Sr No.	PhD Botany
1	In the series 357,363,369,……. What will be the 10th term?
Alt1	405
Alt2	411
Alt3	413
Alt4	417

2	Choose word from the given options which bears the same relationship to the third word, as the first two bears: Moon: Satellite :: Earth : ?
Alt1	Sun
Alt2	Planet
Alt3	Solar System
Alt4	Asteroid

3	Door is related to Bang in the same way as Chain is related to ……..?.....
Alt1	Thunder
Alt2	Clinch
Alt3	Tinkle
Alt4	Clank

4	Select the lettered pair that has the same relationship as the original pair of words: Emollient: Soothe
Alt1	Dynamo: Generate
Alt2	Elevation: Level
Alt3	Hurricane: Track
Alt4	Precipitation: Fall

5	Which of the following is the same as Count, List, Weight?
Alt1	Compare
Alt2	Sequence
Alt3	Number
Alt4	Measure

6	Spot the defective segment from the following:
Alt1	The downtrodden
Alt2	needs
Alt3	to be uplifted
Alt4	on a war footing

7	Choose the meaning of the idiom/phrase from among the options given: A close shave
Alt1	a nice glance
Alt2	a narrow escape
Alt3	an intimate
Alt4	a triviality

8	Lightning ------- in the same place twice.
Alt1	doesn't hit
Alt2	never strikes
Alt3	never attacks
Alt4	never falls

9	Choose the option closest in meaning to the given word: FLIPPANT
Alt1	serious
Alt2	unsteady
Alt3	irreverent
Alt4	caustic

10	Choose the antonymous option you consider the best: OBSOLETE
Alt1	obscure
Alt2	hackneyed
Alt3	current
Alt4	grasp

11	Akash scored 73 marks in subject A. He scored 56% marks in subject B and X marks in subject C. Maximum marks in each subject were 150. The overall percentage marks obtained by Akash in sall te three subjects were 54%. How many marks did he score in subject C ?
Alt1	84
Alt2	86
Alt3	79
Alt4	73

12	A person starts from his house and travels 6 Km towards the West, he then travelled 4 Km towards his left and then travels 8 Km towards west and 3 Km towards South. Finally he turns right and travels 5 Km. What is the horizontal distance he has travelled from his house ?
Alt1	7 Km
Alt2	15 Km
Alt3	23 Km
Alt4	19 Km

13	If 1st Jan 2012 is a Tuesday then on which day of the week will 1st Jan 2013 fall ?
Alt1	Wednesday
Alt2	Thursday
Alt3	Friday
Alt4	Saturday

14	One morning after sunrise, Reeta and Kavita were talking to each other face to face at University. If Kavita' shadow was exactly to the right of Reeta, which direction was Kavita facing ?
Alt1	North
Alt2	South
Alt3	East

Alt4	West

15	In an exam every candidate took History (or)Geography(or)both. 74.8%took History and 50.2% took Geography. If the Total number of candidates is 1500,how many took History and Geography both?
Alt1	400
Alt2	350
Alt3	750
Alt4	375

16	Which word includes the larger % of Vowels?
Alt1	GOOGLE
Alt2	AMAZON
Alt3	FACE BOOK
Alt4	DOE

17	A= Least prime >24; B=Greatest prime <28; Then
Alt1	A>B
Alt2	A<B
Alt3	A=B
Alt4	None

18	CL X VIII refers
Alt1	861
Alt2	701
Alt3	168
Alt4	107

19	Which of the following is larger than 3/5 ?
Alt1	1/2
Alt2	39/50
Alt3	7/25
Alt4	59/100

20	Mr. Babu travelled 1200 km by air which formed 2/5 of his trip. One third of the whole trip, he travelled by car and the rest of the journey was by train. What was the distance travelled by train?
Alt1	600km
Alt2	700 km
Alt3	800 km
Alt4	900 km

21	What is the toxin found in Cyanobacteria?
Alt1	Cardiotoxins and Hepatotoxins
Alt2	Cytotoxins and myotoxins
Alt3	Hepatotoxins and Neurotoxins
Alt4	All

22	In lichens, during sexual reproduction the fruiting bodies are formed of _____
Alt1	Apothecium type
Alt2	Perithecium type.
Alt3	A Both and B
Alt4	None of the above

23	What is the causative agent for ringworm and Athlete's foot on skin?
Alt1	Malassezia furfur
Alt2	Trichosporon and Microsporon spp.
Alt3	Hortaea werneckii
Alt4	Trichophyton rubrum

24	Which fungi responsible for Sorghum root rot?
Alt1	Alternaria solani
Alt2	Bipolaris sacchari
Alt3	Pyrenophora tritici-repentis
Alt4	Periconia circinata

25	The two most important species of lichens in the perfume industry.
Alt1	Evernia prunastri
Alt2	Pseudevernia furfuracea
Alt3	A only
Alt4	Both A and B

26	A Amyloplast is _____
Alt1	A colorless plastid
Alt2	Adapted for the accumulation of storage product
Alt3	A leucoplast
Alt4	All

27	Which one of following is correct?
Alt1	Lichen is indicator of air pollution particularly sulfur dioxide
Alt2	Excessive growth of cyanobacteria is a good indicator of water pollution.
Alt3	Both A and B
Alt4	None

28	Which of the following is the amphibian of the plant kingdom?
Alt1	Pteridophytes
Alt2	Bryophytes
Alt3	Gymnosperms
Alt4	Angiosperms

29	The unique feature of bryophytes compared to other green group is that _____
Alt1	They produce spores
Alt2	They lack vascular tissue
Alt3	They lack roots
Alt4	There the sporophyte is attached to gametophyte

30	Bryophytes differ from pteridophytes in being _____
Alt1	Non-vasculature
Alt2	Seeded
Alt3	Vasculature
Alt4	Sporophytic

31	Sporangia bearing leaf is called _____
Alt1	Sorus
Alt2	Sporophyll
Alt3	Ramentum
Alt4	Indusium

32	Perisperm is ____
Alt1	Outgrowth of the outer integument
Alt2	Surviving nucellus in the seed
Alt3	Outgrowth of the funicles
Alt4	All of these

33	Phloem of gymnosperm differ from angiosperm in _____
Alt1	Having parenchyma
Alt2	Having no companion cells
Alt3	Having no sieve tubes
Alt4	Having no sclerenchyma

34	The most advance order in gymnosperms
Alt1	Cycadales
Alt2	Coniferales
Alt3	Gnetales
Alt4	Taxales

35	Which of the followings is absent in the xylem of gymnosperms?
Alt1	Tracheids
Alt2	Parenchyma
Alt3	Fibers
Alt4	Vessels

36	Which of the following is living fossil?
Alt1	Ephedra
Alt2	Pinus
Alt3	Cycus
Alt4	Ginkgo

37	Megasporophyll of pteridophytes is comparable to which structure of angiosperms
Alt1	Stamens
Alt2	Ovules
Alt3	Carpel

Alt4	Microsporophyll

38	Sieve tubes are suited for translocation of food because they possess
Alt1	Bordered pits
Alt2	No ends walls
Alt3	Broader lumen and perforated cross walls
Alt4	No protoplasm

39	Pericycle of roots produces
Alt1	mechanical support
Alt2	vascular bundles
Alt3	lateral roots
Alt4	adventitious buds.

40	Vascular cambium produces
Alt1	secondary xylem and secondary phloem
Alt2	primary xylem and primary phloem
Alt3	primary xylem and secondary phloem
Alt4	secondary xylem and primary phloem.

41	The aleurone layer in maize grain is especially rich in
Alt1	proteins
Alt2	starch
Alt3	lipids
Alt4	auxins

42	Which ones produce androgenic haploids in anther cultures?
Alt1	anther wall
Alt2	tapetal layer of anther wall
Alt3	connective tissue
Alt4	young pollen grains

43	Double fertilization and triple fusion were discovered by
Alt1	Hofmeister
Alt2	Nawaschin and Guignard
Alt3	Leeuwenhoek
Alt4	Strasburger

44	The polyembryony commonly occurs in
Alt1	tomato
Alt2	potato
Alt3	Citrus
Alt4	turmeric

45	The largest family of flowering plants is
Alt1	Fabaceae
Alt2	Musaceae

Alt3	Compositae
Alt4	Asteraceae

46	During photosynthesis evolution of oxygen is from-
Alt1	Water
Alt2	CO2
Alt3	Glucose
Alt4	Chlorophyll

47	Carbon dioxide is
Alt1	a basic oxide
Alt2	an acidic oxide
Alt3	a neutral oxide
Alt4	none of these

48	A single base pair mutation occurs in strand CATTACCG, its complementary strand had a sequence GTTATGGC. It means mutation has changed base pair-
Alt1	A T
Alt2	T T
Alt3	T A
Alt4	A A

49	In bacteria, site of respiration is-
Alt1	Golgi bodies
Alt2	cytoplasm
Alt3	Endoplasmic reticulum
Alt4	Microsomes

50	In mitochondria the enzymes of electron transport chain are located at-
Alt1	Outer membrane
Alt2	Inter membrane space
Alt3	Inner membrane
Alt4	Matrix

51	Which is not a programming language?
Alt1	BASIC
Alt2	C
Alt3	MS-WORD
Alt4	LOGO

52	The main force involved in protein folding are-
Alt1	H-bonding
Alt2	Hydrophobicity
Alt3	Covalent bonds
Alt4	Vanderwall force

53	Among the following which chemical inhibits the mitochondrial electron transport chain-
Alt1	Streptomycin
Alt2	Nystanin
Alt3	Azides
Alt4	Penicillin

54	The common word for bacteria which are helically curved rods is
Alt1	cocci
Alt2	pleomorphic
Alt3	bacillus
Alt4	spirilla

55	The process of Gram staining is based on the ability of bacterial cell wall
Alt1	to retain the safranin dye
Alt2	to retain the crystal violet dye during solvent treatment
Alt3	to retain part of both dyes
Alt4	none of above

56	Which of the following aid plants in the acquisition of nitrogen from nitrogen gas of the atmosphere?
Alt1	Bacteria
Alt2	Algae
Alt3	Nematodes
Alt4	Moulds

57	Which of the following molecule is produced from the fixation of CO2 in C4 plants?
Alt1	Malate
Alt2	Oxaloacetate
Alt3	Pyruvate
Alt4	Alpha-ketoglutarate

58	Which of the following is capable of oxidizing sulfur to sulfates?
Alt1	Thiobacillus thiooxidans
Alt2	Desulfotomaculum
Alt3	Rhodospirillum
Alt4	Rhodomicrobium

59	Which are the most primitive group of algae
Alt1	Blue green algae
Alt2	Red algae
Alt3	Green algae
Alt4	Brown algae

60	One of the following is present in blue green algae
Alt1	Starch
Alt2	Cyanophacean granule

Alt3	Any polysaccharide
Alt4	Floridian starch

61	The primary acceptor of Co2 in C3 pathway
Alt1	PEP
Alt2	RuBP
Alt3	GDP
Alt4	NADP

62	Algae differ from Riccia and Marchantia in having
Alt1	Multicellular body
Alt2	Multicellular sex organs
Alt3	Pyrenoids in the cell
Alt4	Thalloid body

63	Basic principles of embryonic development were pronounced by
Alt1	Von Baer
Alt2	Haeckel
Alt3	Morgan
Alt4	Weismann

64	A species inhabiting different geographical areas is known as
Alt1	sympatric
Alt2	allopatric
Alt3	sibling
Alt4	endemic

65	In which condition gene ratio remains constant in a species
Alt1	gene flow
Alt2	mutation
Alt3	random mating
Alt4	sexual selection

66	Name the region reported with wild occurrence of Cocos nucifera in India
Alt1	Assam
Alt2	Lakshadweep
Alt3	Nagaland
Alt4	Andaman Islands

67	Which of the algae is responsible for red colour of red sea
Alt1	Chlamydomonas brauii
Alt2	Trichodesmium erythrium
Alt3	Ulothrix zonata
Alt4	None of the above

68	Who proposed the terminology ‘Taxonomy’
Alt1	A.P.de Candolle.

Alt2	Carl Linnaeus.
Alt3	Robert Brown
Alt4	Adolf Engler

69	Who proposed the term ‘Biodiversity’
Alt1	Walter G Rosen
Alt2	Henry Lawrence
Alt3	Michel Adanson
Alt4	Hans Hallier

70	Who proposed the ‘genus concept’ in plant Taxonomy
Alt1	de Tournefort
Alt2	Karl Mez
Alt3	Oswald Tippo
Alt4	C. Bauhin

71	IUCN (The International Union for Conservation of Nature and Natural Resources) headquarters is located at
Alt1	Morges, Switzerland
Alt2	Paris, France
Alt3	Vienna, Austria
Alt4	NewYork, USA

72	Wild occurrence of betel nut palms in India
Alt1	Western Ghats
Alt2	Eastern Ghats
Alt3	Great Nicobar
Alt4	North Andaman

73	Ex situ conservation includes
Alt1	Cryo bank
Alt2	Pollen bank
Alt3	Germplasm bank
Alt4	all of the above

74	The final stable community in an ecological succession is called
Alt1	final community
Alt2	ultimate community
Alt3	climax community
Alt4	serial community

75	The dominant generation in Pteridophyte is
Alt1	triploid
Alt2	gametophytic
Alt3	diploid
Alt4	haploid

76	The structure that produce gametes in the Prothallus are
Alt1	anthers and ovules
Alt2	ascogonium and anthers
Alt3	antheridia and archegonia
Alt4	anthers and archegonia

77	Prothallus represents
Alt1	gametophytic phase in a fern
Alt2	gametophytic phase in a angiosperm
Alt3	gametophytic phase in a gymnosperm
Alt4	sporophytic phase in a fern

78	The process of successful establishment of the species in a new area is called
Alt1	sere
Alt2	climax
Alt3	invasion
Alt4	ecesis

79	The root type of Loranthus is known as
Alt1	Stilt root
Alt2	Prop roots
Alt3	Haustoria
Alt4	Assimilatory root

80	Total number of nuclei involved in double fertilization in Angiosperms
Alt1	Two
Alt2	Three
Alt3	Four
Alt4	Five

81	Indian Botanic Garden is located at
Alt1	Ooty
Alt2	Bangalore
Alt3	Kodaikanal
Alt4	Kolkatta

82	Origin and evolution of sex in algae is best seen in
Alt1	Blue green algae
Alt2	Green algae
Alt3	Red algae
Alt4	Brown algae

83	9:7 is the F2 ratio in
Alt1	Inhibitory gene action
Alt2	Supplementary gene action
Alt3	Complementary gene action
Alt4	Duplicate gene action

84	Which of the following is a petro-crop genus
Alt1	Jatropha
Alt2	Podocarpus
Alt3	Pometia
Alt4	Pterocarpus

85	Palm oil is extracted from
Alt1	Cocos nucifera
Alt2	Elaeis guineensis
Alt3	Arenga pinnata
Alt4	Caryota mitis

86	Auxanometer is used to measure
Alt1	Plant growth
Alt2	Plant hormone analysis
Alt3	Rate of photosynthesis
Alt4	Osmosis

87	The climax community from an abandoned land is a an example of
Alt1	Autogenic succession
Alt2	allogenic successsion
Alt3	primary succession
Alt4	secondary succession

88	The order of basic processes involved in succession is
Alt1	Nudation->Invasion-> competition and co action->reaction->stabilization
Alt2	Invasion->stabilization-> competition and co action-Reaction->nudation
Alt3	Invasion-> Nudation->competition and co action->Reaction->stabilization
Alt4	Nudation->stabilization-> competitionand co action->Invasion->reaction

89	Biological plastic is composed of
Alt1	Cellulose, hemicellulose, agarose
Alt2	Cellulose, amylase, glactose
Alt3	Cutin, lignin, suberin
Alt4	Pectin, cutin, gelatine

90	The induction of flowering by low temperature treatment is called
Alt1	Cryobiology
Alt2	Photoperiodism
Alt3	Vernalization
Alt4	Silviculture

91	Ruminate endosperm is found in
Alt1	Areca catechu
Alt2	Cocos nucifera
Alt3	Mangifera indica

Alt4	Mimusops elangi

92	Greenhouse effect is caused by
Alt1	CO2
Alt2	SO2
Alt3	CO
Alt4	Combination of all above

93	In allopatric speciation, the initial barriers for gene flow is
Alt1	Behavioral
Alt2	Post zygotic
Alt3	Geographic
Alt4	Ecological

94	Cystolith is composed of
Alt1	CaCO3
Alt2	CaNO3
Alt3	CaNO2
Alt4	CaSO3

95	Highest number of chromosome reported in
Alt1	Pinanga
Alt2	Reflessia
Alt3	Bentinckia
Alt4	Ophioglossum

96	Virus free clones can be obtained from
Alt1	Callus culture
Alt2	Meristem culture
Alt3	Embryo culture
Alt4	Haploid culture

97	Androgenic haploids were first produced by
Alt1	Steward and White
Alt2	Guha and Maheswari
Alt3	Reinert and Bajaj
Alt4	Bourgin and Nitsch

98	Name the wild rice described by Ellis from Andaman-Nicobar Island
Alt1	Oryza andamanica
Alt2	Oryza ind-andamanica
Alt3	Oryza barthii
Alt4	Oryza katifolia

99	Which of the following is an indirect gene transfer method
Alt1	Microinjection
Alt2	Biolistics

Alt3	Cosmid
Alt4	Lipofection

100	Sago is extracted from
Alt1	Cycas
Alt2	Adiantum
Alt3	Pinus
Alt4	Nephrolepis

Examination: **Ph.D. Botany**

Section 1 - Section 1

Question No.1 4.00

Bookmark ☑

Study the following information carefully and answer the question below it

Lakshman passes through seven lanes to reach his school. He finds that 'Truth lane' is between his house and 'Lie lane'. The third lane from his school is 'Karma lane'. 'Dharma lane' is immediately before the 'Yog lane'. He passes 'Salvation lane' at the end, 'Lie lane' is between 'Truth lane' and 'Dharma lane', the sixth lane from his house is 'Devotion lane'.

If Lakshman's house, each lane and his school are equidistant and he takes 2 minutes to pass one lane, then how long will he take to reach school from his house?

- 13 minutes
- 15 minutes
- 16 minutes
- 14 minutes

Question No.2 4.00

Bookmark ☐

Choose the best antonym of the italicized word.
The deliberate *suavity* of Olaf's behavior made the emotions of the audience volatile.

- impetuosity
- stupidity
- pleasantness
- politeness

Question No.3 4.00

Bookmark ☑

Tricarpellary, syncarpous, inferior ovary with parietal placentation is found in

- Cruciferae
- Ranunculaceae
- Solanceae
- Cucurbitaceae

Question No.4 4.00

Bookmark ☑

5^{th} June is celebrated as

- World forest day
- World wildlife day
- World population day
- World environment day

Question No.5 4.00

Bookmark ☐

She studies very hard for the exams, _____?

- doesn't she?
- does she?
- is it?
- isn't it?

Question No.6 4.00

Bookmark ☑

Study the following information carefully and answer the question below it

The Director of an MBA college has decided that six guest lectures on the topics of Motivation, Decision Making, Quality Circle, Assessment Centre, Leadership and Group Discussion are to be organised on each day from Monday to Sunday.
(i) One day there will be no lecture (Saturday is not that day), just before that day Group Discussion will be organised.
(ii) Motivation should be organised immediately after Assessment Centre.
(iii) Quality Circle should be organised on Wednesday and should not be followed by Group Discussion
(iv) Decision Making should be organised on Friday and there should be a gap of two days between Leadership and Group Discussion

Which of the following information is not required for the above lecture arrangements?

- All are required
- Only (i)
- Only (ii)
- Only (iii)

Question No.7 4.00

Bookmark ☑

Which of the following is not the characteristics of histoplasmosis

- Yeasts in tissue
- Specific geographic distribution
- mycelial phase in the soil
- Person to person transmission

Question No.8 4.00

Bookmark ☐

Being awarded the Best Singer in 2010 marked a _____ in her life.

- yardstick
- memorial
- milestone
- sign-post

Question No.9 4.00

Bookmark ☐

This is the school where I studied till class 5.
The underlined word is a

- adjective
- preposition
- adverb
- pronoun

Question No.10 4.00

Bookmark ☐

Minamata disease was caused by water pollution by

- Lead
- Bismuth
- Tin
- Mercury

Question No.11 4.00

Bookmark

Select the Pair that best respresents the relationship that is given in the question:
Explore : Discover

- Think : Relate
- Research : Learn
- Tree : Wood
- Books : Knowledge

Question No.12 4.00

Bookmark

Statement: Ten Candidates, who were on the waiting list could finally be admitted to the course.
Assumptions:
I. A large of number of candidates were on the waiting list.
II. Wait listed candidates do not ordinarily get admission.

- If neither I nor II is implicit
- If both I and II are implicit
- If only assumption II is implicit
- If only assumption I is implicit

Question No.13 4.00

Bookmark

Which of the following is fungicide?

- 2-4,D
- Bordeaux mixture
- D.D.T
- Auxin

Question No.14 4.00

Bookmark

In callus culture, roots can be induced by the supply of

- Auxin
- Ethylene
- Cytokinin
- Gibberellin

Question No.15 4.00

Bookmark

A clone is a group of individuals obtained through

- Cross-Pollination
- Self-Pollination
- Hybridization
- Vegetative Propagation

Question No.16 4.00

Bookmark

Choose the best synonym of the italicized word.
Dr. Elango is in the habit of using *obsolete* words.

- difficult
- simple
- outdated
- wrong

Question No.17 4.00

Bookmark

Megasporophyll of sellaginella is equal to which structure of angiosperms

- Carpel
- Ovul
- Stem
- Stigma

Question No.18 4.00

Bookmark

Which of the following has peptidoglycan as a major constituent of cell wall?

- Gram-negative bacteria
- Virus
- Gram-positive bacteria
- Fungi

Question No.19 4.00

Bookmark

Megasporophyll in gymnosperms is termed as

- Leaf
- Carpel
- Stem
- Stamen

Question No.20 4.00

Bookmark

Water bloom is generally caused by

- Bacteria
- *Hydrilla*
- Blue-green algae
- Green algae

Question No.21 4.00

Bookmark

Birbal sahni is known for

- Dark reaction
- Light reaction
- Evolution
- Fossil

Question No.22 4.00

Bookmark

When their father died, their elder brother sold the old house and _____ in a small flat in a far-off suburb

- set them up
- set them down
- put them up
- put them down

Question No.23 4.00

Bookmark

The cell walls of Gram positive bacteria contain two modified sugar, viz. N- acetylgucosamine (NAG) and N- acetylmuramic acid (NAM). They are covalently linked by

- α- 1,4-glycosidic bond
- α- 1,6-glycosidic bond
- β- 1,4-glycosidic bond
- β-1,6-glycosidic bond

Question No.24 4.00

Bookmark

Plants which are not differentiated into leaf, stem and root are

- Pteridophytes
- Bryophytes
- Thallophytes
- Gymnosperms

Question No.25 4.00

Bookmark

The most advanced Gymnosperm is

- Gnetales
- Cycadales
- Coniferales
- Codaitales

Question No.26 4.00

Bookmark

- 3
- 1
- 2
- 4

Question No.27 4.00

Bookmark

Spore dissemination in fern is done by

- Sorus
- Annulus
- Indusium
- Tapetum

Question No.28 4.00

Bookmark

Which are the primitive group of algae

- Cyanophyceae
- Rhodophyceae
- Chlorophyceae
- Pheophyceae

Question No.29 4.00

Bookmark

Fern stele is a

- Siphonostele
- Actinostele
- Plectodstele
- Dictyostele

Question No.30 4.00

Bookmark

Correct the error in the italicized part of the sentence by choosing the most appropriate options
Job was a tiny man, barely five feet tall, with *a spright walk*

- spright walk
- a sprightly walk
- a sprightly walking
- spright walkingly

Question No.31 4.00

Bookmark

DNA replication occurs in

- S phase
- M Phase
- G_1 Phase
- G_2 Phase

Question No.32 4.00

Bookmark

Seed habit is originated in

- Pteridophytes
- Algae
- Fungi
- Bryophytes

Question No.33 4.00

Bookmark

Which one of the followings is a good indicator of SO2 pollution?

- Pteridophytes
- Bryophytes
- Fungi
- Lichen

Question No.34 4.00

Bookmark

Based on the information given answer the following question.
1. In a family of six persons, there are people from three generations. Each has separate professions and they like different colours. There are two couples.
2. Shyam is an Engineer and his wife is not a doctor and she does not like Red colour.
3. Chartered Accountant likes green colour and his wife is a teacher.
4. Manisha is the mother-in-law of Sunita and she likes orange colour.
5. Vimal is the grand father of Tarun and tarun is the Principal and likes black colour.
6. Nyna is the grand daughter of Manisha and she likes blue colour. Nyna's Mother likes white colour.

What is the profession of Sunita?

- Cannot be determined
- Principal
- Chartered Accountant
- Teacher

Question No.35 4.00

Bookmark

Which is most likely to be exposed on the surface of a gram-negative bacterium?

- Lipoteichoic acid
- Aminoacids
- Pore protein (porin)
- Phospholipids

Question No.36 4.00

Bookmark

Statement: Apart from it's entertainment value of Television, it's educational value cannot be ignored
Assumptions:
I. People take Television to be the means of entertainment only.
II. The educational value of Television is not realized properly

- If only assumption I is implicit
- If both I and II are implicit
- If only assumption II is implicit
- If neither I nor II is implicit

Question No.37 4.00

Bookmark

Select the first land plants on the earth from the followings

- Bryophytes
- Algae
- Pteridophytes
- Fungi

Question No.38 4.00

Bookmark

The filtering medium of trickling filters is coated with microbial flora, known as

- Geological film
- Zoological film
- Microbial film
- Zoogleal film

Question No.39 4.00

Bookmark

Aspergillosis is recognized in tissue by the presence of

- Psuedohyphae
- Metachromatic granules
- Septate hyphae
- Budding cells

Question No.40 4.00

Bookmark

Primary development of male and female gametophytes takes place in the sporangia itself in

- Sellaginella
- Fern
- Volvux
- Fungi

Question No.41 4.00

Bookmark

In C3 plants first stable product photosynthesis during dark reaction is:

- PGA
- Pyruvic acid
- Oxalo acetic acid
- RuBP

Question No.42 4.00

Bookmark

Sporangia bearing leaf is called as

- Indusium
- Sporophyll
- Androecium
- Sorus

Question No.43 4.00

Bookmark

Polymerase chain reaction is most useful in

- Protein synthesis
- DNA amplification
- DNA synthesis
- Amino acid synthesis

Question No.44 4.00

Bookmark

The process by which phage reproduction is initiated in lysogenized culture is called

- infection
- induction
- integration
- repression

Question No.45 4.00

Bookmark

Pteridophytes are different from bryophytes by

- Archegonia
- Presence of vascular tissue
- Alternate generation
- Sperms

Question No.46 4.00

Bookmark

Nidhi walks 10 metres in front and 10 metres to the right. Then every time turning to her left, she walks 5, 15 and 15 metres respectively. How far is Nidhi now from her starting point?

- 10 metres
- 5 metres
- 15 metres
- None of the above

Question No.47 4.00

Bookmark

Which one of the following is one of the characteristics of a biological community?

- Sex ratio
- Stratification
- Death ration
- Natality

Question No.48 4.00

Bookmark

Fist biochemical to be produced commercially by microbial cloning and genetic engineering, is

- Interferon
- Human insulin
- Fertility factor
- Penicillin

Question No.49 4.00

Bookmark

Agar agar is obtained from the followings

- Spirolina
- Gracilaria
- Gelidium
- Nostoc

Question No.50 4.00

Bookmark

A diploid population having individuals with different chromosome numbers ranging from 2N + 3 to 2N − 3 is a

- Polyploidy
- Triploidy
- Diploidy
- Aneuploidy

Question No.51 4.00

Bookmark

Competition for light, nutrients and space is most severe between

- closely related organisms growing in the same area/niche
- distantly related organisms growing in different niches.
- distantly related organisms growing in the same habitat
- closely related organism growing in different niches

Question No.52 4.00

Bookmark

T-cells and B-cells are called as

- Natural killer cells
- Lymphocytes
- RBCs
- WBCs

Question No.53 4.00

Bookmark

Crumb : Bread ::

- Water : Bucket
- Flower : Vase
- Splinter : Wood
- Tea : Cup

Question No.54 4.00

Bookmark

What is the percentage of Peptidoglycan in the dry weight of cell wall in many gram positive bacteria?

- Within 20 to 50%
- Above 50%
- 50% or more
- Below 20%

Question No.55 4.00

Bookmark

BOD stands for

- Biotic oxygen demand
- Biochemical oxidation demand
- Biochemical oxygen demand
- Biological oxygen demand

Question No.56 4.00

Bookmark

Immuno-compromised persons are suffered from several fungal diseases. Which of the following is the least frequently associated

- *Aspergillus fumigatus*
- *Rhizopus sp.*
- *Cryptococcus neoformans*
- Mucor species

Question No.57 4.00

Bookmark

Mycorrhiza is the phenomenon of

- Symbiosis
- Antagonism
- Parasitism
- Endemism

Question No.58 4.00

Bookmark

The classification given by Bentham and Hooker is

- Natural
- Artificial
- Phylogenetic
- Numerical

Question No.59 4.00

Bookmark

Green house effect is warming due to

- infra-red rays reaching earth
- moisture layer in atmosphere
- ozone layer of atmosphere.
- increase in temperature due to increase in carbon dioxide concentration of atmosphere

Question No.60 4.00

Bookmark

A woman showing extra Barr bodies in chromosome during amniocentesis is showing that the embryo is associated with:

- Patau's syndrome
- Klinefelter's syndrome
- Down's syndrome
- Edward's syndrome

Question No.61 4.00

Bookmark

Gasohol is defined as

- Natural gas
- Hydrogen
- Petrol
- ethanol

Question No.62 4.00

Bookmark

Ruminate endosperm is commonly found in the seeds of

- Euphorbiaceae
- Annonaceae
- Cruciferae
- Compositae

Question No.63 4.00

Bookmark

Which one of the following is NOT a PCR-based molecular marker?

- RELP
- DAF
- RAPD
- AP-PCR

Question No.64 4.00

Bookmark

Zygotic meiosis is the characteristic of

- Brophytes
- Algae
- Fungi
- Bacteria

Question No.65 4.00

Bookmark

The largest sperm is found in the plants of

- Rhynia
- Cycas
- Hydrilla
- Lycopodium

Question No.66 4.00

Bookmark

Which of the following nucleic acid is present in hepatitis B virus?

- ssRNA
- ssDNA
- dsRNA
- dsDNA

Question No.67 4.00

Bookmark

Energy flow in ecosystem is

- Unidirectional
- Bidirectonal
- Tridirectional
- Multidirectional

Question No.68 4.00

Bookmark

A can finish a work in 18 days and B can do the same work in half the time taken by A. Then, working together, what part of the same work they can finish in a day?

- 0 1/8
- 0 1/2
- 0 1/6
- 0 1/4

Question No.69 4.00

Bookmark

The main constituent of 'Ergot of rye' is

- Phenol
- Alkaloid
- Nucleic acid
- Antibiotic

Question No.70 4.00

Bookmark

Black rust of wheat is caused by

- Rhizopus
- Penicillin
- Puccinia
- Yeast

Question No.71 4.00

Bookmark

The pairing of homologous chromosome occurs in

- Termnalization
- Crossing over
- Tetrads
- Synapsis

Question No.72 4.00

Bookmark

Flagella found all over the body surface of the bacteria is called as

- lophotrichous
- peritrichus
- monotrichus
- Amphitrichus

Question No.73 4.00

Bookmark

Development of egg without fertilization is

- Apomixis
- Apocarpy
- Parthenogenesis
- Parthenocarpy

Question No.74 4.00

Bookmark

Secondary immune response is generated due to

- Naive B cells
- Naive T cells
- NK cells
- Memory cells

Question No.75 4.00

Bookmark

Find out the bacteria which lack cell wall and are resistant to penicillin?

- Spirochetes
- Bdellovibrios
- Cyanobacteria
- Mycoplasmas

Question No.76 4.00

Bookmark

Which one is considered as man made ecosystems?

- Forest
- Aquarium
- Pond
- Tissue culture

Question No.77 4.00

Bookmark

Which of the algae is responsible for red colour in red sea

- Ulothixzoneta
- Volvox sp.
- Clamydomonasbrauii
- Trichodesmiumerythrium

Question No.78 4.00

Bookmark

Balbiani rings are found in the following

- Non-sense chromosomes
- Polysomes
- Autosomes
- Polytene chromosomes

Question No.79 4.00

Bookmark

Error free repair of double strand breaks in DNA is accomplished by

- Homologous recombination
- Base excision repair
- Mismatch repair
- Non-homologous end joining

Question No.80 4.00

Bookmark

Coralloid roots are found in

- Gnetum
- Pinus
- Gingo
- Cycas

Question No.81 4.00

Bookmark

Red rust of tea is caused by

- Gymnosperm
- Algae
- A fungus
- Bacterium

Question No.82 4.00

Bookmark

Iodine is obtained from

- Volvox
- Laminaria
- Spirolina
- Nostoc

Question No.83 4.00

Bookmark

The cocci which forms a chain is

- Streptococci
- Sarcina
- diplococci
- Staphycocci

Question No.84 4.00

Bookmark

In a comparative study of grassland ecosystem and pond ecosystem, it may be observed that

- primary and secondary consumers are similar
- the abiotic components are almost similar
- the biotic components are almost similar
- both biotic and abiotic components are different

Question No.85 4.00

Bookmark

Find the odd one out?

- Deposit
- Deduction
- Debit
- Withdrawal

Question No.86 4.00

Bookmark

Development of sporophytes without involvement of sexual reproduction

- Apogamy
- Apomixis
- Apocarpy
- Apospory

Question No.87 4.00

Bookmark

Fungi often colonize lesions due to other causes. Which of the following is least likely to be present as colonizer

- Candida
- Sporothrix
- Aspergillus
- Mucor

Question No.88 4.00

Bookmark

Choose the best synonym of the italicized word.
Children of excessively indulgent parents often become very *recalcitrant.*

- insolent
- dependent
- disobedient
- indolent

Question No.89 4.00

Bookmark

Noise pollution is measured by sound meter in the unit of

- Hertz
- Decibel
- Sound
- Joule

Question No.90 4.00

Bookmark

Identify the correct type of food chain : dead animal → blow fly maggots → common frog → snake

- Predator food chain
- Detrital food chain
- Decomposer food chain
- Grazing food chain

Question No.91 4.00

Bookmark

If A+B means A is daughter of B,
A-B means A is husband of B
A × B means A is brother of B

From the statement A × B × C × D, which of the following statement is not necessarily true?

- A, B, C are male
- D is brother of C
- B is the brother of A
- C is the brother of A

Question No.92 4.00

Bookmark

White rust of crucifers is caused by

- *Phytophthora*
- *Puccinia*
- *Ustilago*
- *Albugo*

Question No.93 4.00

Bookmark

The protein from which hook and filaments of flagella are composed of, is

- Flagellin
- Keratin
- Gelatin
- Casein

Question No.94 4.00

Bookmark

The last step in synthesis of peptidoglycan is

- attachment of a peptide to muramic acid
- binding of penicillin to a membrane protein
- attachment of a portion of peptidoglycan to a membrane lipid
- attaching two amino acids to form a cross-link

Question No.95 4.00

Bookmark

What is the end product of photosynthesis?

- Carbon dioxide
- Glucose and oxygen
- Nitrogen
- Water

Question No.96 4.00

Bookmark

Which of the following cell possess poly morphonucleus

- B- cells
- Neutrophils
- macrophage
- erythrocyte

Question No.97 4.00

Bookmark

Both heterospory and circinateptyxis occur in

- Pinus
- Dryopteris
- Cycas
- Funaria

Question No.98 4.00

Bookmark

Sargassum belong which group

- Green algae
- Red algae
- Ble green algae
- Brown algae

Question No.99 4.00

Bookmark

Megasporangium is also known as

- Sorus
- Fruit
- Nucellus
- Ovule

Question No.100 4.00

Bookmark

Which one of the following pairs is mismatched?

- Tundra - permafrost
- Coniferous forest - evergreen trees
- Prairie - epiphytes
- Savanna - acacia trees