

PREVIEW QUESTION BANK

Module Name : SCPH06 Botany - ENG
Exam Date : 26-Oct-2023 Batch : 14:30-17:30

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	972001	Research Ethics is 1. A social phenomenon 2. Moral relations 3. Doctrine of mortality 4. Plagiorism A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
2	972002	Which one of the following statements best describes the nature of fundamental research? 1. It requires the use of experimentation 2. The primary purpose of it is to facilitate the managerial decision process 3. It might lead to academic theory or building model 4. It is related to scientific domain only A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
3	972003	Which statement is true about research design? 1. It is a framework for conducting the research project. 2. It specifies the measurement and scaling procedures. 3. It is undertaken before developing the approach to the problem. 4. It is undertaken after the research problem is defined. A1 : 1 A2 : 2	4.0	0.00

		A3 : 3		
		A4 : 4		
Objective Question				
4	972004	Who is known as the "Frogman of India"? 1. S. Das Biju 2. C. R. Rao 3. C. R. Babu 4. C. R. Pandit A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
5	972005	Which non-statistician is known to have used her skills in data collection and analysis to provide evidence of unsanitary conditions for soldiers in the Crimean War? 1. Gertrude Cox 2. Florence Nightingale 3. Janet Norwood 4. Madame Curie A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
6	972006	San is a probabilistic programming language written in _____ 1. R 2. C++ 3. Python 4. Julia A1 : 1 A2 : 2	4.0	0.00

		A3 : 3		
		A4 : 4		
Objective Question				
7	972007	While using LaTeX there is also a need for plain ____ editor and software to view the output file. 1. Text 2. Transcript 3. Script 4. Word A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
8	972008	Which of the following lead to mis-interpretation of data? A. Bias B. Use of nominal scale C. Faulty generalizations D. Misinterpretation of statistical measures E. Qualitative measures 1. A, B, C 2. A, C, E 3. A, C, D 4. C, D, E A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
9	972009		4.0	0.00

		The h-index in research is short form for which of the following: 1. History index 2. Highest index 3. Hebrew index 4. Hirsch index A1 : 1 A2 : 2 A3 : 3 A4 : 4		
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Objective Question

10	972010	An h-index of 15 means that 1. the scientist has published at least 15 papers that have at least 15 citations of each 2. the scientist has 3 publications with 5 citations of each 3. the scientist has 15 publications in all 4. the scientist has 5 publications with 3 citations of each A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

11	972011	ISBN is a _____ digit unique numeric commercial machine-readable identification number meant for monograph publication. 1. 8 2. 10 3. 11 4. 13 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

12	972012		4.0	0.00
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		Which one of the following abbreviations is used to mention more than four authors of a research work to be cited? 1. at al 2. et all 3. et al 4. ot all A1 : 1 A2 : 2 A3 : 3 A4 : 4		
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Objective Question

13	972013	Web of Science is _____ 1. a citation index 2. a bibliography 3. an abstracting service 4. Reference format A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

14	972014	Web Impact factor was developed by 1. P. Ingwersen 2. L. Bornebara 3. M. Thelwall 4. R. Rousseau A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

15	972015		4.0	0.00
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		Which of the following is NOT used to check plagiarism?		
		1. Turnitin 2. LaTeX 3. iThenticate 4. Urkund		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

16	972016	_____ is an unstructured, exploratory research methodology based on small samples intended to provide insight and understanding of the problem setting.	4.0	0.00
		1. Primary research 2. Qualitative research 3. Secondary research 4. Quantitative research		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

17	972017	Which type of hypothesis is formulated during the planning of a research problem?	4.0	0.00
		1. Parametric Test 2. Null Hypothesis 3. Working Hypothesis 4. Conceptual Hypothesis		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

18	972018		4.0	0.00
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		Name a sampling approach in which initial respondents are chosen using non-probabilistic methods, and then further respondents are found using the information provided by the initial respondents. 1. Semi-random 2. Initial 3. Quota 4. Snowball A1 : 1 A2 : 2 A3 : 3 A4 : 4		
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Objective Question

19	972019	If alpha is 0.10 for a particular hypothesis test, then it means that 1. Ten percent is our minimum standard for acceptable probability. 2. Ten percent is the risk we take of rejecting a hypothesis that is true. 3. Ten percent is the risk we take of accepting a hypothesis that is false. 4. There are ten percent chances of committing type II error A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

20	972020	An analyst has informed that there is an inverse relationship between the sale of the restaurant and the amount of rain fall during that day. It can be estimated as: 1. Sales tend to be high when rainfall is high. 2. A large amount of rain causes sales to rise. 3. Sales tend to be low when rainfall is high. 4. A lack of rain causes sales to rise. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

21	972021	Structure of logical argument is based on 1. Material truth 2. Linguistic expression 3. Formal Validity 4. Aptness of examples A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

22	972022	Find the odd word among the following: 1. Arrow 2. Axe 3. Knife 4. Dagger A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

23	972023	Which of the following is true and can be concluded from the given statement, 'Some men are honest' ? 1. Some honest people are not men. 2. All honest people are not men. 3. Some honest people are men 4. All honest people not women. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

24	972024		4.0	0.00
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Given below are two statements: one labelled as Assertion (A) and other is labelled as Reason (R).

Assertion (A): Most of the prominent places in ancient civilizations grew near rivers.

Reason (R): Rivers provide water for irrigation and also work as means of transportation.

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

25	972025	If X and Y are uncorrelated variables, then it implies that there is absence of any 1. linear relationship between X and Y. 2. quadratic relationship between X and Y. 3. logarithmic relationship between X and Y. 4. trigonometric relationship between X and Y. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

26	972026	Fill the correct number from the options in the following series: 32, 48, 72, ..., 162, 243 1. 84 2. 96 3. 108 4. 132 A1 : 1 A2 : 2 A3 : 3	4.0	0.00
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		A4 : 4		
Objective Question				
27	972027	If 'PAT' is coded as 'QRBCUV', then how will you code 'GRACE'? 1. HISTBCDEFG 2. HISTBCDEGF 3. HISBTCDEFG 4. HISTBCEDFG A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
28	972028	Among M, N, T, R and D each has a different height. T is taller than D, but shorter than M. R is taller than N but shorter than D. Who among them is the tallest? 1. R 2. M 3. D 4. T A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
29	972029	10 February 2005 was Thursday. What was the day of the week on 8 February 2004? 1. Tuesday 2. Monday 3. Sunday 4. Wednesday A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00

Objective Question

30	972030	In a certain code language, 'Siberia is a cold place' is written as 'a cold place Siberia'. In the same code, 'Water freezes to ice here' is written as 'freezes here ice to water'. How 'covers ten percent of earth' will be written? 1. Covers earth ten percent of 2. Covers earth of percent ten 3. Earth covers ten percent of 4. ten percent of earth covers A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

31	972031	'Research in progress' database in India is _____ 1. Vidhyanidhi 2. Shodhganga 3. Shodhgangotri 4. Indian National Depository Library A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

32	972032	Which of the following analysis cannot be carried out using ordinal scale data? 1. Preparation of frequency distribution 2. Computing the quartiles of the distribution 3. Computing the mode of the distribution 4. Computing the standard deviation of the variable. A1 : 1 A2 : 2 A3 : 3	4.0	0.00
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A4 : 4

Objective Question

33 972033

Match List I with List II

4.0

0.00

LIST I		LIST II	
A.	ANOVA	I.	Test for equality of two population means
B.	t-test	II.	Test for equality of several population means
C.	F-test	III.	Test for equality of two population variances

Choose the correct answer from the options given below:

1. A-III, B-I, C-II
2. A-II, B-III, C-II
3. A-II, B-I, C-III
4. A-I, B-II, C-III

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

34 972034

Match the following:

4.0

0.00

LIST I		LIST II	
A.	Average	I.	Measure of central tendency
B.	Variance	II.	Measure of Dispersion
C.	Median	III.	Measure of Correlation
D.	Range	IV.	Measure of Independence
E.	Mode	V.	Measure of Association

Choose the correct answer from the options given below:

1. A-I, B-I, C-I, D-II, E-I
2. A-I, B-II, C-I, D-II, E-I
3. A-II, B-II, C-I, D-II, E-I
4. A-I, B-II, C-I, D-I, E-I

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

35 972035

4.0

0.00

In a one way ANOVA, if sum of squares due to variation among 4 factors is 2580 and that due to error is 1656, and total number of observations is 20, then

- A. the total degrees of freedom available are 19
- B. the mean squares due to factors is 860
- C. the total variation present is 4236
- D. the value of the calculated F statistic is 8.3

Choose the most appropriate answer from the options given.

- 1. Only A, B and C are correct
- 2. Only B, C, and D are correct
- 3. Only A, C and D are correct
- 4. All A, B, C and D are correct

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

36 972036

Match the following:

A. Face Validity	I. measures the degree to which a test item can forecast an outcome.
B. Concurrent Validity	II. measures how well a test item compares with a second assessment done.
C. Content Validity	III. measures the extent to which test items represent the issue they are supposed to measure.
D. Predictive Validity	IV. measures the logical link between test items and the objectives of the study.

- 1. A-IV, B-II, C-III, D-I
- 2. A-I, B-II, C-III, D-IV
- 3. A-I, B-III, C-II, D-IV
- 4. A-IV, B-III, C-II, D-I

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

0.00

Objective Question

37 972037

4.0

0.00

		Which is the correct syntax for LaTeX? 1. \begin ...\stop 2. \begin ...\end 3. \start ...\end 4. \open ...\end A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
38	972038	Who assesses ISBN in India? 1. National Library, Kolkata 2. Imperial Library, Kolkata 3. Raja Ram Mohan Roy Foundation, Kolkata 4. National Book Trust, New Delhi A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
39	972039	What does ISSN stand for ? 1. International Standard Social Number 2. International Source Serial Number 3. International Standard Serial Number 4. International Standard Society Number A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
40	972040		4.0	0.00

Who coined the term 'Information Transfer'?

1. Ranganathan
2. J. Martin
3. Calvin Moores
4. Beesman

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

41	972041	'BERN CONVENTION' (1886) is concerned with which of the following?	4.0	0.00
		1. Plagiarism 2. Copyright 3. Standards 4. Patent		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

42	972042	Match the following:	4.0	0.00								
		<table><tr><td>A. Type I error</td><td>I Sampling</td></tr><tr><td>B. Type II error</td><td>II Measurement</td></tr><tr><td>C. Systematic Error</td><td>III False negative</td></tr><tr><td>D. Bias</td><td>IV False positive</td></tr></table>	A. Type I error	I Sampling	B. Type II error	II Measurement	C. Systematic Error	III False negative	D. Bias	IV False positive		
A. Type I error	I Sampling											
B. Type II error	II Measurement											
C. Systematic Error	III False negative											
D. Bias	IV False positive											
		1. A-I, B-II, C-III, D-IV 2. A-IV, B-III, C-II, D-I 3. A-III, B-IV, C-II, D-I 4. A-IV, B-III, C-I, D-II										
		A1 : 1										
		A2 : 2										
		A3 : 3										

		A4 : 4		
Objective Question				
43	972043	Which of the following statement/s is/are true about hypotheses? A. Hypothesis is an unproven statement or proposition about a factor or phenomenon. B. Hypotheses are declarative and can be tested empirically. C. Hypothesis cannot be a relational statement D. Hypothesis is a conjecture. 1. A, B and C 2. A, B and D 3. A, C and D 4. B, C and D A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
44	972044	The method where the respondent is presented with a stimulus and asked to respond with the first thing that comes to his mind is _____ 1. Completion techniques 2. Focus groups 3. Association technique 4. Depth interviews A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
45	972045	In analogue mass communication, stories are 1. Static 2. Dynamic 3. Interactive 4. Exploratory A1 : 1	4.0	0.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
46	972046	Find the related word to fill the blank from the options Potato : Carrot: Radish: ... 1. Tomato 2. Spinach 3. Sesame 4. Groundnut A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
47	972047	What one is the major attribute of Correlation Analysis? 1. Regression among Variables 2. Association among Variables 3. Variation among Variables 4. Difference among Variables A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
48	972048		4.0	0.00

		Which of the following are formal experimental designs? A. Factorial designs B. Before and after without control design C. Latin Square design D. Before and after with control design E. Randomized block design 1. A, B, C 2. A, C, E 3. A, C, D 4. B, C, E A1 : 1 A2 : 2 A3 : 3 A4 : 4		
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Objective Question

49	972049	Which of the following are measurement scales? A: Quantitative B. Nominal C. Comparative D. Ordinal E. Interval 1. B, D, E 2. A, C, E 3. B, C, D 4. A, B, C A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

50	972050		4.0	0.00
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		Structure of logical argument is based on: 1. Formal Validity 2. Material truth 3. Linguistic expression 4. Aptness of examples A1 : 1 A2 : 2 A3 : 3 A4 : 4		
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Objective Question

51	972051	A researcher wants to purify a promising hypothetical protein 'Toberase' for the treatment of Alzheimer's from a crude extract of a plant from Western ghats. What would be the logical sequence of steps to follow for its isolation? A. Ion-exchange chromatography B. Precipitation using ammonium sulphate C. Affinity chromatography D. Size-exclusion chromatography E. Dialysis Choose the most appropriate answer from the options given below: 1. E, D, A, B, C Only 2. E, B, C, D, A Only 3. B, E, A, D, C Only 4. C, B, D, A, E Only A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

52	972052	Which of the following shows concave type of survivorship curve? 1. Mountain sheep 2. Sea turtle 3. Lizard 4. Elephant A1 : 1 A2 : 2	4.0	0.00
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A3 : 3

A4 : 4

Objective Question

53	972053	Canaries are introduced to coal mines as an early warning devices. Under which category of the Indicator species, they can be placed? 1. Sentinels 2. Bioassay Organisms 3. Accumulators 4. Detectors A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

54

972054

Match the List I with List II

4.0

0.00

LIST I (Herbicide)		LIST II (Genes involved in providing herbicide resistance)	
A.	Glyphosate	I.	Glutamine synthetase
B.	Atrazine	II.	Nitrilase
C.	Bromoxynil	III.	<i>aroA</i> gene
D.	Phosphinothricin	IV.	Glutathione-S-transferase

Choose the correct answer from the options given below:

1. A-IV, B-II, C-III, D-I
2. A-IV, B-III, C-II, D-I
3. A- I, B-III, C-II, D-IV
4. A-III, B-IV, C-II, D-I

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

55	972055		4.0	0.00
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Which combination is CORRECT for the male and female gene determinants present in respective family for self-incompatibility?

1. Papaveraceae: Male determinant : PrsS Female determinant : PrpS
2. Rosaceae: Male determinant : PrsS Female determinant : PrpS
3. Brassicaceae: Male determinant : SP11/SCR Female determinant : SRK
4. Scrophulariaceae: Male determinant : S-RNase Female determinant : SLF

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

56 972056

Match the List I with List II

LIST I Proteins		LIST II Functions	
A.	GRP17	I.	Stimulation of pollen tube growth
B.	ZmEA1	II.	Pollen hydration
C.	LUREs	III.	Micropylar pollen tube guidance
D.	LeSTIG1	IV.	Pollen tube attraction

Choose the correct answer from the options given below:

1. A-II, B-III, C-IV, D-I
2. A-III, B-IV, C-I, D-II
3. A-IV, B-I, C-II, D-III
4. A- I, B-II, C-III, D-IV

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

57 972057

Which of the following species is critically endangered in India?

1. *Pterocarpus santalinus*
2. *Myristica malabarica*
3. *Syzygium travancoricum*
4. *Cupressus cashmeriana*

A1 : 1

A2 : 2

		A3 : 3		
		A4 : 4		
Objective Question				
58	972058	In a random mating pea plant population of 500, 20 plants are dwarf (homozygous recessive). What would be the number of heterozygous in the said population, if they are in genetic equilibrium? 100 360 400 160 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
59	972059	Predict the colour of <i>Arabidopsis</i> flower in which B-type genes were knocked off. - White - Yellow - Green - Red A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
60	972060	Which of the following botanical name can be considered as <i>Nomen nudum</i>? <i>Sesbania sesban</i> <i>Ziziphus mauritiana</i> <i>Quercus dilatata</i> <i>Rosa villosa</i> A1 : 1 A2 : 2	4.0	0.00

		A3 : 3		
		A4 : 4		
Objective Question				
61	972061	Which of the following botanical name explains that the first author had proposed a name but failed to satisfy all or some of the requirements of the code and was validly published by the second author? 1. <i>Cerasus cornuta</i> Wall. <i>ex</i> Royle. 2. <i>Carex kashmirensis</i> Clarke <i>in</i> Hook.f. 3. <i>Phyllanthus</i> Linn. <i>emend.</i> Mull. 4. <i>Cynodon dactylon</i> (Linn.) Pers. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
62	972062	Which variant of BLAST or FASTA compares an amino acid sequence against a nucleotide sequence database translated in all six reading frames? 1. BLASTP 2. TBLASTN 3. BLASTN 4. TFASTA A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
63	972063	Of the following, which gene can be used as non selectable conditional gene for selection of transgenic plants? 1. <i>nptII</i> 2. <i>hpt</i> 3. <i>barnase</i> 4. <i>gusA</i>	4.0	0.00

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
64	972064	What would be the sex morphology of <i>Drosophila</i> with three X chromosomes and 4 sets of autosomes? 1. Metafemale 2. Female 3. Intersex 4. Metamale A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
65	972065	Which of the following exerts positive control over the <i>Lac</i> operon? 1. Lactose 2. Glucose 3. IPTG 4. CAP A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
66	972066	In C₂ oxidative photosynthetic carbon cycle, the site of Glycolate oxidase activity is: 1. Chloroplast 2. Peroxisome 3. Mitochondria 4. Cytosol A1 : 1	4.0	0.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
67	972067	A botanist while analysing the biochemical parameters of neem leaves exposed to pollution, mistakenly mixed with NaHCO_3 and Na_2CO_3. The mixture is equimolar and weighs 1gm? How much amount of 1N HCL is required to completely neutralize the NaHCO_3 in the mixture? 1. 50 ml 2. 100 ml 3. 20 ml 4. 35 ml A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
68	972068	In which phase of microbial growth, the microbe should be harvested to obtain its secondary metabolite in batch culture? 1. Lag phase 2. Exponential phase 3. Trophophase 4. Idiophase A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
69	972069	Which of the following is a bacterial source of single cell protein? 1. <i>Claviceps purpurea</i> 2. <i>Lactococcus lactis</i> 3. <i>Methylococcus methylotrophus</i> 4. <i>Spirogyra</i> sp.	4.0	0.00

		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
70	972070	Which type of fermenter is commonly used in the industrial/commercial production of penicillin? 1. Stirred tank fermenters 2. Airlift fermenters 3. Solid state fermenters 4. Tower fermenters A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
71	972071	The characteristic smell in mustard family is due to the presence of glucosinolates, in which it also works as defensive compounds. The glucosinolates belongs to which class of secondary metabolites? 1. Terpenes 2. Phenolics 3. Flavanoids 4. Glycosides A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
72	972072	Which of the following does NOT belongs to the class of secondary messengers in eukaryotes? 1. Inositol-1,4,5-triphosphate 2. Nitric oxide 3. Calcium ion 4. Magnesium ion	4.0	0.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

73

972073

Match the List I with List II

4.0

0.00

LIST I (Stress type)		LIST II (Associated gene/transcription factor)	
A.	Freeze	I.	<i>ADH</i>
B.	Salt	II.	<i>CBF1</i>
C.	Heat	III.	<i>AtNHX1</i>
D.	Oxygen deficiency	IV.	<i>AtHSP90</i>

Choose the correct answer from the options given below:

1. A-II, B-IV, C-I, D-III

2. A-I, B-III, C-IV, D-II

3. A-II, B-III, C-IV, D-I

4. A-III, B-IV, C-I, D-II

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

74

972074

Which of the following is an example of heteropolysaccharide?

4.0

0.00

1. Chitin

2. Agarose

3. Dextran

4. Glycogen

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

75

972075

4.0

0.00

		Which of the following is not declared as a Ramsar site? 1. Asthamudi wetland 2. Bhitarkanika mangroves 3. Loktak lake 4. Pachmarhi biosphere reserve A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
76	972076	The most abundant form of organic phosphate present is _____, which form up to 50% of the total organic phosphate in the soil. 1. Inositol phosphates 2. Phospholipids 3. Nucleic acids 4. Mineral phosphate A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
77	972077	In the presence of SDS, electrophoresis separate the proteins almost exclusively on the basis of their: 1. Size 2. Shape 3. Molecular weight 4. Charge A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
78	972078		4.0	0.00

A stele, in which the vascular system appears as a tube and has phloem at both external and internal to the xylem is known as :

1. Amphiphloic siphonostele
2. Amphicribal dictyostele
3. Amphivasal siphonostele
4. Amphivasal dictyostele

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

79	972079	If a turgid plant cell with $\phi_p = 0.488\text{MPa}$ and $\phi_s = -0.732\text{MPa}$ is dropped in a sucrose solution with $\phi_p = 0\text{MPa}$ and $\phi_s = -0.732\text{MPa}$. What would be the ϕ_w of the cell once it reaches equilibrium? 1. -0.732MPa 2. 0.488MPa 3. 0MPa 4. -0.244MPa A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

80	972080	Which of the following mineral nutrient is immobile in the plant system? 1. Potassium 2. Nitrogen 3. Phosphorus 4. Calcium A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

81	972081	Which of the following molecular marker is a non-PCR based single locus, multiallelic, and codominant marker? 1. ISSR 2. RAPD 3. AFLP 4. RFLP A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

82	972082	Structure of proteins from secondary to quaternary are maintained by all of the following except: 1. Electrostatic forces 2. Van der waals forces 3. Covalent forces 4. Hydrogen bonding A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

83	972083	In Calvin cycle, the enzyme responsible for conversion of xylulose-5-phosphate to ribulose-5-phosphate is : 1. Ribulose 5-phosphate-3-epimerase 2. Transketolase 3. Ribulose 5-phosphate isomerase 4. Phosphoribulokinase A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

84	972084		4.0	0.00
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Choose the functions of rough endoplasmic reticulum from the following:

- A. Formation of disulphide bonds
- B. N-linked glycosylation of proteins
- C. Splicing of polypeptide
- D. Assembly of multi-subunit proteins
- E. O-linked glycosylation of proteins

Choose the most appropriate answer from the options given below:

- 1. A, B and E Only
- 2. B, C and D Only
- 3. A, C, D and E Only
- 4. A, B, C and D Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

85	972085	Which of the following statements are correct for K_m of an enzyme? A. numerically equal to $V_{max}/2$ B. independent of pH C. numerically equal to V_{max} D. independent of enzyme concentration E. numerically equal to substrate concentration that gives half maximal velocity Choose the most appropriate answer from the options given below: 1. A, B and D Only 2. A, D and E Only 3. D and E Only 4. B, C and D Only A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

86	972086		4.0	0.00
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		How many types of gametes are possible for a plant with the genotype AaBBCcddEe? 16 32 4 8 A1 : 1 A2 : 2 A3 : 3 A4 : 4		
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Objective Question

87	972087	Arrange the following succession process in the order of their occurrence - Ecesis - Reaction - Competition - Nudation - Migration Choose the correct answer from the options given below: - D, E, A, B, C - D, C, E, B, A - A, C, E, B, D - D, C, E, A, B A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

88	972088	Which of the following is correct with respect to Chargaff's rule: $(A+T) = (G+C)$ $(A+G)/(C+T) = 1$ - Melting temperature is directly proportional to GC content - Ratio of G:A in double stranded DNA is 1:1 - Double stranded DNA with 30% T has 20% C Choose the most appropriate answer from the options given below: - A, C and E Only - B, C and E Only - C and E Only - B and E Only	4.0	0.00
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A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

89 972089

Which of the following statement/s hold/s true for H^+ pump (H^+ ATPase) transmembrane protein?

- A. Found in plasma membrane of bacteria, fungi and plant cells
- B. They source their energy from Na^+ gradient
- C. Their function involve active transport of glucose
- D. They are involved in active export of H^+

Choose the most appropriate answer from the options given below:

- 1. A Only
- 2. B Only
- 3. B and C Only
- 4. A and D Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

0.00

Objective Question

90 972090

Match the List I with List II

LIST I (Cyclins)		LIST II (CDK partner)	
A.	Cyclin E	I.	Cdk4, Cdk6
B.	Cyclin A	II.	Cdk1
C.	Cyclin D	III.	Cdk2, Cdk1
D.	Cyclin B	IV.	Cdk2

Choose the correct answer from the options given below:

- 1. A-IV, B-III, C-I, D-II
- 2. A-II, B-IV, C- I, D-III
- 3. A-III, B-II, C-I, D-IV
- 4. A-IV, B-III, C-II, D-I

A1 : 1

A2 : 2

A3 : 3

4.0

0.00

		A4 : 4		
Objective Question				
91	972091	Colchicine treatment to plant cell helps in doubling of chromosomes through a mechanism in which it : 1. binds along actin filaments 2. depolymerizes microtubules by binding along the filaments 3. depolymerizes microtubules by capping the filament ends 4. stabilizes the actin filaments by binding along the filaments A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
92	972092	Which of the following DNA has the maximum turns per 100 base pairs sequence? 1. A-DNA 2. B-DNA 3. Z-DNA 4. Both A-DNA and B-DNA have same A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
93	972093	Arrange the stages of T4 bacteriophage infecting the bacterial cell in the order of their occurrence. A. Tail contraction B. Penetration and unplugging C. DNA ejection D. Attachment E. Landing Choose the correct answer from the options given below: 1. D, E, B, A, C 2. E, D, A, B, C 3. E, D, B, A, C 4. D, E, B, A, C	4.0	0.00

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
94	972094	Circinotropous type of ovule is a characteristic feature of : 1. Olacaceae 2. Loranthaceae 3. Cactaceae 4. Myrtaceae A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
95	972095	Choose the correct statements with respect to apomixis from the following: A. Initial discovery of apomixis in higher plants was observed in <i>Alchornea ilicifolia</i> B. It is more commonly found in polyploids than in diploids C. Most common families where apomixis can be observed are Myrtaceae, Lorenthaceae, Malvaceae and Liliaceae D. Apomixis is a genetically controlled trait E. Apomictic offspring are genetically identical to the mother plant. Choose the most appropriate answer from the options given below: 1. B, C and D Only 2. A, D and E Only 3. A, B, C and E Only 4. A, B, D and E Only A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
Objective Question				
96	972096		4.0	0.00

Match the List I with List II

LIST I		LIST II	
A.	Onagraceae	I.	Pseudoembryo sac
B.	Podostemaceae	II.	One microspore per microspore mother cell and pollen shedding at three celled stage
C.	Loranthaceae	III.	<i>Oenothera</i> type embryo sac
D.	Cyperaceae	IV.	Divided into two subfamilies on the basis of presence or absence of calyculus below the perianth

Choose the correct answer from the options given below:

1. A-III, B-I, C-IV, D-II
2. A-II, B-I, C-III, D-IV
3. A-IV, B-I, C-III, D-II
4. A-II, B-III, C-I, D-IV

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

97	972097	Which of the following is not a recognition and cleavage site for restriction endonuclease?	4.0	0.00
		1. 5'-GAATTC -3'		
		2. 5'-ATCGAT-3'		
		3. 5'-GCGGCCGC-3'		
		4. 5'-ATATCGAT-3'		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

98	972098		4.0	0.00
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Plant defenses against pathogens are regulated by networks of interconnecting signaling pathways. The primary signal molecules include:

- A. Jasmonic acid
- B. Salicylic acid
- C. Ethylene
- D. Nitric Oxide

Choose the most appropriate answer from the options given below:

- 1. A and B Only
- 2. B and D Only
- 3. A, B and C Only
- 4. A, B, C and D Only

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

99	972099	Arrange the following steps in the purification of water for drinking purpose on the basis of their occurrence: A. Softening B. Colour and precipitate removal C. Turbidity removal D. Disinfection E. Taste and odour removal Choose the correct answer from the options given below: 1. B, C, A, E, D 2. B, A, C, E, D 3. C, B, A, D, E 4. B, C, A, D, E A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	0.00
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Objective Question

100	972100	Which of the organelle is responsible for lipid biosynthesis? 1. Chloroplast 2. Mitochondria 3. Golgi apparatus 4. Endoplasmic reticulum	4.0	0.00
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		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		