Padasalai’s Telegram Groups!

(தமிழ்நாடு குடியிருப்பு விளையாட்டு குறிப்பிட்டு வந்துள்ளது விளக்கமும்!)

- Padasalai's NEWS - Group
  https://t.me/joinchat/NlfCqVRBNj9hhV4wu6_NqA

- Padasalai's Channel - Group
  https://t.me/padasalaichannel

- Lesson Plan - Group
  https://t.me/joinchat/NlfCqVWwo5iL-21gpzrXLw

- 12th Standard - Group
  https://t.me/Padasalai_12th

- 11th Standard - Group
  https://t.me/Padasalai_11th

- 10th Standard - Group
  https://t.me/Padasalai_10th

- 9th Standard - Group
  https://t.me/Padasalai_9th

- 6th to 8th Standard - Group
  https://t.me/Padasalai_6to8

- 1st to 5th Standard - Group
  https://t.me/Padasalai_1to5

- TET - Group
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- PGTRB - Group
  https://t.me/Padasalai_PGTRB

- TNPSC - Group
  https://t.me/Padasalai_TNPSC
A glue called 'funori' is obtained from:

A: Gloeopeltis furcata

B: Ulva lactuca

C: Polysiphonia fastigiata

D: Chondrus crispus

Correct Alternative: - A

2

Match the following:

(a) Budding (i) Erysiphe
(b) Oidia (ii) Saccharomyces
(c) Aethalina (iii) Colletotrichum
(d) Conidia (iv) Fuligo

A: (a)-(iii), (b)-(i), (c)-(iv), (d)-(ii)
(b)-(i), (c)-(iv), (d)-(ii)
(c)-(ii), (b)-(i), (d)-(iv), (d)-(ii)
(d)-(i), (b)-(iv), (c)-(ii), (d)-(i)

Correct Alternative: - C
A lichen 'Letharia Vulpinus' is commonly called:

A: Reindeer moss
B: Wolf moss
C: Peat moss
D: Irish moss

Correct Alternative :- B

In Lichen, Hamathecial element that originate above the asci and grow downwards are called:

A: Paraphyses
B: Basidium
C: Periphysoids
D: Periphyses

Correct Alternative :- C

In Bergy's classification of Bacteria, the phylum 'Firmicutes' include:

A: High G+C Gram Positive Bacteria
B: Low G+C Gram Positive Bacteria
C: High G+C Gram Negative Bacteria
D: Low G+C Gram Negative Bacteria
Correct Alternative :- B

The out growths produced on the lower surface of the leaves infected by virus is called:

A: Lesions
B: Tumours
C: Enations
D: Phyllody

Correct Alternative :- C

'Pin-wheel type' intracellular inclusions are characteristic of:

A: Fungal infection
B: Viral infection
C: Mycoplasma infection
D: Bacterial infection

Correct Alternative :- B

Rice Tungro virus is transmitted by:

A: Nephotettix virescens
B: Toxoptera citricida
C: Bemisia tabaci
D: Graminella nigrifrons
9. Which of the following viruses are also known as stylet-borne viruses?

Correct Alternative :- A

A: Propagative viruses
B: Circulative viruses
C: Non persistent viruses
D: Persistent viruses

10. The algal viruses were first identified by:

Correct Alternative :- C

A: Diamond and Mattern
B: Stanley pruisner
C: Safferman and Morris
D: Hollings

11. Gene for gene hypothesis for host-parasite interaction was proposed by:

Correct Alternative :- C

A: Ainsworth
B: Flor
C: Horsfall
12. Identify the incorrect statement:

A: α - fever is a milk borne disease
B: Brucellosis is a blood - disease
C: 'Tofu' is a food borne disease
D: Greening of meat surface is due to Leuconostoc

Correct Alternative : C

13. Which of the following is a Soil fumigant?

A: Phorate
B: Aldicarb
C: Chloropicrin
D: Carbofuran

Correct Alternative : C

14. Living Araucariaceae members are distributed in:

A: Southern hemisphere
B: Northern hemisphere
C: North America
Which of the following are deciduous gymnosperms?

A: Larix and Taxodium

B: Cycas and Larix

C: Agathis and Podocarpus

D: Araucaria and Cycas

Correct Alternative: A

Match the following:

(a) Oleoresin  (i) Agathis
(b) Copal     (ii) Abies
(c) Sandarac  (iii) Pinus
(d) Canada balsam (iv) Callitris

A: (a)-(iii), (b)-(i), (c)-(iv), (d)-(ii)
B: (a)-(iii), (b)-(i), (c)-(iv), (d)-(ii)
C: (a)-(i), (b)-(iii), (c)-(iv), (d)-(ii)
D: (a)-(ii), (b)-(iv), (c)-(iii), (d)-(i)
   (a)-(ii), (b)-(iv), (c)-(iii), (d)-(i)

Correct Alternative :- A

Match the following and choose the best answer:

<table>
<thead>
<tr>
<th>Plant</th>
<th>Special character</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Lagerstroemia</td>
</tr>
<tr>
<td>(b)</td>
<td>Lawsonia</td>
</tr>
<tr>
<td>(c)</td>
<td>Ammania</td>
</tr>
<tr>
<td>(d)</td>
<td>Atropa</td>
</tr>
</tbody>
</table>

A: (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)
   (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)
B: (a)-(iii), (b)-(ii), (c)-(iv), (d)-(i)
   (a)-(iii), (b)-(ii), (c)-(iv), (d)-(i)
C: (a)-(iii), (b)-(ii), (c)-(i), (d)-(iv)
   (a)-(iii), (b)-(ii), (c)-(i), (d)-(iv)
D: (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)
   (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)

Correct Alternative :- A

Match Column - I with Column - II and choose the right option:

<table>
<thead>
<tr>
<th>Column - I</th>
<th>Column - II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Daven Port</td>
<td>(i) ABO Blood groups</td>
</tr>
<tr>
<td>(b) Nilson - Ehle</td>
<td>(ii) Earlength in maize</td>
</tr>
<tr>
<td>(c) Landsteiner</td>
<td>(iii) Skin colour in man</td>
</tr>
<tr>
<td>(d) Emmerson and East</td>
<td>(iv) Kernel colour in wheat</td>
</tr>
</tbody>
</table>

Correct Alternative :- A
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Petites are formed as a result of Extra - nuclear Inheritance in Mitochondria by:  

A: Neurospora  

Correct Alternative :- A
21. If the total amount of Adenine and Thymine nucleotides in the DNA of a cell amount to 60%, what will be the percentage of Cytosine?

- A: 30%  
- B: 20%  
- C: 40%  
- D: 60%

Correct Alternative: B

22. Copia Elements in Drosophila are examples of:

- A: Operons  
- B: Transposons  
- C: Retroposons  
- D: Cosmids

Correct Alternative: B

23. The type of Histone protein is not an integral part of the nucleosome is:

- A: H2A
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H2A  
B: H2B  
H2B  
C: H3  
H3  
D: H1  
H 1

Correct Alternative :- D

24  
The shoot apex was first recognised by:  
தெசலா நேக்லி மீது மேலூர் கன்னிகைது:

A: Nageli in 1878  
நேக்லி 1878 ஆண் ஆண்டி  
B: Hanstein in 1868  
ஹான்ஸ்டைன் 1868 ஆண் ஆண்டி  
C: Schmidt in 1924  
ச்ச்மிட்ட் 1924 ஆண் ஆண்டி  
D: Wolff in 1759  
வால்ஃப் 1759 ஆண் ஆண்டி

Correct Alternative :- D

25  
Vessels are absent in __________.  
வெசல்கள் பொதும் கம்பநாட்டில் காணப்பட்டு கொள்ளாதா?

A: Equisetum  
சேருமைப்பிள்ளை  
B: Trochodendron  
தோற்றேண்டுரொம்  
C: Selaginella  
சேலாகினேலா  
D: Gnetum  
கேனும்

Correct Alternative :- B
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Match the following :  
(a) Cellulose  (i)  Safranin  
(b) Chromosome  (ii)  Eosin  
(c) Cytoplasm  (iii)  Carmine  
(d) Lignin  (iv)  Calcofluor white  

A:  (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)  
B:  (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)  
C:  (a)-(iv), (b)-(i), (c)-(iii), (d)-(i)  
D:  (a)-(i), (b)-(iii), (c)-(iv), (d)-(ii)  

Correct Alternative :- A  

Ruminate endosperm is formed by the activity of seed coat in :  

A:  Oryza  
B:  Coccoloba  
C:  Elytraria  
D:  Passiflora  

Correct Alternative :- D
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Match the following:
(a) Perisperm (i) Myristica
(b) Caruncle (ii) Piper
(c) Aril (iii) Cyanastrum
(d) Chalazosperm (iv) Ricinus

A: (a)-(i), (b)-(iii), (c)-(iv), (d)-(i)
A: (a)-(i), (b)-(iii), (c)-(iv), (d)-(i)
B: (a)-(iii), (b)-(ii), (c)-(iv), (d)-(i)
B: (a)-(iii), (b)-(ii), (c)-(iv), (d)-(i)
C: (a)-(ii), (b)-(iv), (c)-(i), (d)-(iii)
C: (a)-(ii), (b)-(iv), (c)-(i), (d)-(iii)
D: (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)
D: (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)

Correct Alternative :- C

Which of the statements is not true?
(a) Osmotic pressure is measured in terms of atmosphere.
(b) Osmotic pressure is inversely proportional to the concentration of dissolved solutes in the solution.
(c) Osmotic pressure of solution is always higher than its pure solvent.
(d) Osmotic pressure does not increase by the addition of soluble solute in the solution.

A: (a) and (b) only
B: (b) only

A: பொருள் (d) மைல்வாய்வு
B: பொருள் (c) மைல்வாய்வு
Rieske Centre is the other name for:

A: PS I
   PS I
B: PS II
   PS II
C: Cytochrome b_{6-f} complex
   காரியத்தூரியம் b_{6-f} கார்க்கள் கார்காளிகள்
D: A \& Pase
   A \& பேஸேன்

Correct Alternative :- C

Smoke of burning plant material contain a hormone called:

A: Strigolactone
   சிரியூலக்டோன்
B: Brassinosteroids
   பிராச்சினோஸ்டோரோய்ட்ஸ்
C: Zea xanthin
   கேயா காங்கிடியன்
D: Karrikins
   கார்க்கில்கைன்

Correct Alternative :- D

The percentage of water that a saturated soil can hold against certain centrifugal force is referred as:

A: Water holding capacity
   வாய்ப்பாடு காணப்பட வாய்ப்பாடு
B: Field capacity
   பிள்ளை காணப்பட வாய்ப்பாடு
Homeostasis is:

A: Disturbance of self regulatory system and natural control.
B: Tendency of biological system to remain unchanged.
C: Tendency of biological system to resist change.
D: Disturbance of regulatory factors of ecosystem and its control.

Correct Alternative :- C

Which of the following is true about the Continental drift theory?

A: Continents of the earth were once large mass that broke into large sections and drifted apart.
B: During Paleozoic and much of the Mesozoic the present continents were grouped into Laurasia and Gondwana.
C: In the Jurassic the land masses fragmented and the fragments drifted apart.
D: All of these

Correct Alternative :- D

The earthy odour of the soil after the rain is due to:

A: Bacteria and fungi
B: Molds and mildews
C: Fungi
D: All of these

Correct Alternative :- A
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Sheath blight of rice is caused by :

A: Rhizoctonia solani
B: Drechslera oryzae
C: Magnaporthe grisea
D: Tilletia caries

Correct Alternative :- A

Winged pollens occur in :

A: Cryptomeria
B: Cupressus
C: Podocarpus
D: Taxodium

Correct Alternative :- C

Host specific toxin is :

A: Geosmin
B: Alanine
C: Lectin
D: Quinine

Correct Alternative :- A
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A: Victorin

B: Tabtoxin

C: Phaseotoxin

D: Coronatine

Correct Alternative :- A

Sterile flask shaped structures borne on primary branches of Sargassum are:

A: Cnidoblasts

B: Gomphoblasts

C: Cystocarps

D: Cryptoblasts

Correct Alternative :- D

The vacuolar membrane is called:

A: Symplast

B: Tonoplast

C: Apoplast

D: Phragmoplast

Correct Alternative :- B

Which of the following have tetrasporic type of gametophyte development?

A: Sargassum

B: Phragmoplast

C: Crypto carps

D: Cnidoblasts

Correct Alternative :- B
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42
A: Oenothera
B: Allium
C: Endymion
D: Penaeas

Correct Alternative :- D

43
A: Alburnum
B: Duramen
C: Compression wood
D: Tension wood

Correct Alternative :- A

44
A: Mannan - chitin
B: polygalacturosamine - galacton
C: Chitosan - chitin
D: N-acetylglosamine - N-acetyl muramic acid

Correct Alternative :- D
A: Pithomyces chartarum
   பின்விக்கல் சார்யாகும்

B: Penicillium expansum
   பெனிஸ்சிலியம் எப்பார்வங்கும்

C: Aspergillus flavus
   ஆஸ்பர்ஜலியஸ் எவ்வலும்

D: Fusarium roseum
   புச்சார்யம் போச்சைனைம்

Correct Alternative :- C

45
Which of the following statement about Funaria is correct?

A: Antheridia and archegonia are formed on different branches on same gametophore
   ஆன்தோரியியம் அர்ஸ்ரேமியம் என்னும் கமெடோபோர் பார்வுகளன் ஒரு கனம் இன்விப்பு
   கிரியையாகச் செய்யும்

B: Rhizoids are unicellular
   ரைஸ்கோய்சுகள் செல்வெளிக்கும்

C: Dioecious plants
   டொயெசியூஸ் புல்லங்கள்

D: Protonema absent
   ப்ரோட்டோனேமா அஸ்திதிய

Correct Alternative :- A

46
Which of the following is not correct pair?

A: Orthotropous ovule - Polygonaceae
   ஓர்தோட்ரோப் போளியையும் - பொலிஜ்நியேசே

B: Anatropous ovule - Piperaceae
   அனாட்ரோப் போளியையும் - பிப்ரேசே

C: Campyloptropous ovule - Capparidaceae
   கம்பெலோப்டோப் போளியையும் - கப்பாரியேசே

D: Circinotropous ovule - Cactaceae
   செட்டியொட்டோப் போளியையும் - காஸ்தேசே

Correct Alternative :- B

47
Which of the following are used as clearing agents in paraffin method?
In calotropis, the inflorescence is called cymose because the flowers are arranged:

A: aeropetally

B: basipetally
The phenomenon of double fertilization was first observed by:

A: Russell
B: Cass
C: Jensen
D: Nawaschin

Correct Alternative: - D

Branched, thin walled hair-like sclereids are called ........

A: Filiform sclereid

Correct Answer: Filiform Sclereid
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53 Which of the following method is not used in maceration?  
பிற்பான்மையான மத்தை பலிக்கியவுழைப்படுள் பாகமுற்னி?  

A: Schultzes method  
குலவாய் (பலகை)  
B: Feulgen method  
பூபாலு (பலகை)  
C: Jeffrey's method  
ஜெர்ரீயிய் (பலகை)  
D: Harlow's method  
ஹர்லோவ் (பலகை)  

Correct Alternative :- B

54 Sigatoka leaf spot disease of Banana is caused by:  
சிகாட்கா எல்லை ப்ளே காய்ப்பட்டி சோடியை எழுப்பிக் கையில் ஏது?  

A: Guignardia bidewelli  
கிழுந்தவாய் பிலவ்யைநூல்  
B: Ceratocystis fimbriata  
செரடூச்சிஸ் டிம்ப்ரிதா பிலவ்யைநூல்  
C: Mycosphaerella musicola  
முக்ஸ்பேர்லா மூசிக்கால பிலவ்யைநூல்  
D: Taphrina deformans  
தாப்ரினா டெஃபோர்மன்ஸ்  

Correct Alternative :- C

55 Which of these are dioecious bryophytes?  
எனினும் இவை பலிக்கியவுழைப்படுள் பாகமுற்னி?  

A: Polytrichum and Marchantia  
பலோட்ரிசம் மற்றும் மார்சாங்டியா
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B: Marchantia and Funaria

C: Pogonatum and Funaria

D: Funaria and Polytrichum

Correct Alternative :- A

According to histogen theory, periblem forms ________.

A: Epidermis

B: Pith

C: Cortex

D: Central cylinder

Correct Alternative :- C

Which of these monocots have secondary growth?

A: Yucca

B: Aloe

C: Dracaena

D: All of these

Correct Alternative :- D

Consider the statements about Riccia.

(a) Monoecious only
(b) Thallus is differentiated into photosynthetic and storage regions.
(c) Both smooth and tuberculate rhizoids present.
(d) Sporophyte differentiate into foot, seta and capsule

Correct Alternative :- C
(a) பாதம் பாதம்
(b) ஹோலோடிமான் பாதம் கூட்டு செய்ய மற்றும் ஹோலோடிமான் பாதம்.
(c) கூட்டு பாதம் கூட்டு செய்ய மற்றும் ஹோலோடிமான் பாதம்.
(d) பாதம், மற்றும் ஹோலோடிமான் செய்ய மற்றும் ஹோலோடிமான் பாதம்.

A: (a) and (d) are correct
B: (b) and (d) are correct
C: (b) and (c) are correct
D: (c) and (d) are correct

Correct Alternative :- C

The specimen designated by the author as the nomenclatural type is called:

A: Topotype
B: Paratype
C: Isotype
D: Holotype

Correct Alternative :- D

Which of the following is a non-motile coenobial form?

A: Gonium
B: Eudorina
C: Pandorina
D: Pediastrum
Correct Alternative :- D

The mode of development of gametophyte in heterosporous pteridophyte is _________.

A: Exoscopic
   எக்ஸோச்போரிக்
B: Endoscopic
   எந்தோச்போரிக்
C: Exosporic
   எக்ஸோபோரிக்
D: Endosporic
   எந்தோச்போரிக்

Correct Alternative :- D

Which of these is not a function of smooth Endoplasmic Reticulum ?

A: Protein synthesis
   போர்ட்னேட்டு செமைட்டேக்கைக்
B: Lipid Metabolism
   சுருளுக்கோறை மேரிச்சம் செமைட்டேக்கை
C: Glycogenolysis
   கர்கிள்க் பல்பைசைக்
D: Drug Detoxification
   பேரைப்பாடல் செமைட்டேக்கை

Correct Alternative :- A

Which of these grows entirely submerged in water ?

A: Riccia
   ரிக்சியா
B: Riella
   ரியேல்லா
C: Porella
   பொரேல்லா
D: Frullania
   ஫ிருல்லானியா
Correct Alternative :- B

Fern, completely without lamina in leaves:

A: Marsilea
B: Regnellidium
C: Pilularia
D: Azolla

Correct Alternative :- C

Coenocytic mycelium is found in:

A: Pezize
B: Penicillium
C: Colletotrichum
D: Albugo

Correct Alternative :- D

Identify the correctly matched pair:

A: Taxodiaceae - Agathis
B: Cupressaceae - Sequoia
C: Araucariaceae - Thuja
D: Pinaceae - Cedrus
Correct Alternative :- D

Identify the correctly matched pair:

Correct Alternative :- D

Deamination is caused by:

Correct Alternative :- C

Match Column - I with Column - II and choose the right answer:

<table>
<thead>
<tr>
<th>Column - I</th>
<th>Column - II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Robert Holley</td>
<td>(i) DNA Sequencing</td>
</tr>
<tr>
<td>(b) Jacob and Monad</td>
<td>(ii) Alanyl t-RNA</td>
</tr>
<tr>
<td>(c) Khurana and Nuremberg</td>
<td>(iii) DNA Replication</td>
</tr>
<tr>
<td>(d) Arthur Kornberg</td>
<td>(iv) Cracking genetic code</td>
</tr>
<tr>
<td>(e) Fredrick Sanger</td>
<td>(v) Operon model</td>
</tr>
</tbody>
</table>
DNA polymerase - I was isolated by:

A: (a)-(ii), (b)-(v), (c)-(iv), (d)-(iii), (e)-(i)
   (a)-(ii), (b)-(v), (c)-(iv), (d)-(iii), (e)-(i)
B: (a)-(ii), (b)-(v), (c)-(i), (d)-(iii), (e)-(iv)
   (a)-(ii), (b)-(v), (c)-(i), (d)-(iii), (e)-(iv)
C: (a)-(ii), (b)-(v), (c)-(iv), (d)-(i), (e)-(iii)
   (a)-(ii), (b)-(v), (c)-(iv), (d)-(i), (e)-(iii)
D: (a)-(v), (b)-(ii), (c)-(iv), (d)-(i), (e)-(ii)
   (a)-(v), (b)-(ii), (c)-(iv), (d)-(i), (e)-(ii)

**Correct Alternative :- A**

DNA polymerase - I was isolated by:

DNA பொலியெராசேஸ் - I என்று பொருத்திக்கொள்ளப்பட்டு:

A: Okazaki Zaki
   ஒகாசற்குழி
B: Fleming
   ப்ளெமிங்
C: Arthur Kornberg
   ஆர்சர் கொர்ந்பர்க்
D: Sturtevant
   ஸ்டூட்டேவன்

**Correct Alternative :- C**
Match the following:
(a) Tikka disease of groundnut (i) Albyes candida
(b) Powdery mildew of cucurbits (ii) Erysiphe chioracearnum
(c) White rust of crucifers (iii) Cercospora personata
(d) Brown root of potato (iv) Pseudomonas solanaceanum

A: (a) - (iv), (b) - (i), (c) - (ii), (d) - (iii)
 (a) - (iv), (b) - (i), (c) - (ii), (d) - (iii)
B: (a) - (iii) (b) - (i), (c) - (i), (d) - (iv)
(a) - (iii), (b) - (i), (c) - (i), (d) - (iv)
C: (a) - (iii), (b) - (ii), (c) - (iv), (d) - (i)
(a) - (iii), (b) - (ii), (c) - (iv), (d) - (i)
D: (a) - (iv), (b) - (iii), (c) - (i), (d) - (ii)
(a) - (iv), (b) - (iii), (c) - (i), (d) - (ii)

Correct Alternative :- B

The best described floral formula of *Michelia Champaca* is:

A: 

\[ \begin{align*}
&\text{♀} \\
&\text{♀} \\
&P_{10} A_{10} G_{10}
\end{align*} \]
The correct sequence involved in the multiplication of Bacteriophage is:

A: Adsorption, synthesis, replication, penetration, maturation, release

B: Adsorption, replication, penetration, maturation, synthesis, release

C: Adsorption, penetration, synthesis, replication, maturation, release

D: Adsorption, synthesis, penetration, replication, maturation, release

Correct Alternative: - C
If a pure breeding grey seeded pea plant is crossed with a pure breeding white seeded one, in the F₂ generation 705 grey seeded and 224 white seeded plants were obtained. What is the ratio of white and grey seeded plants?

A: 1 : 2 : 1
B: 3 : 1
C: 1 : 3
D: 2 : 1

**Correct Alternative:** C

An algal family which lack sexual reproduction:

A: Coleschactaceae
B: Stigonemataceae
C: Laminaceae
D: Caulerpaceae

**Correct Alternative:** B

Which of the following statement is correct for *Vaucheria*?

A: It belongs to Rhodophyceae
B: Sexual reproduction is Isogamous
C: Produce multiflagellate zoospores
D: Produce auxospores

Correct Alternative : C

According to Bentham and Hooker's system of classification:
Statement (I) : Polypetalae, Gamopetalae and Monochlamydeae are the 3 classes of seed plants.
Statement (II) : The Gymnosperms are not subdivided into subclasses or series, but include only 3 Natural orders.

A: Both the statements are correct

B: Statement (I) only is correct

C: Statement (II) only is correct

D: Both the statements are false

Correct Alternative : C

The fungal partner in 98% of lichen thallus belongs to:

A: Ascomycetes

B: Basidiomycetes

C: Deuteromycetes

D: Chytridimycetes

Correct Alternative : A

In Euphorbia, the inflorescence is a cyathium which in its middle has:

A: a single female flower with tricarpellary gynoecium

Correct Alternative : A
The procedure which gives a precise method of calculating geologic time is based on:

A: Carbon dating
Microfossils are those which require a compound microscope for their study. They include:

A: leaves and seeds
B: leaves and woods
C: seeds and fruts
D: pollen and spores

Correct Alternative :- D

G.H. Shull (1914) used the term:

A: Heterosis
B: Emasculaton
C: Clone
D: Pure line

Correct Alternative :- A

According to geological time scale, the early gymnosperms should have originated during the period of:

Correct Alternative :- B
A: Lower Carboniferous

Statement (a) : The salinity of the ocean increases appreciably from geological epoch to epoch.

Statement (b) : The salinity of the ocean decreases appreciably from geological epoch to epoch.

Correct Alternative :- A

The type of vegetation characteristic to the Jurassic period of Mesozoic era is:

A: Pteridophytes and Lyopods

B: Gymnosperms

C: Rhynia Vegetation

D: Marine algae

Correct Alternative :- B
Evidence of the length of geologic time comes from:

A: sedimentation, saltness of the ocean and environmental change
B: sedimentation, environmental change and the disintegration rate of Uranium
C: sedimentation, saltness of the ocean and the disintegration rate of Uranium
D: environmental change, saltness of the ocean and the disintegration rate of Uranium

Correct Alternative :- C

The first artificial cloning vector developed in 1977:

A: pBR 322
B: pSC 102
C: pRP 4
D: ColE 1

Correct Alternative :-) A

Select the wrongly matched pair:

A: *Aerobacter aerogens* - Siderophores
B: *Pseudomonas GRC* - Necrotrophic effect
C: *Trichoderma Viride* - Cell wall lysing enzymes
D: *Fusarium oxysporum* - Chelating agent

Correct Alternative :- B
91. The method for DNA sequencing that utilises single stranded DNA as template is known as:

A: Sanger and Coulson Method
B: Maxam and Gilbert Method
C: Robert and Holley Method
D: None of these

Correct Alternative :- B

92. The most important Indian fossil of cycads is:

A: Lepidodendron vasculare
B: Protopteridium
C: Williamsonia swardiana
D: Asteroxylon mackiei

Correct Alternative :- C

93. Somatic Hybridisation is achieved through:

A: Grafting
B: Protoplast fusion
C: Gene transfer

Correct Alternative :- B
D: Recombinant DNA technology

Correct Alternative: - B

Depending upon the area under occupation of a species and its ecotypes plants are designated as:

A: Wides
B: Endemics
C: Extent
D: Wides and Endemics

Correct Alternative: - B

Raphano brassica an example for:

A: Intergeneric hybridization
B: Interspecific hybridization
C: Intrageneric hybridization
D: Intervarietal hybridization

Correct Alternative: - A

The possible advantage of using Ri-plasmid of Agrobacterium rhizogenes in the production of secondary root systems for interaction with soil-borne mycorrhizal fungi was reported by:

A: Moore et al., 1979
B: Smith and Walker, 1981
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97. Which of the following is not an example for complete ecosystem?

A: Desert
B: Deep Sea
C: A Tree
D: Lake

Correct Alternative: - B

98. Of the three major geological eras, coenozoic era began about:

A: 70 million years ago
B: 200 million years ago
C: 500 million years ago
D: 2000 million years ago

Correct Alternative: - A

99. Aegle marmelos is an example for:

A: Endemic species

Correct Alternative: - A
B: Continuous distribution
A: ஒவ்வொரு திசையிலும் பரவல்
C: Discontinuous distribution
B: ஒவ்வொரு திசையிலும் பரவல்
D: Halobiote
A: ஹாலோபிடிக் பரவல்

Correct Alternative:- A

Find the odd one out with regard to mechanism of Bio-control :

A: Amensalism
B: Mycoparasitism
C: Nematophagy
D: Mycophagy

Correct Alternative:- A

Match the bio-fertilizer with their beneficiary crops :

(a) Rhizobium   (i) Sugarcane
(b) Azoto bacter (ii) Soybean
(c) Azospirillum (iii) Paddy
(d) Cyanobacteria (iv) Cotton

A: (a)-(ii), (b)-(iv), (c)-(i), (d)-(iii)
B: (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)
Problem 102
Genetically different groups of populations adjusted to certain ecological conditions are called:

A: Ecodemes
B: Ecotypes
C: Ecophenes
D: Ecotomes

Correct Alternative: A

Problem 103
Match the following:

(a) B.P. Paul  (i) Rice Breeding
(b) Pushkarnath  (ii) Sugarcane Breeding
(c) Venkataraman  (iii) Wheat Breeding
(d) K. Ramiah  (iv) Potato Breeding

1. B.P. Paul
2. Pushkarnath
3. Venkataraman
4. K. Ramiah

(a) (i) (b) (ii) (c) (iii) (d) (iv)

Correct Alternative: B
104

Which of the following statements is not true?

A: Protozoa and Mycoplasma are also known to kill the insect pests.

B: The toxin secreted by Bacillus *thuringiensis* is not toxic to the larvae of Lepidoptera.

C: Viral pesticides after application get entered into the mouth and digestive tract of insect pests and kill them.

D: The microbial insecticides are non-phytotoxic

**Correct Alternative:** - B

105

Which of these is a basic Amino acid?

(a) Lysine
(b) Arginine
(c) Histidine
(d) Tyrosine

which is which?

(a) (a) and (b) only
(b) (b) and (c) only
(c) (a) and (b) only
(d) only

**Correct Alternative:** - C
The type of vegetation characteristic to the silurian period of paleozoic era is:

A: Pteridophytes
   பெரிய்போய்டேஸ்
B: Gymnosperms
   கைம்போனோசேர்மஸ்
C: Rhynia Vegetation
   ர்ய்ந்ியா வெக்சேட்
D: Marine algae
   காட்சு அல்ஜாக்காணான்

Correct Alternative: - A

With regard to Carbohydrates which of the statements is true?

(a) A rat-inose is a pentose sugar
(b) Inulin is a storage polysaccharide
(c) Sucrose is a reducing sugar
(d) Raffinose is a trisaccharide

The statement is true if: 

(a) ஆர்டாட்டிலோஸ் ஒரு பென்டேசைய் சேர்மஸ்
(b) இன்யிலுேஸ் ஒரு கொள்ளல்லாம் பொலிஸ்காசேர்மஸ்
(c) சுக்கரேஸ் ஒரு பாய்டேசரிசேமஸ்
(d) ராஃபினோஸ் ஒரு திரிஸ்காசேர்மஸ்

Correct Alternative: - B

Haploid Cultures are useful in:

A: Direct screening of recessive mutation
   காட்சு ரெசேச்வீன் முடிவுக் கண்காண்கு செய்யப்படும்:
In a food chain the amount of energy transferred from one trophic level to another is:

A: 5%
B: 10%
C: 15%
D: 20%

Correct Alternative :- B

Sphenophyllum, a herbaceous creeping plant, had existed during:

A: Upper Carboniferous period
B: Triassic period
C: Lower Devonian period
D: Middle Devonian period

Correct Alternative :- A
A bar magnet is whirled in a mixture of copper and gold dust. We observe that:

Correct Alternative :- C
A: Copper and gold dust are attracted by the bar magnet

Correct Alternative :- B

B: Both copper and gold dust are not attracted by the bar magnet

C: Gold dust is attracted by the bar magnet

D: Copper dust is attracted by the bar magnet

Correct Alternative :- B

Generally plants need nitrogen from soil to make ________.

Correct Alternative :- A

In which year Swami Vivekananda delivered his special speech at world religious conference in Chicago?

Correct Alternative :- D

_________ was called as the 'Hero of Arcot'.
Correct Alternative :- D

Which of the following play a significant role in acid rain?

A: Carbon monoxide and Carbon dioxide
B: Ozone and Carbon dioxide
C: Nitrogen and Oxygen
D: Nitrous oxide and Sulphur dioxide

Correct Alternative :- D

According to direct democratic system of government:

A: All government officials are appointed by the Parliament
B: People appoint the government servants
C: People take part in the administration of the country
D: People directly elect their President

Correct Alternative :- C

The Highest court in England:
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121
The Mahatma Gandhi community colleges have been opened in Tamil Nadu in which among the following?
Correct Alternative :- D

A: District with low education ratio
B: Educationally backward districts with low income
C: Districts with more SC and ST Population
D: Prisons, for imparting vocational training

122
Identify the need that Ashok will get in his ambition of becoming a class representative.
Correct Alternative :- B

A: Aggression
B: Achievement
C: Maternal
D: Social approval
We forget the things we do not want to remember by burying them in our unconsciousness is called _______ forgetting.

A: Morbid
B: Refined
C: Inference
D: Purposeful

Correct Alternative :- A

Of the first seven gifts called by Froebel's name, _______ consists of a big wooden cube, divided into eight smaller equal cubes.

A: Gift 7
B: Gift 3
C: Gift 1
D: Gift 2

Correct Alternative :- B

_______ model is intended to increase efficiency of information processing capacities to meaningfully absorb and relate bodies of knowledge.

A: Concept attainment
B: Inquiry training

Correct Answer :- A

Correct Answer :- B

Correct Answer :- A
C: Inductive thinking
D: Advance organizer

Correct Alternative: - D

126 ______ mechanism is the exclusion from consciousness of anxiety-producing memories, thoughts or impulses. ______ law of ______

A: Regression
B: Aggression
C: Repression
D: Fear reduction

Correct Alternative: - C

127 An individual responds to a new situation on the basis of the responses made by him in similar situations in the past due to the law of ______.

A: varied reactions
B: attitude
C: analogy
D: associative shifting

Correct Alternative: - C

128 'Compulsory Mis-education' is the work of ______.

A: John Holt

Correct Alternative: - C
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B: Charles Silberman

C: Paul Goodman

D: Ivan Illich

Correct Alternative : - C

NCERT has been publishing a half-yearly research journal titled _________ since ________.
NCERT _________ கையாள்ப்படுகின்ற _________ ஆண்டு மத்தியப்பாதசு குழு ஆண்டுப்பாட்டிலும் ஆண்டுப்பாட்டிலும் பொருளிக்கப்படுகின்றது.


B: Pre-Primary Teacher, 1986

C: Resonance, 1992

D: Education, Research and Training, 2002

Correct Alternative : - A

In classical conditioning the process by which an organism learns to respond to stimuli similar but not identical to the training stimulus is ________.

A: Stimulus generalization

B: Spontaneous recovery

C: Extinction of conditioning

D: Stimulus discrimination

Correct Alternative : - A

When the emotions develop under supervision, children learn to respond with behaviour that is accepted by the group. This can be classified as ________ in the role of learning in children's emotions.
At this stage of Erikson's psycho-social development, children begin to identify with the appropriate adult and to model, or copy, aspects of the adult's behaviour.

A: Initiative Vs Guilt
B: Mastery Vs Inferiority
C: Autonomy Vs Shame
D: Identity Vs Diffusion

Correct Alternative :- D

According to Bruner, the specific quality of a concept that differentiates it from other concepts can be defined as:

A: abstract
B: attribute
C: concrete
D: experience

Correct Alternative :- B
Correct Alternative :- A

Which one of the following describes best the meaning of 'Nirvana'?

A: Freedom from the 'self'
B: Freedom from Worldly life
C: Freedom from the cycle of rebirth
D: Freedom from consciousness

Correct Alternative :- C

The pedagogy that operates at the level of self-regulating individual micro and macro systems such as teaching machines and instutions is:

A: Programmed instruction
B: Synergism
C: Operant conditioning
D: Cybernetics

Correct Alternative :- D

divides school into two groups A and B, In this A received instruction on 3R's and B studied arts, games and other areas like gym and artroom.

A: Laboratory School
B: Montessori Schooling System
Which one of the following is considered to be the basis for imagining, creating, associating meanings and reasoning?

A: Animism
B: Maturation
C: Interest
D: Memory

Correct Alternative :- D

There will be a great sense of difficulty in maintaining posture, walking, climbing and in controlling voluntary movements such as reaching, grasping and manipulating, without ________.

A: Visceral responses
B: Apparent motion
C: Assertiveness training
D: Kinesthesia

Correct Alternative :- D

In ______ type of concept, attributes and values are substituted for one another. For example, if we say 'two figures or two circles', in this the attributes are form and number but the value of the number remains the same.
Correct Alternative :- C

The report of the National Commission on Teachers-I was entitled as, _______.

A: Teacher, Pupil and School
B: The Teacher and Society
C: 'The Teacher'
D: The Teacher and Nation Building

Correct Alternative :- B

_________ reinforcers differ considerably from the concept of punishment. Unlike punishment these are designed to strengthen an escape response, not to inhibit an undesirable response.

A: Positive
B: Negative
C: Neutral
D: Zero
Correct Alternative :- B

142

The DANIDA-TNAHCP initiative of Tamil Nadu state is related to which among the following sectors?

A: Housing

B: Health

C: Education

D: Horticulture

Correct Alternative :- B

143

The Indian Council of Philosophical Research(ICPR) was established in _______ by the ministry of education, Govt. of India.

A: 1962

B: 1977

C: 1985

D: 1999

Correct Alternative :- B

144

Akila generally appears sad, expresses in writing rather than speaking, is interested in reading of the following in which type did J.C. Jung classify him?

A: Introvert intuitive type

B: Extrovert intuitive type
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145 Which theory is popularly known as the Jukebox Theory?

A: Schchter and singer theory of emotion
B: Arnold's excitatory theory of emotion
C: Maclean's theory of emotion
D: Papez's theory of emotion

Correct Alternative :- A

146 'Sriniketan' is a constituent institution of VisvaBharti University, is an institute of ________.

A: Teacher Training and Education
B: Languages
C: Fine arts and crafts
D: Rural reconstruction

Correct Alternative :- D

147 Activities such as writing an essay, drawing a picture to depict the seasons of the year, constructing an exhibit for the school science fair, represents ________.

A: Sensory
B: Additivity
C: Discrimination
D: Extrovert feeling type

Correct Alternative :- C
A: Application
B: Analysis
C: Synthesis
D: Evaluation

Correct Alternative :- C

In Froebel's Kindergarten, full freedom is given to the child to handle gifts, educational toys in the way he/she likes. Such activities connected with these gifts are called _________.

A: Occupations
B: Childs Play
C: Engagement
D: Life Work

Correct Alternative :- A

_______ is also known as Adlerian Therapy.

A: Individual Psychology
B: Client Centered Psychology
C: Behavioural Theory
D: Reality Therapy

Correct Alternative :- A
Education methodology modelled by Paulo Freire is __________.

A: Active learning method

B: Conscientization

C: Self-perpetuation

D: Participation

Correct Alternative :- B