gregorii
(c) Pinus roxburghii
(d) Adansonia

Q90. **How do transdisciplinary approaches differ from interdisciplinary approaches?**

(a) Transdisciplinary approaches integrate knowledge and methodological approaches from different disciplines, whereas interdisciplinary approaches involve two or more disciplines working together
(b) Transdisciplinary approaches involve collaboration between different disciplines, whereas interdisciplinary approaches involve working independently
(c) Transdisciplinary approaches integrate knowledge and methodological approaches from different disciplines, whereas interdisciplinary approaches involve two or more disciplines working together
(d) Transdisciplinary approaches involve working independently, whereas interdisciplinary approaches involve collaboration between different disciplines

Q91. **Match the following statements regarding Indian coal with the correct suggestions.**

Statements	Suggestions
Metallurgical grade	Blending
Photographic quality	Washing
Argillaceous shale grade	Sorting and Blending

(a) I - c, II - a, III - b
(b) I - b, II - c, III - a
(c) I - a, II - b, III - c
(d) I - c, II - b, III - a

Q92. **Which of the following characteristics are NOT a Metaphora of mammals in NCF 2005?**

(a) They are homeothermic
(b) They have mammary glands
(c) They have diaphragm
(d) They have external ears

Q93. **Match the following crystal systems with their essential characteristics:**

Systems	Characteristics
A. Cubic	I. One 3-fold axis
B. Monoclinic	II. Only 4-fold axis
C. Tetragonal	III. One 2-fold axis
D. Trigonal	IV. Three 4-fold axes

(a) A-IV, B-III, C-II, D-I
(b) A-III, B-II, C-IV, D-I
(c) A-IV, B-III, C-I, D-II
(d) A-III, B-IV, C-II, D-I

Q94. **The efficient diffusion of oxygen from the alveolar air into the blood is facilitated by all of the following features, EXCEPT:**

(a) The very large surface area
(b) The very short distance between the alveolar air and the blood
(c) The cells which diffuse oxygen secrete a layer of surfactant
(d) The minimal surface area provided by the millions of alveoli

Q95. **Two pairs of identical twins, P and M, are either having trait 'a' or trait 'b'. All the progenies are found to all have trait 'a'. What can be said about the trait 'b'?**

(a) Dominant trait
(b) Polygenic trait
(c) Recessive trait
(d) Mutation trait

Q96. **Evaluate the Assertion (A) and Reason (R) based on facts and define the relationship between them.**
Assertion (A): The Langmuir adsorption isotherm assumes the formation of a monolayer of adsorbate on the surface of the adsorbent.
Reason (R): At high pressures, all available adsorption sites are occupied, and further increase in pressure does not increase adsorption.

(a) A is false but R is true
(b) Both A and R are true and R is the correct explanation of A
(c) Both A and R are true but R is not a correct explanation of A
(d) A is true but R is false

Q97. **Which reagent can convert cyclohexene to adipic acid directly?**

(a) $KMnO_4$, cold, dilute
(b) $K_2Cr_2O_7$, H_2SO_4
(c) Conc. HNO_3/warm
(d) CrO_2Cl_2, CCl_4

Q98. **Identify the type of ANTONYMS in the sentence.**
Despite the fact that the old technology was obsolete, nobody became peaceful after the technological reforms.

(a) Letter - Letter
(b) Word - Word
(c) Sentence - Sentence
(d) Letter - Sentence

Q99. **Which soil type is most widely found in the mid-hill and high-hill regions of Himachal Pradesh and supports cultivation of temperate fruits like apples?**

(a) Black soil with rich organic matter
(b) Alluvial soil with high fertility
(c) Brown forest soil with moderate acidity and good drainage
(d) Saline-alkali soil with poor fertility

Q100. **The asexual reproductive structure in which small buds detach to form new individuals is known as:**

(a) Conidium
(b) Sporangium
(c) Gemmule
(d) Fragmentation

Q101. **What is the region that acts as the primary site for gaseous exchange in mesenteric?**

(a) Cuticle
(b) Gills
(c) Trachea

Q102. **Which of the following plants contains the alkaloid reserpine that is used to treat hypertension?**

(a) Aloe vera
(b) Rauvolfia serpentina
(c) Withania somnifera
(d) Terminalia arjuna

Q103. **Phosphorus pentachloride (PCl_5) reacts with water to form:**

(a) PCl_3
(b) $POCl_3$
(c) HCl
(d) H_3PO_4, HCl

Q104. **Multifaceted compounds are NOT found in:**

(a) Protozoa
(b) Platyhelminthes
(c) Annelida
(d) Coelenterata

Q105. **Which of the following phytogeographical regions of India is characterized by high degree of endemism and tropical rainforest vegetation?**

(a) Trans-Himalaya
(b) Upper Himalaya
(c) Western Ghats
(d) Eastern Coast

Q106. **Select the option that rectifies the incorrectly spelt word in the given sentence.**
The cemetery near the church looked solemn as mourners gathered around a wethly grave.

(a) Looked
(b) Cemetery
(c) Mourners
(d) Wethly

Q107. **Refer to the three statements given below and choose the correct option.**
Statement I: Alkyl halides generally undergo nucleophilic substitution only under severe conditions.
Statement II: Aryl halides are highly activated and undergo substitution easily under ordinary conditions.
Statement III: The C–X bond in vinylic halides is very strong and is difficult to break.

(a) Only Statement II is true
(b) Statements II, III are true
(c) Statements II, III are false
(d) Only Statement III is true

Q108. **Seven people, P, Y, V, S, Q and R are sitting in a row, facing North. Y is the 3rd person to the right of S. V is the 2nd to the right of R. Only one person sits between S and Q. V sits at some place to the right of R but at some place to the left of Y. How many people sit to the left of Y?**

(a) 2
(b) 3
(c) 1
(d) 4

Q109. **Element with atomic number 64 has $4f^7$ $5d^1$ $6s^2$ in:**

(a) Eu
(b) Gd
(c) Tb

Q110. **The process of releasing eggs and sperm into water during breeding is called:**

(a) Copulation
(b) Spawning
(c) Fertilization

Q111. **What is the concept of the 'trophic cascade' in ecological systems?**

(a) The gradual movement of nutrients up a food chain
(b) The sudden collapse of an entire ecosystem due to a single species' extinction
(c) The indirect effects of apex predators on lower trophic levels
(d) A cascading chain reaction of energy loss between trophic levels

Q112. **What is the primary physiological trigger for the accessional reaction in mammalian spermatogenesis?**

(a) The binding of sperm to the zona pellucida of the egg
(b) The ending of sperm to integral receptors in the cervical and vaginal walls of the female reproductive tract, which are activated by the changing chemical environment
(c) The physical stretching that occurs when sperm pass through the narrow regions of the uterus and fallopian tubes
(d) The release of hormones by the sperm themselves

Q113. **Which Fundamental Right protects minority groups by allowing them to establish and administer educational institutions?**

(a) Right to Equality
(b) Right to Freedom
(c) Right against Exploitation
(d) Right to Constitutional Remedies

Q114. **निम्नलिखित वाक्य के रेखांकित भाग का भाववाचक संज्ञा रूप चुनिए।**
वह संकल्प का बहुत पक्का था।

(a) दृढ़ता
(b) दृढ़
(c) दृढ़ संकल्प
(d) संकल्प

Q115. **Which of the following is a key principle of constructivist learning?**

(a) Learning is transmitted from the teacher
(b) Learners are passive recipients
(c) Learning is individualistic
(d) Knowledge is constructed

Q116. **Which of the following classes of algae shows filamentous form?**

(a) Phaeophyceae and Rhodophyceae
(b) Chlorophyceae
(c) Chlorophyceae
(d) Phaeophyceae

Q117. **Which of the following describes a back titration?**

(a) Titration with a known volume of titrant
(b) Titration with a known volume of analyte
(c) Titration of the excess reagent after reaction
(d) Titration of the excess reagent after reaction

Q118. **Which of the following chemical mutagen is mainly responsible for inducing point mutations in plants?**

(a) Ethyl methane sulphonate
(b) Nitrous oxide
(c) Ethyl methane sulphonate
(d) Nitrous oxide

Q119. **Differential teaching practices stem from teachers holding different expectations based on the student's:**

(a) Race, gender or caste
(b) Socio-economic status
(c) Prior knowledge or ability
(d) Parental involvement levels

Q120. **A strong ethical self-understanding in teachers helps to:**

(a) Follow professional guidelines in schools or school organizations
(b) Develop a sense of responsibility towards the profession
(c) Develop a sense of responsibility towards the profession
(d) Develop engagement with families, families, and the broader community

Q121. **Critical pedagogy encourages:**

(a) Rote learning
(b) Passive learning
(c) Critical thinking
(d) Memorization

Q122. **Which of the following is the major drawback of the Bentham and Hooker system of classification?**

(a) It is based on artificial characters and does not reflect the true evolutionary relationships among plants
(b) It is based on natural characters and does not reflect the true evolutionary relationships among plants
(c) It is based on phylogeny and does not reflect the true evolutionary relationships among plants
(d) It is based on artificial characters and does not reflect the true evolutionary relationships among plants

Q123. **What is the rank of India in Sustainable Development Goals Report 2023?**

(a) 112
(b) 121
(c) 99
(d) 134

Q124. **Which feature of the Ti plasmid is directly responsible for transfer of foreign DNA into the plant genome?**

(a) T-region
(b) T-DNA border sequences
(c) Virulence (vir) genes
(d) Opine synthesis genes

Q125. **Parts of a sentence are given below. Write the first part (P) in the blank space provided in the sentence and the rest (Q, R, S, T) as one jumbled up, lettered part in the correct order to form a meaningful and coherent sentence.**
P. Despite the challenges,
Q. people managed to stay
R. communication effortless
S. with their loved ones
T. in touch before phones and

(a) S-R-T-Q
(b) T-S-R-Q
(c) Q-R-S-T
(d) R-S-T-Q

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Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.77 Which quantity represents the distance between the pole and the focus of a spherical mirror?

Ans: a. 2 cm(R)
b. 4 cm(2R)
c. Radius of curvature
d. Diameter

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.78 Potato is a modified _____.

Ans: a. Underground stem
b. Root
c. Underground fibrous root

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.79 Which of the following has the highest total heat energy in the Woodward-Fawer rules?

Ans: a. 10 carbons
b. 11 carbons
c. 12 carbons
d. Hexane

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.80 Drama supports the aesthetic development of learners because it can help

Ans: a. Develop their creative voice and understanding of society
b. Learning material, science is an ancient agency
c. Learning material, science is an ancient agency of understanding
d. Technical evolution of science, research and ancient classroom

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.81 Which of the following major products is produced during the addition of HBr to propene in the presence of peroxides?

Ans: a. 1-bromopropane
b. 2-bromopropane
c. 1,2-dibromopropane
d. 1,3-dibromopropane

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.82 Which of the following is the unit of radioactivity?

Ans: a. Curie
b. Curie
c. Curies

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.83 In which of the following crystal type of these ionuts is the ovary inferior?

Ans: a. Polygonaceae
b. Cruciferae
c. Liliaceae
d. Malvaceae

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.84 Which nuclear process changes the atomic number but keeps the mass number constant?

Ans: a. Gamma emission
b. Beta emission
c. Fast fusion

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.85 Which of the following is a thermoplastic polymer?

Ans: a. Cured bakelite resin
b. Polyethene
c. Rubber
d. Vulcanized rubber

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.86 Which of the following is not a characteristic of a fungus?

Ans: a. They are found in the soil
b. They are found almost everywhere
c. They are found in oceans

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.87 Which of the following is a thermoplastic polymer?

Ans: a. Cured bakelite resin
b. Polyethene
c. Rubber
d. Vulcanized rubber

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.88 Which of the following is not a characteristic of a fungus?

Ans: a. They are found in the soil
b. They are found almost everywhere
c. They are found in oceans

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.89 The conversion of galactose → glucose-1-phosphate occurs via

Ans: a. Embden pathway
b. Entner-Doudoroff pathway
c. Leloir pathway

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.90 In sponges, food is digested by which method?

Ans: a. Extracellular digestion only
b. Intracellular digestion only
c. Both extracellular and intracellular

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.91 After Queen Victoria's Proclamation of 1858, what change occurred in the status of British-held hill territories of present-day Himachal Pradesh?

Ans: a. They were annexed to the Punjab
b. They were annexed to the Bengal Presidency
c. They were placed under the Governor-General
d. They were made part of the province called Bilaspur

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.92 Which type of forest in India remains green throughout the year because trees do NOT shed leaves simultaneously?

Ans: a. Tropical Thorn Forests
b. Alpine Forests
c. Tropical Evergreen Forests

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.93 Which of the following phenomenon provides a direct evidence of natural selection in action?

Ans: a. Fossil record of a species over the ancient Himalaya
b. Comparative embryology between species
c. Study following mutations

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.94 Select the best statement that explains the concept of Constructivism in education.

Ans: a. Learning is an active process
b. Learning is a passive process
c. Knowledge is transmitted from teacher to student
d. Knowledge should be stored in a knowledge bank

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.95 For the purposes of crop improvement by polyploid breeding, which of the following methods can be used for inducing polyploidy in plants?

Ans: a. Use of light and heat
b. Use of colchicine and heat
c. Use of colchicine and light
d. Treatment with acids

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.96 Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which one letter-cluster does not belong to the group and hence is the odd one out? Do not based on the number of consonants/vowels or their position in the letter-cluster.)

Ans: a. EGIK
b. LNP
c. QSU
d. VWY

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.97 Which of the following is a salient feature of class Amphibia?

Ans: a. Cold blooded animals
b. Chordates with internal ear
c. Chordates with internal ear and vertebral column
d. Chordates having internal ear and vertebral column

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.98 After fertilisation the cells of ovular wall divide periclinally and give rise to 2 to 3 layered _____ to Meristemoid.

Ans: a. Primary
b. Parietal
c. Placenta
d. Funicle

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.99 Which metal ion stabilizes the negatively charged ATP-tRNA complex in ribosomes and is essential for proper folding of tRNA?

Ans: a. Ca²⁺
b. Mg²⁺
c. Na⁺
d. Mn²⁺

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.100 Select the most appropriate article to fill in the blank. If no article is required, mark 'no article required'.
Ans: a. Can understand
b. It
c. I

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.101 Which of the following compounds is the most ambident to be posed through electron transport chain by the aerobic respiration?

Ans: a. Phosphoenol pyruvate
b. Citrate
c. Isocitrate
d. Fumarate

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.102 How does the Language Across the Curriculum (LAC) approach integrate language skills with subject content?

Ans: a. It requires students to memorize subject-specific terminology
b. It focuses exclusively on improving grammar and vocabulary
c. It includes assessing students' ability to apply language skills in subject tasks
d. It involves giving students rote memorization and complete tasks

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.103 Which factor makes sugar mills in India operate during the maximum efficiency, especially during crushing season?

Ans: a. Availability of sugarcane
b. Cane availability (%)
c. Cane availability (%) and sugar content (%)

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.104 Which of the following statements are NOT true in relation to the Meiocytes and Microsporangium?
1. A single cell within the nucellus differentiates into the megaspore mother cell (MMC), which is haploid (n).
2. The MMC undergoes meiosis to produce four cells from the megaspore mother cell (MMC), which is diploid (2n).
3. The primary sporogenous cells in the ovary, which is located inside the ovule, are diploid (2n).
4. The primary sporogenous cells within the ovule, which is located inside the ovary of a flower.

Ans: a. 1 only
b. 1 and 4
c. 2 only
d. 3 only

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.105 Which of the following is a characteristic of a Fungus?

Ans: a. Cells is composed of RNT
b. Cells is composed of DNT
c. Cells is composed of DNA
d. All are correct(DNA)

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.106 Linked genes are located:

Ans: a. On chromosomes
b. On different chromosomes
c. On different genes
d. On meiosis

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.107 Which statement about a block and p-block elements is correct?

Ans: a. Both belong to same group in the periodic table
b. Valence energy of block elements decrease with the group
c. Physical properties of p-block elements decrease with the group

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.108 In mitochondrial electron transport system, which of the following is the correct order of mobile carriers from Complex III and Complex IV?

Ans: a. Cyt-c then Ubiquinone
b. Ubiquinone then Cyt-c
c. Cyt-c1 then Cyt-c
d. Ubiquinone then Cyt-c1

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.109 To initiate muscle contraction in the body, which of the following statement is correct for the neuromuscular junction?

Ans: a. The transmission of action potential from axon hillock to the end of motor neuron
b. The transmission of action potential from the end of motor neuron to the muscle fiber
c. The transmission of action potential from sensory neuron to the muscle fiber
d. The transmission of action potential from sensory neuron to axon to the muscle fiber

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.110 Which of the following is the main driving force of evolution according to Lamarck?

Ans: a. Natural Selection
b. Use and disuse of organs
c. Sexual selection
d. Inheritance of traits acquired

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.111 The Integrated Child Development Scheme (ICDS) scheme, which aims to improve child nutrition, health and early childhood education, was launched in which year?

Ans: a. 1975
b. 1985
c. 1995
d. 2005

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.112 Which of the following methods of plant breeding uses radiation and/or chemicals to improve traits?

Ans: a. Hybridization
b. Mutation breeding
c. Tissue culture

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.113 Which thinker emphasized "Education for all with equality and justice" as a foundation for India?

Ans: a. Rabindranath Tagore
b. Dr. A. P. J. Abdul Kalam
c. Dr. Zakir Hussain

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.114 Which of the following sets correctly lists the major river basins that drain Himachal Pradesh?

Ans: a. Indus, Ganga, Narmada, Tapi
b. Indus, Ganga, Brahmaputra, Mahanadi
c. Indus, Ganga, Godavari, Krishna, Kaveri
d. Indus, Ravi, Beas, Sutlej, Yamuna

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.115 The main chemical component of a pearl is:

Ans: a. Calcium Carbonate
b. Silica
c. Iron

Question Type: MCQ
Question ID: 4611000000000
Option 1ID: 4611000000000
Option 2ID: 4611000000000
Option 3ID: 4611000000000
Option 4ID: 4611000000000
Status: Answered
Chosen Option:

Q.116 Which amino acid contains a sulfur atom in its side chain that can form disulfide linkages in proteins?

Ans: a. Serine
b. Cysteine
c. Tyrosine
d. Threonine

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Q.**Which of the following photosynthetic conditions is required for the short-day plants (SDP) to flower?**
A. A critical night length longer than a minimum value
B. A critical night length shorter than a minimum value
C. Night length is not important, but there is a critical dark period, and interruption of the dark period by a short flash of light prevents flowering
D. Night length is not important, but there is a critical dark period, and interruption of the dark period by a short flash of light promotes flowering

Q.**Which of the following statements is NOT correct with respect to the function of chromosomal basic proteins?**
A. Protects nuclei in the resting stage
B. Protects DNA from the restriction enzyme
C. Functions as a genetic material in RNA

Q.**Iodine pentafluoride (IF5) is prepared by the direct reaction of iodine and fluorine. What is its molecular geometry and what is the hybridization of the central iodine atom?**
A. Square pyramidal, sp^3d^2
B. Square planar, sp^3d^2
C. Trigonal bipyramidal, sp^3d
D. Octahedral, sp^3d^2

Q.**Which model emphasizes learning through observation?**
A. Operant
B. Cognitive
C. Observational

Q.**Select the most appropriate idiom that can substitute the underlined phrase in the following sentence:**
The manager promised that the problem would be solved soon, but he was only making false assurances.
A. A wild goose chase
B. A day to rest
C. A pack of lies
D. A time to come

Q.**Which edition of the National Games concluded on 14 February 2020 in Uttarakhand?**
A. 12th
B. 13th
C. 14th
D. 15th

Q.**Which of the following is the primary economic importance of both Triticum spp. and Sitophilus spp. for stored products?**
A. Both are beneficial to agricultural ecosystems
B. Both are harmful to agricultural ecosystems
C. Triticum spp. is harmful, while Sitophilus spp. is beneficial to agricultural ecosystems

Q.**Which of the following is correct about coenocytic hyphae?**
A. Found in Ascomycetes
B. Typical cell is binucleate
C. Septa with complete perforation

Q.**The genus Anopheles is primarily responsible for the transmission of:**
A. Filariasis
B. Encephalitis
C. Malaria

Q.**If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 7526159, what will be the difference between the highest and lowest digits in the number thus obtained?**
A. 6
B. 7
C. 8
D. 9

Q.**Which feature best distinguishes the learner-centered approach in curriculum development?**
A. Learners actively participate in decision-making about what and how they learn
B. The curriculum is designed by experts with minimal input from students
C. The teacher delivers content through lectures and assigns tasks for students to complete
D. The learner's learning experience and output matter more than teacher activities and curriculum content

Q.**Which of the following is NOT a symptom of Wuchereria bancrofti transmission? Fatigue by mosquitoes?**
A. Fever
B. Lymphedema
C. Elephantiasis

Q.**What will be the effect on the boiling point of water upon addition of sodium chloride (NaCl)?**
A. Boiling point of water becomes less than 0 °C
B. Boiling point of water becomes more than 0 °C but less than 100 °C
C. Boiling point of water becomes more than 100 °C
D. Boiling point of water becomes less and remains equal to 100 °C

Q.**A 5.0 L container holds O2 gas at 2.50 atm and 305 K. Then calculate how many moles of O2 are present? (R= 0.082057 L atm mol-1 K-1)**
A. 0.500 mol
B. 0.250 mol
C. 0.375 mol
D. 0.125 mol

Q.**Which group of protists act as decomposers and play a key role in nutrient recycling in forest ecosystems?**
A. Euglenophytes
B. Slime molds
C. Diatoms

Q.**Select the correct match of the following compounds with their different uses.**

Compound	Use
(P) Sodium carbonate	(1) Antacid
(Q) Sodium hydrogen carbonate	(2) Glass
(R) Sodium hydroxide	(3) Soap

A. (P)-(2), (Q)-(1), (R)-(3)
B. (P)-(3), (Q)-(2), (R)-(1)
C. (P)-(2), (Q)-(3), (R)-(1)
D. (P)-(1), (Q)-(2), (R)-(3)

Q.**Effective planning for inclusive education requires schools to:**
A. Conduct child find activities to locate the children and support family contacts
B. Provide a continuum of alternative placements to meet the needs of children with disabilities
C. Develop academic programs for children with disabilities
D. Ensure teacher training to maintain high fidelity in service guidelines

Q.**Substances that chemically transform during a reaction are referred to as which of the following?**
A. Reactants
B. Products
C. Solutions
D. Catalysts

Q.**Who proposed the theory of multiple intelligences, expanding the concept of mental abilities beyond IQ?**
A. Howard Gardner
B. Daniel Goleman
C. Robert Sternberg

Q.**Which of the following is the correct explanation of polymorphism in Physalis, commonly known as 'The Portuguese Man of War'?**
A. It is the presence of different forms of cells, egg, sperm, polyp and medusa
B. It is the presence of two forms of cells, the male cell and female cell, or polyps and medusa
C. It is the presence of multicellular units, forming one for feeding, the other for reproduction

Q.**If it is added to a brown fire dissolves to:**
A. Red
B. Blue-black
C. Yellow

Q.**A study found a link between fire dissolves to:**
A. Red
B. Blue-black
C. Yellow

Q.**What is the most effective method for controlling Xenopsylla cheopis?**
A. Use of rodent baits
B. Spraying insecticides
C. Burning rodents

Q.**In Himachal Pradesh, which of the following crop groups is correctly identified as the principal rabi crops grown on the region's terraced fields?**
A. Coconuts, cassava, and cashews
B. Rice, millets, and sugarcane
C. Pulses, maize, and wheat

Q.**Which factor most significantly enhances the release of oxygen from oxyhemoglobin in actively metabolizing tissues?**
A. Increase in temperature and increase in pH
B. Increase in temperature and decrease in pH
C. Decrease in temperature and increase in pH
D. Decrease in both temperature and pH

Q.**Parasites living on the surface of the host are known as:**
A. Endoparasites
B. Ectoparasites

Q.**Which of the following is the primary site of nutrient absorption in humans?**
A. Stomach
B. Small intestine
C. Large intestine

Q.**Which of the following structures is homologous to the ovule of angiosperms in gymnosperms?**
A. Megasporangium (megasporangium)
B. Ovary
C. Megaspore

Q.**Women's theory successfully explained the existence of which type of isomerism?**
A. Optical isomerism
B. Geometrical isomerism
C. Functional isomerism

Q.**Which of the following scientists postulated the concept of chromosomal theory of inheritance for the first time?**
A. Thomas Morgan
B. Walter Sutton and Theodor Boveri
C. Gregor Johann Mendel

Q.**The complex $[Mn(H_2O)_6]^{2+}$ shows pink colour due to:**
A. $t_{2g}^3 e_g^2$ transition (d-d transition)
B. Charge transfer from ligand to metal
C. Charge transfer from ligand to ligand

Q.**Which of the following scientists postulated the concept of chromosomal theory of inheritance for the first time?**
A. Thomas Morgan
B. Walter Sutton and Theodor Boveri
C. Gregor Johann Mendel

Q.**Which of the following proteins plays a major role in producing oxygen and forming the base of marine food webs?**
A. Rubisco
B. Chlorophyll
C. Cytochrome

Q.**The radius of an octahedral void is how many times the radius of the sphere?**
A. 0.155
B. 0.414
C. 0.732

Comprehension:
Read thepassage carefully and answer the questions that follow.

The transformation of water vapour into water is called condensation. Condensation is caused by the loss of heat. When moist air is cooled, it may reach a level when its capacity to hold water vapour ceases. This is known as saturation point. Further cooling of moist air will cause condensation.Insects from soaring around and small particles formed by the condensation of water vapour. Clouds are formed when water from the ocean are particularly good examples. Mist, smoke and air are also condensation. Condensation takes place when the moist air is cooled. Condensation also takes place when the moist air comes in contact with cold objects. Condensation, the water vapour or the moisture in the atmosphere condenses in the form of following forms like fog and clouds.

SubQuestion No : 199
The loss of the capillary is best described as:
A. Loss of
B. Loss of
C. Loss of
D. Loss of

Comprehension:
Read thepassage carefully and answer the questions that follow.

The transformation of water vapour into water is called condensation. Condensation is caused by the loss of heat. When moist air is cooled, it may reach a level when its capacity to hold water vapour ceases. This is known as saturation point. Further cooling of moist air will cause condensation.Insects from soaring around and small particles formed by the condensation of water vapour. Clouds are formed when water from the ocean are particularly good examples. Mist, smoke and air are also condensation. Condensation takes place when the moist air is cooled. Condensation also takes place when the moist air comes in contact with cold objects. Condensation, the water vapour or the moisture in the atmosphere condenses in the form of following forms like fog and clouds.

SubQuestion No : 200

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Select the most appropriate ANTONYM of the word 'condensation'.

Ans

✗ A. Formation B.

✗ Humidification C.

✗ Crystallisation

✓ D. Evaporation

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Question Type : **MCQ**
Question ID : **4410091168607**
Option 1 ID : **4410094608931**
Option 2 ID : **4410094608933**
Option 3 ID : **4410094608932**
Option 4 ID : **4410094608930**
Status : **Answered D**
Chosen Option :

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