Govt of Himachal Pradesh
Himachal Pradesh Higher Chayan Ayog
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Assessment Name	Applicant for the post of Trained Graduate Teachers
Candidate's ID No. & Roll No.	
Candidate's Name	
Father's Name	
Date	
Candidate's Signature with Thumbprint	
Candidate Exam No. Thumbprint	15.12.2025 (3RD SHIFT)

Subject: Trained Graduate Teachers Medical

Q1. Which of the following shows an increase across a period from left to right in the periodic table?
ans: a
a. Ionic radius b. Atomic radius
c. Atomic number d. Valency

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 2
Marks: Answered:0

Q2. Parts of a sentence are given below in jumbled order. Arrange the parts in the correct order to form a meaningful sentence.
(P / the / ancient / a / ruins / remnants / civilization / discovered / were
ans: a
a. P, Were discovered ancient remnants of a civilization
b. The ancient ruins were discovered in a civilization
c. Discovered were the remnants of a civilization ancient
d. Were discovered remnants of the ancient ruins a civilization

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 2
Marks: Answered:0

Q3. If a female plant is tetraploid and it is crossed with a normal diploid male plant, what will be the ploidy of endosperm and zygote, respectively, after double fertilization?
ans: d
a. 3 n (triploid) of its tissue and 2n (diploid) of its tissue
b. 4 n (tetraploid) of its tissue and 2n (diploid) of its tissue
c. 3 n (triploid) of its tissue and 3 n (triploid) of its tissue
d. 3 n (triploid) of its tissue and 4 n (tetraploid) of its tissue

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 4
Marks: Answered:0

Q4. Who among the following was appointed as Chairman of Central Board of Direct taxes (CBDT) in June 2024?
ans: a
a. Ajay Seth(Retired)
b. Vivek Johri
c. Sanjay Kumar
d. Ajit Bhatnagar

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q5. Which of the following is the SI unit for measuring time?
ans: a
a. Second
b. Gram
c. Meter
d. Kelvin

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q6. Snow is formed due to the process of:
ans: a
a. condensation
b. melting
c. evaporation

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q7. The Baner Hydroelectric Project is located in which district?
ans: a
a. Kangra
b. Chenab
c. Ravi

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q8. Which of the following organs in the human body is primarily responsible for filtering blood?
ans: c
a. Liver
b. Heart
c. Kidneys

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q9. The Sawra Kuddu Hydroelectric Project (HEP) is located on which river?
ans: a
a. Pabbar River
b. Satluj River
c. Ravi River
d. Beas River

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q10. The class Amphibia is divided into how many living orders?
ans: c
a. Four
b. Five
c. Three

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q11. Which stage in the life cycle of Basidiomycetes is typically prolonged and dominant?
ans: c
a. Mycelial stage
b. Fruiting body stage
c. Dikaryotic stage
d. Conidiospore stage

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q12. Which class of algae is characterized by the presence of r- phycoerythrin pigments?
ans: b
a. Green algae
b. Red algae
c. Brown algae

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 2
Marks: Answered:0

Q13. Phytogeography is also known as _____.
ans: a
a. Floristic geography
b. Ecological geography
c. Geological study
d. Climatic study

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q14. Birds possess exceptional vision because of:
ans: a
a. A large eye-to-body ratio
b. Nocturnal habits
c. Absence of cones

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q15. The poison gland of snakes is a modification of which structure?
ans: c
a. Sweat gland
b. Mammary gland
c. Salivary gland

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q16. Why is life grabbing experiment performed?
ans: a
a. It is performed to understand the role of natural selection in the evolution of a species
b. It is performed to demonstrate the role of genetic drift in the evolution of a species
c. It is performed to demonstrate the role of mutation in the evolution of a species
d. It is performed to demonstrate the role of gene flow in the evolution of a species

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q17. In the nitration of benzene, which of the following is the true electrophile that attacks the aromatic ring?
ans: c
a. NO_2^-
b. HNO_3
c. NO_2^+

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q18. Select the option that correctly describes the given group of animals/plants.
A type of small fish
ans: a
a. Class
b. Phylum
c. Species
d. Order

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q19. Which of the following best describes the body symmetry of Platyhelminthes?
ans: a
a. Bilateral symmetry
b. Radial symmetry
c. Biradial symmetry
d. Absence of symmetry

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q20. Which copper-containing enzyme undergoes reduction (Fe^{3+}) to ferric ions (Fe^{2+})?
ans: c
a. Cytochrome c
b. Cytochrome a
c. Ceruloplasmin

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q21. What is the main aim of inclusive education policies?
ans: a
a. To segregate students with disabilities
b. To improve academic performance
c. To reduce teacher workload
d. To eliminate special education programs

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q22. Which condition favors the initiation step in a free radical chain reaction?
ans: a
a. Absence of catalysts initiates the mechanism
b. Presence of inhibitors initiates the mechanism
c. Presence of a UV radiation or high temperature
d. None of the aforesaid

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q23. Which of the following parts of the sporophyte of the *Funaria* bears sporangia and performs photosynthesis?
ans: b
a. Base of the sporophyte
b. Seta of the sporophyte
c. Apophysis of the capsule
d. Foot of the sporophyte

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 2
Marks: Answered:0

Q24. Banks earn a spread because:
ans: a
a. The interest rates they charge borrowers are higher than the interest rates they pay depositors
b. Borrowers never repay their loans in full
c. They are the only lenders in the economy
d. They can print money

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q25. Arrange the elements Li, Na, K, and Rb in order of decreasing first ionization energy. Which of the following orders is correct?
ans: d
a. Li > Na > K > Rb
b. Li > K > Na > Rb
c. Li > K > Rb > Na
d. Li > Na > Rb > K

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 4
Marks: Answered:0

Q26. The portion of embryonal axis above & below cotyledon is called as _____ and _____ respectively.
ans: a
a. Epicotyl, hypocotyl
b. Hypocotyl, epicotyl
c. Coleoptile, coleorhiza
d. Coleoptile, radicle

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q27. Which of the following reagents can reduce an aldehyde to a primary alcohol without affecting a C=C double bond?
ans: c
a. $LiAlH_4$
b. Diisobutylaluminium hydride
c. Sodium borohydride ($NaBH_4$)
d. Lithium aluminium hydride ($LiAlH_4$)

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q28. Descriptive or static phytogeography is concerned with the study of _____.
ans: a
a. Land distribution of plant communities
b. Climatic factors of plant communities
c. Floristic features of plant species
d. Effect of ecological factors on plant distribution

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q29. A nuclear reactor uses which of the following to slow down neutrons?
ans: b
a. Control rods
b. Moderator
c. Coolant
d. Uranium-235

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 2
Marks: Answered:0

Q30. Which of the following correctly represents the trend of electron affinity among the given elements?
ans: d
a. O > F > S > Cl
b. F > O > Cl > S
c. F > O > S > Cl
d. Cl > F > S > O

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 4
Marks: Answered:0

Q31. Which among the following are the general characteristics of angiosperms?
I) The sporophyte is differentiated into stems, roots, and leaves.
II) Angiosperms produce two kinds of spores - microspores and megaspores - in sporangia.
III) The vascular system has true vessels in the xylem and companion cells in the phloem.
IV) The endosperm is formed before fertilization and is a source of food for the developing seed and seedlings.
ans: a
a. I, III, and IV only
b. I and III only
c. II, III, and IV only
d. I, II, and IV only

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q32. As of November 2025, what is the installed capacity of the Sanj Hydroelectric Project in Himachal Pradesh?
ans: c
a. 10 MW
b. 50 MW
c. 60 MW
d. 70 MW

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q33. Which aspect of yoga most effectively supports the teaching of life science concepts in education?
ans: c
a. It is only useful in children with physical impairment
b. It has no relevance to academic performance
c. It develops body-mind coordination and awareness

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q34. The Normal equation assumes that:
ans: a
a. Observed values are independent and normally distributed
b. Observed values are correlated
c. Observed values are constant
d. All values are positive

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q35. Which of the following evolutionary forces counteracts the effect of genetic drift by introducing new alleles into a population?
ans: c
a. Genetic drift
b. Gene sweeping
c. Mutation

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 3
Marks: Answered:0

Q36. The lower jaw of mammals articulates with the skull through:
ans: a
a. Squamosal bone
b. Quadrate bone
c. Articular bone
d. Temporal bone

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q37. 'It is easier to build a child...' means:
ans: a
a. Children are more receptive to learning
b. Adults do not need education
c. Children need more time

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q38. Health Education primarily aims to:
ans: a
a. Promote overall well-being
b. Treat diseases
c. Train students to become doctors
d. Prepare students for competitive exams

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q39. Which capital city saw protests after the MCD retains revised property tax? Eastern Congo and foreign embassies were targeted?
ans: a
a. Lusaka
b. Kinshasa
c. Harare
d. Dakar

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

Q40. The Darwinian Theory of Evolution was based on the important concept of _____.
ans: a
a. Struggle for existence and survival of the fittest
b. Use and disuse of organs
c. Inheritance of acquired characters
d. Natural selection

Question Type: MCQ
Option 01: xxxxxxxxxx
Option 02: xxxxxxxxxx
Option 03: xxxxxxxxxx
Option 04: xxxxxxxxxx
Correct Option: 1
Marks: Answered:0

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a) Lipid bilayer is made of a hydrophobic core
b) Ions easily can be flushed
c) Lipid bilayer is made of hydrophilic core
d) Permeability does not vary

Q7 Which of the following statements about molecularity is correct?

a) Molecularity is always a fractional number
b) Molecularity can be zero for a reaction
c) Molecularity is the number of molecules undergoing collision in a chemical reaction
d) Molecularity does not vary

Q8 Refer to the following letter series and answer the question.
Counting to be done from left to right.
(Left) B R T C D F G H J K L N S T V W Z Q X M (Right)
How many letters in the above series are immediately preceded by a consonant and also immediately followed by a consonant?

a) 1 (One Only)
b) 2 (Two)
c) 3 (Three)
d) None

Q9 Which of the following is NOT correct about molecular orbitals?

a) The number of molecular orbitals formed equals the number of combining atomic orbitals
b) Molecular orbitals are not identified as bonding, antibonding, or nonbonding
c) Molecular orbitals show the electron distribution in atoms accurately

Q10 Fishes maintain steering and propulsion during swimming with the help of

a) Caudal/tail/anal fins
b) Caudal fin
c) Dorsal fin
d) Anal fin

Q11 Which of the following body systems in poultry are affected by Newcastle disease?

a) Respiratory system
b) Nervous system
c) Digestive system
d) Digestive, nervous and respiratory systems

Q12 Select the most appropriate option to fill in the blank.

In Gymnosperm, the main plant body is _____.

a) gametophyte/haploid
b) sporophyte/diploid
c) gametophyte and sporophyte

Q13 Which gymnosperm has male gametophyte (the pollen grains) with wings?

a) Cycas
b) Pinus
c) Ginkgo
d) Gnetum

Q14 What is the scientific name for humans?

a) Homo sapiens
b) Homo erectus
c) Homo habilis

Q15 The most common species of Ixora/pink acting as a vector of plague is

a) Ixora coccinea
b) Ixora macrothyrsa
c) Ixora alba var.
d) Ixora parviflora

Q16 Which hydride is used as a rocket fuel?

a) CaH_2
b) NH_3
c) B_2H_6
d) PH_3

Q17 The core objective of the Himachal Pradesh Ceiling on Land (Amendment) Act, 1972 is

a) Regulating the size of agricultural holdings
b) Regulating economic & agricultural development
c) Regulating the land ownership
d) Regulating the land ownership & agricultural development

Q18 In a doubleblind benzene with a -CH3 group and a -NO2 group, where will an incoming electrophile most likely attack?

a) Ortho to the -NO2 group
b) Meta to the -NO2 group
c) Ortho to the -CH3 group
d) Para to the -NO2 group

Q19 Which of the following statements about nucleophilic addition is correct?

a) Nucleophilic addition involves the electron donor
b) Nucleophilic addition occurs only with basic nucleophiles
c) Nucleophilic addition occurs only with weak nucleophiles
d) The nucleophile donates a pair of electrons to the substrate

Q20 sneeze & tits(sgf Beare wj? eli ee gu ence gf

a) sneeze
b) tits
c) sgf
d) Beare wj?

Q21 Which of the following statements about the kinetic molecular theory of gases is NOT correct?

a) Gas molecules are in continuous random motion
b) The average kinetic energy of gas molecules is proportional to the absolute temperature of the gas
c) The collisions of gas molecules are perfectly elastic
d) Collisions between gas molecules are perfectly elastic

Q22 The first step in becoming an effective disaster manager is to:

a) Develop a response plan
b) Learn to be flexible
c) Learn to work under pressure
d) Consider ethics training

Q23 Which of the following is an example of addition polymer?

a) Terylene
b) Teflon
c) Nylon-6
d) Nylon-6,6

Q24 A primary source of soil pollution is:

a) Sewage water
b) Fertilizers
c) Animal waste disposal

Q25 Which of the following statements has the correct functional significance of mammalian cell membrane proteins?

a) Channel proteins are involved in the transport of ions across the membrane
b) Carrier proteins are involved in the transport of ions against the concentration gradient
c) Carrier proteins are involved in the transport of ions against the concentration gradient
d) Both channel proteins and carrier proteins are involved in the transport of ions against the concentration gradient

Q26 The economic importance of Triticum castaneum mainly attributed to its ability to:

a) Cause contamination of stored products
b) Cause damage to stored products
c) Cause damage to stored products and contamination
d) Act as a parasite of human

Q27 Select the INCORRECTLY spelt word in the given sentence. The government's decision to implement new environmental policies was applauded by many.

a) governments
b) environmental
c) decision
d) implement

Q28 Which type of chromosomal mutation results in the loss of a chromosome segment?

a) Translocation
b) Deletion
c) Inversion
d) Duplication

Q29 what will come in the place of the question mark (?) in the following equation, if '*' and '/' are interchanged and '+' and '-' are interchanged?
36 / 36 + 81 * 27 + 44 = ?

a) 15
b) 16
c) 17
d) 5

Q30 Refer to the three statements given below and choose the correct option.
Statement I: Aldehydes generally undergo nucleophilic addition more readily than ketones.
Statement II: The carbonyl carbon in aldehydes and ketones is sp2 hybridized.
Statement III: Larger groups (R, R') reduce reactivity due to steric hindrance.

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

Q31 Which of the following is NOT a Ramsar site in Himachal Pradesh?

a) Chandra Taal
b) Pong Dam Lake
c) Kanwar Lake
d) Renuka Lake

Q32 Select the correct statement about stems and roots.

a) They are radially symmetric and negatively geotropic
b) Stem are jointed (present) and nodes (absent)
c) Stem are negatively geotropic and positively phototropic
d) Stem are jointed (present) and nodes (absent)

Q33 In which year was the Planning Commission set up to evaluate national resources and frame development plans?

a) 1946
b) 1947
c) 1948
d) 1950

Q34 Which pair of molecules shows dipole-dipole attraction?

a) CH_4 and O_2
b) HCl and HCl
c) CH_4 and CCl_4

Q35 A comprehensive plan for inclusive schooling emphasizes

a) Creating support staff only in elementary/secondary only
b) Creating support staff in elementary/secondary/higher secondary
c) Creating support staff in elementary/secondary/higher secondary
d) Personnel required by the students teacher with special requirements

Q36 Which of the following elements shows the highest tendency for the formation of peroxides?

a) Li
b) Na
c) K
d) Rb

Q37 Which of the following is associated with respiration in fishes?

a) Gills
b) Fins
c) Nostrils

Q38 Which of the following is INCORRECT about Flavr Savr tomato, a genetically engineered plant?

a) They had been a variety of tomato
b) They were delayed ripening
c) They were a form of the Cavendish banana
d) They may get a fifty-meals-a-gingerroot

Q39 In an environment, which of the following is abiotic component _____.

a) Soil
b) Water
c) Air
d) All

Q40 In B-form of DNA, one complete turn of the double helix corresponds to approximately _____.

a) 10 base pairs in the A-form
b) 10 base pairs in the B-form
c) 10 base pairs in the Z-form
d) 10 base pairs in the Z-form

Q41 Rithlhao ofiiho ik Ehe ow ef vnn ee?
ipu ibni ef ondl ee?

a) ow ifiyf ofiiho / ik Ehe ow ef vnn ee?
b) ipu ibni ef ondl ee? ow ifiyf ofiiho
c) ow ifiyf ik Ehe ow ef vnn ee?
d) ipu ibni ef ondl ee? ik Ehe ow ef vnn ee?

Q42 Which idea reflects Piaget's theory of cognitive development?

a) Children's cognitive development proceeds in stages
b) Children's cognitive development proceeds at a constant rate
c) Children's cognitive development proceeds at a variable rate

Q43 Which of the following is NOT correct regarding conjugation of bacteria?

a) Conjugation is a process in which one bacterium transfers genetic material to another bacterium through direct contact
b) Conjugation requires the bacteria to be in close contact
c) Conjugation does not require the bacteria to be in close contact
d) Conjugation is a process in which one bacterium transfers genetic material to another bacterium through direct contact

Q44 Which of the following types of alternation of generation is found in Polysiphonia?

a) Haplontic
b) Haplontic-diplontic
c) Diplontic-haplontic

Q45 What does the Bohr effect explain in terms of hemoglobin structure?

a) Hemoglobin's affinity to substrates
b) The effect of hydrogen ion concentration
c) Hemoglobin's affinity to oxygen is changed by the binding of substrates
d) Hemoglobin's affinity to oxygen is changed by the binding of hydrogen ions

Q46 Which of the following complexes exhibits coordination isomerism?

a) $[Co(NH_3)_6]Cl_3$
b) $[Co(NH_3)_5Cl]Cl_2$
c) $[Pt(NH_3)_4Cl_2]$
d) $[Pt(NH_3)_2Cl_2]$

Q47 Which of the following is a major application of tissue culture in agriculture?

a) Production of hybrid seeds
b) Increasing plant size only
c) Producing disease-free plants
d) Increasing plant color

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Exam Date: 4

Q1. _____ form of glibberrhine is commonly used in plant tissue culture.
(a) 1 only
(b) 2 only
(c) 1 and 2
(d) Neither 1 nor 2

Q2. Nessler's reagent is used for the estimation of _____.
(a) Urea
(b) Ammonia
(c) Chloride

Q3. On which day did Himachal Pradesh attain full statehood and become the 18th state of the Indian Union under the State of Himachal Pradesh Act, 1970?
(a) 15th August, 1971
(b) 25th January, 1971
(c) 15th April, 1971
(d) 15th May, 1971

Q4. In a certain code language, 'CLAP' is coded as 'THIZ' and 'LITE' is coded as 'WSM'. What is the code for 'L' in the given code language?
(a) T
(b) S
(c) Z
(d) I

Q5. The process of changing dissolved gases and volatile organic compounds from one water is known as _____.
(a) Aeration
(b) Degassing

Q6. For a three-component system (C = 3) in liquid-liquid equilibrium involving two liquid phases, L1 and L2, under atmospheric pressure (neglecting gravity and polarizing, the number of degrees of freedom is _____.
(a) 1
(b) 2
(c) 3
(d) 4

Q7. Which of the following is absent in the male gametophyte of Gymnosperms?
(a) Prothallial cells
(b) Tube nucleus
(c) Generative cell

Q8. Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which is the letter-cluster pair that DOES NOT belong to that group?
(Note: The odd one out is not based on the number of letters between the first letter and second letter in the letter cluster.)
(a) AD : HL
(b) BE : IM
(c) CF : JN
(d) DG : KO

Q9. Which of the following statements is true about enzyme-catalyzed reactions?
(a) Enzymes increase the activation energy of a reaction.
(b) Enzymes alter the chemical equilibrium of a reaction.
(c) Enzymes are not reusable.

Q10. Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which is the letter-cluster pair that DOES NOT belong to that group?
(Note: The odd one out is not based on the number of letters between the first letter and second letter in the letter cluster.)
(a) AC : FH
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Despite the _____ setting, the hiking trail proved to be difficult and striking to achieve success in her career.
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After years away from the company, John realised that his old colleagues had moved on and that he was long absent, soon forgotten.
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(a) 1 only
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Q.1) Who represented the Indian National Congress at the Round Table Conference, which took place in London in 1931?
Ans. (1)
(1) Jawahar Lal Nehru
(2) Mahatma Gandhi
(3) Sardar Vallabhbhai Patel

Q.2) हिन्द एवं सिंधु के संगम का शिलालेख किस स्थान पर स्थित है?
Ans. (1)
(1) हड़प्पा
(2) मोहनजोदड़ो
(3) लोथल
(4) धौलावीरा

Q.3) Match the following phases of ecological succession with their correct descriptions:
Phases	Descriptions
A. Nudation	I. Establishment of plants
B. Migration	II. Formation of unoccupied area
C. Ecesis	III. Arrival of new species
Ans. (1)
(1) A-II, B-III, C-I
(2) A-III, B-II, C-I
(3) A-II, B-I, C-III

Q.4) What is the primary focus of the PM SHRI Schools initiative?
Ans. (1)
(1) Promoting 10,000 schools that meet benchmarks aligned with 360° IDEAL
(2) Establishing new schools in rural areas only
(3) Offering scholarships solely to rural students for national education

Q.5) In selecting digital learning resources, what factor is essential beyond content accuracy?
Ans. (1)
(1) Cost-effectiveness for the school budget
(2) Alignment with student learning styles and needs
(3) Popularity and viral image sharing ability for marketing

Q.6) Which of the following temperatures is best suitable for the cultivation of sugarcane?
Ans. (1)
(1) 21°C to 27°C
(2) 10°C to 20°C
(3) 5°C to 10°C

Q.7) Which of the following is NOT an example of natural ecosystem?
Ans. (1)
(1) Tree Farm
(2) Forest
(3) Pond

Q.8) Which of the following statements is FALSE for carrying out artificial insemination in cattle via artificial insemination?
Ans. (1)
(1) Frozen semen is thawed at room temperature before insemination
(2) The semen should be kept cool at all times to maintain viability
(3) The straw should be held vertically with the sealed end pointing downwards

Q.9) Under which Article is the name Lagerstroemia sanctioned as the botanical name for the genus of trees that yield the timber Dhaw subfamilies Fabroideae (Papilionoideae), Caesalpinioideae and Mimosoideae?
Ans. (1)
(1) Article 3
(2) Article 4
(3) Article 5
(4) Article 6

Q.10) Which of the following statements about the Fe-protein component of Nitrogenase is correct?
Ans. (1)
(1) It is rich in Fe and S clusters
(2) It contains Mo
(3) It contains Mg

Q.11) Which principle of curriculum construction emphasizes the alignment of learning objectives and assessments directly with intended learning outcomes?
Ans. (1)
(1) Constructivist principle, encouraging learners to build knowledge through experience
(2) Backward design principle, starting with desired outcomes and planning assessments first
(3) Content coverage principle, prioritizing the quantity of information taught

Q.12) In incomplete metamorphosis, the immature stage is called
Ans. (1)
(1) Nymph
(2) Larva
(3) Pupa

Q.13) In which year did Himachal Pradesh become a Union Territory?
Ans. (1)
(1) 1956
(2) 1966
(3) 1971

Q.14) Which Constitutional Amendment placed education in the Concurrent List, allowing both the Union and the States to legislate on it?
Ans. (1)
(1) 41st Amendment
(2) 42nd Amendment
(3) 44th Amendment

Q.15) Which of the following adaptations is primarily responsible for a plant's ability to turn its head many 100 degrees?
Ans. (1)
(1) Flexible cell walls that can change shape easily
(2) Specialized cells called pulvini that control movement
(3) Roots that grow in search of water
(4) Stems in which the leaf is attached

Q.16) Which of the following statements best describes depression of freezing point?
Ans. (1)
(1) Adding a solute to a solvent increases the freezing point
(2) Adding a solute does not affect the freezing point
(3) Adding a solute makes it harder for a solvent to freeze
(4) Adding a solute makes it easier for a solvent to freeze

Q.17) Which of the following is INCORRECT about BI culture?
Ans. (1)
(1) It is performed in the Biochemistry
(2) It is in a sterilized tube
(3) It is done in a biological hood

Q.18) The adult Ascaris lumbricoides lives in which part of the human body?
Ans. (1)
(1) Large intestine
(2) Stomach
(3) Pancreas

Q.19) The cells responsible for creating water current and food capture in sponges are-
Ans. (1)
(1) Choanocytes
(2) Pinacocytes
(3) Porocytes

Q.20) Which of the following processes involves the denaturation of proteins?
Ans. (1)
(1) Cooking an omelette
(2) Mixing oil and water
(3) Freezing vegetables
(4) Boiling an egg

Q.21) Which of the following organisms act as the main decomposers in a forest ecosystem?
Ans. (1)
(1) Herbivores
(2) Fungi
(3) Carnivores

Q.22) Which of the following statements about bacterial flagellum is NOT correct?
Ans. (1)
(1) Flagellin protein is composed of hexagonal rings - Theta-L, rotation basal body
(2) Flagellum is composed of three parts: filament, hook, and basal body that anchors the flagellum to the cell wall
(3) Flagellum has a hook at the junction between the filament and basal body
(4) Bacteria have a region in the number and arrangement of flagella

Q.23) Which of the following statements about racemization is NOT correct?
Ans. (1)
(1) Racemization results in a product containing equal quantities of the enantiomers
(2) Racemization results in a product containing unequal quantities of the enantiomers
(3) Racemization can occur spontaneously or it can be catalyzed by the destruction of stereocenters

Q.24) Electronegativity is highest for elements that have:
Ans. (1)
(1) Low atomic mass
(2) High atomic radius
(3) Low ionization energy and high atomic affinity
(4) Low atomic radius (large)

Q.25) Which intermolecular force primarily affects the boiling point of nonpolar liquids?
Ans. (1)
(1) Covalent bonding between atoms
(2) Dipole-dipole interactions
(3) Ionic bonds between oppositely charged ions
(4) Dispersion forces from instantaneous dipoles

Q.26) What was one major change that came into effect when the Constitution was adopted?
Ans. (1)
(1) The Constitution of India replaced the Government of India Act 1935
(2) India's Parliament adopted British law without
(3) States lost all legislative powers

Q.27) Haemophilia is an example of which type of genetic disorder?
Ans. (1)
(1) Autosomal dominant
(2) Autosomal recessive
(3) X-linked recessive
(4) Y-linked

Q.28) Indigestion tablets (antacids) mainly consist of which substance?
Ans. (1)
(1) Strong acid
(2) Weak acid
(3) Weak base

Q.29) मैग्नीशियम धातु के दहनशील गुण का उदाहरण है-
Ans. (1)
(1) क्षार
(2) लवण
(3) ऑक्साइड
(4) जल

Q.30) In Periplaneta americana, which structural modification of the abdominal tergum facilitates movement and articulation with the thorax?
Ans. (1)
(1) Presence of hinged tergal and pleural plates
(2) Fusion of tergum with sternum
(3) Presence of a single, rigid tergum and sternum without hinge joints

Q.31) Which of the following types of organisms are infected by T-even bacteriophages?
Ans. (1)
(1) Virus
(2) Fungi
(3) Protist

Q.32) What is the process by which heat is transferred through direct contact between particles of a substance?
Ans. (1)
(1) Convection
(2) Radiation
(3) Conduction

Q.33) Using Woodward-Fieser rules, calculate the approximate absorption maximum wavelength (λmax) for an acyclic diene with base value = 214 nm, three alkyl substituents, and One exocyclic double bond.
Ans. (1)
(1) 214 nm
(2) 244 nm
(3) 274 nm
(4) 304 nm

Q.34) As of October 2025, into how many districts is Himachal Pradesh divided?
Ans. (1)
(1) 11
(2) 12
(3) 13
(4) 14

Q.35) Which of the following types of crosses can yield maximum degree of heterosis?
Ans. (1)
(1) Intervarietal cross
(2) Interspecific cross
(3) Intergeneric cross
(4) Intravarietal cross

Q.36) दूध से दही में दूषण/ लवण बनता है- क्या आई.आर. कार्य है? :-
Ans. (1)
(1) दूध आई.आर.
(2) दूध आई.आर.
(3) दूध आई.आर.

Q.37) Which monomers form the copolymer Lexan?
Ans. (1)
(1) Bisphenol A, Carbonate
(2) Ethylene, Terephthalate
(3) Phosgene, Chloroethene

Q.38) The wonder drug Penicillin was first extracted by Alexander Fleming from which organism?
Ans. (1)
(1) Penicillium rubrum
(2) Penicillium chrysogenum
(3) Penicillium notatum

Q.39) Which of the following best describes the role and origin of

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Question No : 1
Capsular Hydrostatic Pressure (CHP) is the Bowman's capsule?

Question Type : MCQ
Question Id : 4111000001
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ It opposes the glomerular filtration pressure
Q.2 It is present the space filled with urine from the collecting duct
Q.3 It is present the space between the glomerular capillaries and Bowman's capsule
Q.4 It is the osmotic pressure that keeps water in the blood and does not allow the plasma

Question No : 2
For a reaction $\Delta H^\circ = -180 \pm 3$ kJ mol^{-1} and $\Delta S^\circ = +70 \pm 2$ mol^{-1} K^{-1}, determine the minimum temperature (in K) above which the reaction becomes spontaneous (±0.1 K).

Question Type : MCQ
Question Id : 4111000002
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.2 ✓ 2.6 K
Q.3 2.5 K
Q.4 2.4 K

Question No : 3
Which of the following characteristics is unique to mammals among vertebrates?

Question Type : MCQ
Question Id : 4111000003
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.3 ✓ Presence of a four-chambered heart
Q.4 Presence of a diaphragm

Question No : 4
Which of the following statements about freezing point depression is INCORRECT?

Question Type : MCQ
Question Id : 4111000004
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Freezing point depression causes the freezing of solvent (ionone perfume)
Q.2 Freezing point depression is used to determine the molecular weight of solutes
Q.3 It is directly proportional to molality

Question No : 5
The heart is enclosed in a double-layered sac called:

Question Type : MCQ
Question Id : 4111000005
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.2 ✓ Pericardium
Q.3 Peritoneum
Q.4 Mesentery

Question No : 6
Which state is the largest producer of sugarcane in India?

Question Type : MCQ
Question Id : 4111000006
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Tamil Nadu
Q.2 Uttar Pradesh
Q.3 Odisha

Question No : 7
Which of the following is NOT typically a use of ICT in a Primary School classroom?

Question Type : MCQ
Question Id : 4111000007
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Creating graphs and spreadsheets
Q.2 ✓ Conducting virtual experiments

Question No : 8
Which law explains the lowering of vapour pressure when a non-volatile solute is dissolved in a solvent?

Question Type : MCQ
Question Id : 4111000008
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Henry's law
Q.2 Dalton's law
Q.3 ✓ Raoult's law
Q.4 Boyle's law

Question No : 9
Which of the following compositions is closest to that of a typical gem-quality pegmatite?

Question Type : MCQ
Question Id : 4111000009
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ 30% silica minerals, 10% aluminum, 10% feldspar, 10% mica, 40% water
Q.2 50% silica minerals

Question No : 10
Which of the following statements about sp3 hybridization is NOT correct?

Question Type : MCQ
Question Id : 4111000010
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Trigonal planar geometry of hybridized orbitals is quite common
Q.2 Hybridization is the mixing of atomic orbitals to form new orbitals
Q.3 The number of hybrid orbitals formed is equal to the number of atomic orbitals mixed
Q.4 The bond angle in perfect sp3 hybridization is approximately 109°

Question No : 11
The resting membrane potential of a typical neuron is approximately:

Question Type : MCQ
Question Id : 4111000011
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 -70 mV
Q.2 ✓ -90 mV
Q.3 0 mV

Question No : 12
Almachal Pradesh lies approximately between which of the following latitudes and longitudes?

Question Type : MCQ
Question Id : 4111000012
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ 28°20'N to 33°40'N and 77°45'E to 79°04'E
Q.2 28°20'N to 33°40'N and 79°04'E to 81°01'E
Q.3 31°20'N to 36°40'N and 77°45'E to 79°04'E
Q.4 31°20'N to 36°40'N and 79°04'E to 81°01'E

Question No : 13
Which of the following factors is NOT responsible for determining the type of species in a sand stage during plant succession?

Question Type : MCQ
Question Id : 4111000013
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Temperature
Q.2 Soil texture and water
Q.3 ✓ Amount of litter

Question No : 14
How does language contribute to the development of students' metacognitive skills?

Question Type : MCQ
Question Id : 4111000014
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Through opportunities to articulate thinking and learning
Q.2 By focusing on memorization of vocabulary and rules of pronunciation
Q.3 By encouraging rote memorization as a key component of learning
Q.4 By prioritizing correct grammar and sentence construction over fluency

Question No : 15
According to the constructivist perspective, how do students learn most effectively?

Question Type : MCQ
Question Id : 4111000015
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ By actively constructing their own understanding through hands-on engagement
Q.2 By passively receiving information from the teacher
Q.3 By memorizing facts and procedures
Q.4 By following a strict curriculum

Question No : 16
Evaluate the Assertion (A) and Reason (R) based on facts and define the relationship between both.

(A) Cyclonations can rearrange to form more stable carbocations during a reaction mechanism.
(R) Migration of alkyl or hydride groups from adjacent atoms to positive-like centers can stabilize the carbocation.

Question Type : MCQ
Question Id : 4111000016
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Both A and R are true and R is the correct explanation of A
Q.2 ✓ Both A and R are true but R is not the correct explanation of A
Q.3 A is true but R is false
Q.4 Both A and R are false and R is not the correct explanation of A

Question No : 17
Which of the following statements correctly describes benzene?

Question Type : MCQ
Question Id : 4111000017
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 It undergoes addition reactions easily
Q.2 It is a non-polar, colorless, gaseous hydrocarbon
Q.3 ✓ It contains only alternating single and double bonds
Q.4 It is a flat, non-polar molecule with delocalized electrons

Question No : 18
निम्नलिखित में से कौन सबसे कठोर खनिज है?

Question Type : MCQ
Question Id : 4111000018
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ टोपाज़
Q.2 क्वार्ट्ज़
Q.3 फेल्डस्पार
Q.4 कोरंडम

Question No : 19
Which type of flight is characterized by minimal wing flapping and maximum wing extension?

Question Type : MCQ
Question Id : 4111000019
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Soaring flight
Q.2 Flapping flight
Q.3 Hovering flight

Question No : 20
The following option shows that the tetrahydramous condition is due to a ____.

Question Type : MCQ
Question Id : 4111000020
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Double Crossover
Q.2 ✓ Crossover in one strand and Cross linkage
Q.3 Crossover in both strands
Q.4 Crossover, Cross strand and Cross linkage

Question No : 21
Which statement best represents the dynamic relationship between disciplines and school subjects?

Question Type : MCQ
Question Id : 4111000021
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Disciplines are static bodies of knowledge unaffected by school subjects
Q.2 ✓ Disciplines and school subjects continuously influence each other
Q.3 School subjects are created independently of disciplines
Q.4 Disciplines are only relevant in higher education, not in schools

Question No : 22
The hormone that stimulates secretion of pancreatic juice rich in bicarbonate is

Question Type : MCQ
Question Id : 4111000022
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Cholecystokinin
Q.2 ✓ Secretin
Q.3 Gastrin
Q.4 Enterogastrone

Question No : 23
Which of the following characteristics is NOT an adaptation in tall stream fishes to survive in fast flowing hill stream environments?

Question Type : MCQ
Question Id : 4111000023
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Streamlined body with a dorsoventrally depressed head and flattened ventral surface
Q.2 Adhesive suckers or ventral sucker-shaped fins for attachment to rocky substrates
Q.3 ✓ Presence of a swim bladder for buoyancy control
Q.4 A laterally compressed body with a deep caudal fin

Question No : 24
Which of the following body symmetries is primarily seen in sponges?

Question Type : MCQ
Question Id : 4111000024
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 Bilateral symmetry
Q.2 Radial symmetry
Q.3 ✓ Asymmetry
Q.4 Biradial symmetry

Question No : 25
The xanthelate endosulfation is primarily derived from which of the following?

Question Type : MCQ
Question Id : 4111000025
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Xylose
Q.2 Glucose
Q.3 Fructose

Question No : 26
Which statement correctly explains the Intertropical Convergence Zone (ITCZ)?

Question Type : MCQ
Question Id : 4111000026
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 It is a region where cold polar winds meet warm tropical winds
Q.2 ✓ It is a region where the trade winds from both hemispheres converge
Q.3 It is a region where the westerlies and trade winds meet
Q.4 It is a region where monsoon winds change direction

Question No : 27
Which experimental observation first supported Werner's theory of a fixed spatial arrangement (secondary valency) in complexes?

Question Type : MCQ
Question Id : 4111000027
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 The magnetic moment of $[Ni(CN)_4]^{2-}$
Q.2 ✓ The isomerism in $[Co(NH_3)_4Cl_2]^+$
Q.3 The conductivity behavior of $[Co(NH_3)_6]Cl_3$
Q.4 The molecular behavior of $[Co(NH_3)_6]Cl_3$

Question No : 28
निम्नलिखित संख्या को पद रूप में लिखिए: तीन सौ तिरानवे (393) का सही विकल्प चुनें।

Question Type : MCQ
Question Id : 4111000028
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ तीन सौ तिरानवे
Q.2 तीन सौ तेरानवे
Q.3 तीन सौ तिरानवें
Q.4 तीन सौ तेरानवें

Question No : 29
Which compounds can show geometrical isomerism?

Question Type : MCQ
Question Id : 4111000029
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 $[Co(NH_3)_6]Cl_3$
Q.2 ✓ $[Co(NH_3)_4Cl_2]^+$
Q.3 $[Co(NH_3)_5Cl]^{2+}$
Q.4 $[Co(NH_3)_3Cl_3]$

Question No : 30
The smallest part of an antigen that binds to the antibody is known as:

Question Type : MCQ
Question Id : 4111000030
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Epitope
Q.2 Paratope
Q.3 Hapten
Q.4 Idiotype

Comprehension:
Read the following passage and answer the given questions. Books shape human life in many ways. They can be a source of joy, as others sharpen reasoning and critical thinking, and a few simply offer pity and pure pleasure. Yet, not every book deserves the same kind of attention. Some are like calories. To be tasted quickly and forgotten soon after. Others are like wholesome meals. To be swallowed and enjoyed. And a few rare must be chewed slowly and digested, for they contain profound wisdom and timeless truth. Reading alone, however, is not enough; it must influence and refine the mind. Books are the silent companions of the wise, who learn, and how to use it always. A truly well-read person thinks clearly, judges rightly, and applies knowledge with purpose. Therefore, reading is not just a habit but a responsibility.

What is the closest synonym of "precise" as used in the passage?

Question Type : MCQ
Question Id : 4111000031
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Accurate
Q.2 Vague
Q.3 Simple
Q.4 Quick

Comprehension:
Read the following passage and answer the given questions. Books shape human life in many ways. They can be a source of joy, as others sharpen reasoning and critical thinking, and a few simply offer pity and pure pleasure. Yet, not every book deserves the same kind of attention. Some are like calories. To be tasted quickly and forgotten soon after. Others are like wholesome meals. To be swallowed and enjoyed. And a few rare must be chewed slowly and digested, for they contain profound wisdom and timeless truth. Reading alone, however, is not enough; it must influence and refine the mind. Books are the silent companions of the wise, who learn, and how to use it always. A truly well-read person thinks clearly, judges rightly, and applies knowledge with purpose. Therefore, reading is not just a habit but a responsibility.

Which line from the passage best supports the main idea?

Question Type : MCQ
Question Id : 4111000032
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ "Books shape human life in many ways."
Q.2 "Some are like calories."
Q.3 "Reading alone, however, is not enough."
Q.4 "A truly well-read person thinks clearly."

Comprehension:
Read the following passage and answer the given questions. Books shape human life in many ways. They can be a source of joy, as others sharpen reasoning and critical thinking, and a few simply offer pity and pure pleasure. Yet, not every book deserves the same kind of attention. Some are like calories. To be tasted quickly and forgotten soon after. Others are like wholesome meals. To be swallowed and enjoyed. And a few rare must be chewed slowly and digested, for they contain profound wisdom and timeless truth. Reading alone, however, is not enough; it must influence and refine the mind. Books are the silent companions of the wise, who learn, and how to use it always. A truly well-read person thinks clearly, judges rightly, and applies knowledge with purpose. Therefore, reading is not just a habit but a responsibility.

Which of the following is NOT mentioned in the passage?

Question Type : MCQ
Question Id : 4111000033
Option 1 : 4111000001
Option 2 : 4111000002
Option 3 : 4111000003
Option 4 : 4111000004
Option Order : Random
Status : Answered

Q.1 ✓ Books can be a source of pain
Q.2 Some books are like calories
Q.3 Reading alone is not enough
Q.4 A well-read person thinks clearly

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