RGUCET 2022 Advanced PG Diploma in Biodiversity (APGDB)

1	Which of the given words will complete the following sentence correctly? The music festival _____ in Ziro.					
	a) begin	b) began	c) start	d) go on	b	Began
2	On cloud nine means _____.					
	a) happy	b) sad	c) good	d) bad	a	happy
3	His youngest daughter was _____ apple of his eye.					
	a) an	b) the	c) a	d) in	b	The
4	Ram is blind _____ one eye.					
	a) in	b) at	c) by	d) of	a	In
5	Select the plural form.					
	a) Man	b) Mans	c) Men	d) Mens	c	Men
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11	Who is the Father of Botany?					
	a) Theophrastus	b) Carl Linnaeus	c) Aristotle	d) Hugo De Vries	a	Theophrastus
12	Rubber plantation on large scale has been done in _____.					
	a) Assam	b) Arunachal Pradesh	c) Mizoram	d) Tripura	d	Tripura
13	India's first satellite was _____.					

	a) Bhaskara□I	b) Aryabhata	c) IRS-1A	d) Apple	b	Aryabhata
14	Which of the following is the national park in Assam?					
	a) Corbett	b) Kajiranga	c) Keoladeo	d) Bandipur	b	Kajiranga
15	Taxol is _____.					
	a) Antifungal drug	b) Anti-inflammatory drug	c) Anticancer drug	d) Anticoagulant	c	Anticancer drug
16	Indian sports women Rani Rampal is associated with _____.					
	a) Badminton	b) Football	c) Hockey	d) Athletics	c	Hockey
17	Indian weightlifter Saikhom Mirabai Chanu won Silver medal in 2020 Summer Olympics held at Tokyo. The weightlifter who won the Gold medal was from which country?					
	a) China	b) Indonesia	c) Chinese Taipei	d) Belgium	a	China
18	Air India nearly 70 years after its nationalisation has recently been acquired by the _____.					
	a) Tata Group	b) Aditya Birla Group	c) Reliance ADA Group	d) Adani Group	a	Tata Group
19	The minimum age required to become a member of the Rajya Sabha is _____.					
	a) 25 years	b) 21 years	c) 30 years	d) 18 years	c	30 years
20	Which of the following is not a neighboring country of Myanmar?					
	a) Thailand	b) Laos	c) China	d) Vietnam	d	Vietnam
21	$\sqrt{15} \times \sqrt{20}$ is equal to _____.					
	a) $5\sqrt{12}$	b) $10\sqrt{3}$	c) $12\sqrt{5}$	d) $\sqrt{35}$	b	$10\sqrt{3}$
22	The sum of all angles in a quadrilateral is equals to _____.					
	a) 180 degree	b) 240 degree	c) 270 degree	d) 360 degree	d	360 degree
23	The sum of ages (in year) of a son and his father is 55 years. After 10 years, the age of the father would be twice the age of the son. Find the age of the son after 10 years.					
	a) 15	b) 25	c) 18	d) 40	b	25
24	The side of a square is 12 cm. If this square is cut into four equal triangles, then the area of each triangle will be _____.					

	a) 48 cm^2	b) 12 cm^2	c) 18 cm^2	d) 36 cm^2	d	36 cm^2
25	A goods train running at a speed of 36 km/h passes a bridge of 600 m length in 90 second. What is the length of the train?					
	a) 180m	b) 150m	c) 300m	d) 240m	c	300m
26	The function of β subunit of polymerase is					
	a)Template binding	b)Catalytic binding	c)Promoter binding	d)Cation binding	b	Catalytic binding
27	Cystic fibrosis is					
	a)ex-linked recessive disorder	b) Autosomal dominant disorder	c)Autosomal recessive disorder	d)Sex-linked dominant disorder	c	Autosomal recessive disorder
28	Which of the following is a type of autosomal recessive genetic disorder?					
	a)Haemophilia	b)Skeletal dysplasia	c)Sickle cell anaemia	d) Cri du chat syndrome	c	Sickle cell anaemia
29	Which of the following genotypes and phenotypes in a man may be the correct result of aneuploidy in sex chromosomes?					
	a)22 pairs + Y females	b)22 pairs + XY females	c)22 pairs + XXY females	d)22 pairs + XXXY females	c	22 pairs + XXY females
30	The mode of inheritance for the trait – Fragile X syndrome is_____.					
	a)X linked dominant	b)X linked recessive	c)Autosomal dominant	d)Autosomal recessive	a	X linked dominant
31	Which of the following signal molecules does not interact with cell surface receptors.					
	a) Insulin	b)Gastrin	c)Glucagon	d) Testosterone	d	Testosterone
32	Which of the following hormones requires a cell surface receptor for its action?					
	a)*Adrenaline*	b)*Progesterone*	c)*Growth factors*	d)*FSH*	a	*Adrenaline*
33	Amphioxus has what kind of epidermis					
	a) stratified	b) unstratified	c) keratinized	d) Rough	b	unstratified
34	Mulberry cell in hemichordate is found in					
	a) Ventral Nerve Cord	b) Epidermis	c) Buccal diverticulum	d) Gill slits	b	Epidermis
35	Oil Producing gland on the tail of some birds is known as:					
	a) Sebaceous gland	b) Preen gland	c) Sweat gland	d) Red gland	b	Preen gland
36	Monkeys differ from Apes by which of the following feature?					
	a) Homodont dentition	b) Large Canines	c) Post anal part in their bodies	d) Viviparous	c	Post anal part in their bodies
37	During the glycolysis, substrate-level phosphorylation result in generation of					

	a)6 ATP	b)4 ATP	c)5 ATP	d)3 ATP	b	4 ATP
38	Polytene chromosomes are found in					
	a) salivary gland	b) liver	c) lung	d) neurons	a	salivary gland
39	D-Amino acids are found in					
	a) Algae cell wall	b)Bacterial cell wall	c) Fungal cell wall	d)Plant cell wall	b	Bacterial cell wall
40	During the β-oxidation, the conversion of the 16-carbon chain of palmitate to ……..acetyl-CoA molecules.					
	a) Six	b) Nine	c) Seven	d) Eight	d	Eight
41	Islet of Langerhansis found in					
	a) Pancreas	b) Lung	c) Liver	d) Kidney	a	Pancreas
42	Which of the following is not the part of innate immunity?					
	a) Mast cells	b) T lymphocytes	c)Dendritic cells	d)NK cells	b	T lymphocytes
43	Which immunoglobulins can significantly crosses the human placenta?					
	a) IgD	b)IgG	c) IgM	d)IgA	b	IgG
44	MHC Class II molecules (a class of major histocompatibility complex) molecules normally are found in					
	a) Dendritic cells	b) Mononuclear phagocyte	c) RBC	d) Both a and b	d	Both a and b
45	Which of the following is a taxonomic category					
	a)Reptilia	b)*Panthera tigris*	c)Bird	d)Class	d	Class
46	Honey bees belong to order					
	a)Diptera	b)Coleoptera	c)Hymenoptera	d)Apidae	c	Hymenoptera
47	Which of the following is a chordate?					
	a) Amphioxus	b)Balanoglosus	c) Silverfish	d) Starfish	a	Amphioxus
48	Biramous appendages are characteristics of					
	a)Crustaceans	b)Insects	c)Molluscs	d)Millipedes	a	Crustaceans
49	Which of the following is a hemipteran rice pest?					
	a) Rice hispa	b) Rice gandhi bug	c)Rice grasshopper	d) Yellow stem borer	b	Rice gandhi bug
50	Pollen baskets of honey bees are found on					
	a) Inner side of basitarsus	b) Outer side of basitarsus	c) Outer side of tibia of fore leg	d) Outer side of tibia of hind leg	d	Outer side of tibia of hind leg
51	Which of the following is a microsporidian disease of silkworm?					

	a) Pebrine	b) Muscardine	c) Flacherie	d) Grasserie	a	Pebrine
52	In which habitat condition plants produce pneumatophores?					
	a) aquatic	b) mangrove	c) desert	d) epiphytic	b	mangrove
53	Thorns are the modification of _____.					
	a) leaf	b) branch	c) flower bud	d) root	b	branch
54	A mature pollen grain represents which stage of life cycle?					
	a) gametophyte	b) sporophyte	c) male gamete	d) intermediate stage	a	gametophyte
55	In which book Binomial nomenclature was scientifically uniformly utilized for the first time?					
	a) *Species Plantarum* (1753)	b) *Genera Plantarum* (1737)	c) *Critica Botanica* (1737)	d) *Fundamenta Botanica* (1736)	a	*Species Plantarum* (1753)
56	What is the anatomical nature of jute fiber?					
	a) bast fiber from phloem	b) xylem fiber	c) sclerenchyma	d) Collenchyma	a	bast fiber from phloem
57	In which plant family stamens are tetradinamous?					
	a) Brassicaceae	b) Capparaceae	c) Caryophyllaceae	d) Fabaceae	a	Brassicaceae
58	From which morphological part of the plant, we extract oil in *Oryza sativa*?					
	a) husk (lemma & palea)	b) bran-layer	c) endosperm	d) leaf	b	bran-layer
59	The common example of psychrophile is _____.					
	a) *E. coli*	b) *Salmonella*	c) *Pseudomonas*	d) *Lactobacillus*	**c**	*Pseudomonas*
60	Stellate shaped chloroplasts are commonly found in _____.					
	a) *Chara*	b) *Chlamydomonas*	c) *Volvox*	d) *Zygnema*	d	*Zygnema*
61	Which one is a common example of RNA virus?					
	a) Hepatitis c	b) Smallpox	c) Herpes	d) Papilloma	a	Hepatitis c
62	Haplontic life cycle is found in _____.					
	a) *Cladophora*	b) *Fucus*	c) *Chlamydomonas*	d) *Laminaria*	c	*Chlamydomonas*
63	Which one of the following can be used as edible vaccine _____.					

	a) BCG	b) GMO	c) MMR	d) TT	b	GMO
64	Triphasic life cycle in *Polysiphonia* consists of three kinds of plants. Tick the odd one from the following:					
	a) Diploid tetrasporophyte	b) Diploid carposporophyte	c) Haploid gametophyte	d) Haploid carposporophyte	d	Haploid carposporophyte
65	Septate and dark-coloured conidia are produced by _____.					
	a) *Alternaria*	b) *Albugo*	c) *Mucor*	d) *Penicillium*	a	*Alternaria*
66	Biflagellate zygote is formed in _____.					
	a) *Saprolegnia*	b) *Albugo*	c) *Synchitrium*	d) *Mucor*	c	*Synchitrium*
67	The largest group of fungi is _____.					
	a) Ascomycota	b) Basidiomycota	c) Mastigomycota	d) Zygomycota	a	Ascomycota
68	Sexual reproduction through the fusion of isogametes is achieved in _____.					
	a) *Saprolegnia*	b) *Albugo*	c) *Synchitrium*	d) *Phytophthora*	c	*Synchitrium*
69	Cyclin dependent kinases (cdks) is a _____.					
	a) Protein kinase	b) Carbohydrate Kinase	c) Lipid kinase	d) Ribozyme	a	Protein kinase
70	Complete synapsis of homologous chromosomes is achieved in _____.					
	a) Zygotene	b) Pachytene	c) Diplotene	d) Diakinesis	b	Pachytene
71	If sequence of one DNA strand is 5'p ATGGCAT 3' OH, then, the sequence of its complementary strand would be written as _____.					
	a) 3'p TACCGTA 5' OH	b) 3'OH TACCGTA 5'p	c) 5'p TACCGTA 3' OH	d) 5'p ATGCCAT 3'OH	d	5'p ATGCCAT 3'OH
72	Which of the following is not a type of archaebacteria?					
	a) Crenarchaeota	b) Korarchaeota	c) Thaumarchaeota	d) Noniarchaeota	d	Noniarchaeota
73	*Mycoplasma* is _____.					
	a) eukaryotic	b) multicellular	c) unicellular	d) a fungus	c	unicellular
74	_____are extremophilic organisms that is capable of growth and reproduction in low temperatures, ranging from −20 °C to +20 °C.					
	a) Halophiles	b) Thermophiles	c) Xerophily	d) Psychrophiles	d	Psychrophiles
75	*Escherichia coli* (E. coli) is _____.					
	a) rod-shaped gram negative bacteria	b) rod-shaped gram positive bacteria	c) round-shaped gram positive bacteria	d) Oval shaped gram negativebacteria	a	rod-shaped Gram negative bacteria
76	A retrovirus is a type of virus that inserts a copy of its _____ genome into the _____ of a host cell that it invades, thus changing the genome of					

	that cell.					
	a) RNA; DNA	b) DNA; RNA	c) ssDNA; ssRNA	d) tRNA; mRNA	a	RNA; DNA
77	COVID-19 are caused by _____.					
	a) double-stranded DNA viruses	b) single-stranded DNA viruses	c) double-stranded RNA viruses	d) single-stranded RNA viruses	d	single-stranded RNA viruses
78	Prions are _____.					
	a) misfolded proteins	b) RNA particles	c) bacterial particle	d) DNA particles	a	misfolded proteins
79	The genome of Human Immunodeficiency Viruses (HIV III) are made up of _____.					
	a) ds DNA	b) ss DNA	c) ds RNA	d) ss RNA	d	ss RNA
280	Which cell organelle is present in both Prokaryotic and Eukaryotic cells?					
	a) Mitochondria	b) Ribosomes	c) Golgi Bodies	d) Peroxisomes	b	Ribosomes
81	Antibiotics are compounds which acts against _____.					
	a) Bacteria	b) Fungi	c) Viruses	d) Both Bacteria and Fungi	a	Bacteria
82	Which one of the following organism has cell membrane?					
	a) Mycoplasmas	b) Viruses	c) Viroids	d) Prions	a	Mycoplasmas
83	The leaf colour in plants is due to the presence of _____.					
	a) Plastids	b) Chlorophylls	c) Anthocyanins	d) Pigments	b	Chlorophylls
84	In Whittaker's five Kingdom System Classification of biological organisms, blue green algae are placed under the kingdom _____.					
	a) Kingdom Protista	b) Kingdom Plantae	c) Kingdom Monera	d) Kingdom Animalia	c	Kingdom Monera
85	Which of the following organism has cilia present all over its body?					
	a) *Euglena*	b) *Paramecium*	c) *Chlamydomonas*	d) *Pseudomonas*	b	*Paramecium*
86	Fermentation of milk by bacteria results in the formation of curd due to the secretion of					
	a) Acetic acid	b) Lactic acid	c) Citric acid	d) Carboxylic acid	b	Lactic acid
87	Who had proposed the concept that proteinoid might have been the precursors to the first living cells?					
	a) Sidney W. Fox	b) T.H. Huxley	c) Spallanzani	d) Urey	a	Sidney W. Fox
88	The theory of spontaneous generation was disproved in 1768 by the Italian biologist_____.					
	a) T.H. Huxley	b) Van Helmont	c)L. Spallanzani	d) A.V. Leeuwenhoek	c	L. Spallanzani
89	Which one of the following conditions cannot be detected by karyotyping?					

	a) number of chromosomes	(B) size of chromosomes	c) shape of chromosomes	d) Number of genes in the chromosome	d	Number of genes in the chromosome
90	Chromosomes found in the salivary gland of Chironomus are known as _____.					
	a) Polytene chromosomes	b) Z-chromosome	c) Lampbrush chromosomes	d) A-Chromosomes	d	Polytene chromosomes
91	Lampbrush chromosomes were discovered by _____.					
	a) Morgan	b) Walther Flemming	c) E.G.Balbiani	d) Barr bodies	b	Walther Flemming
92	Who develop the mutation theory of evolution?					
	a) Mendel	b) Morgan	c) de Vries	d) WS Sutton	c	de Vries
93	The secondary wood of Ginkgo is _____.					
	a) Manoxylic	b)Pycnoxylic	c)Microxylic	d) Polyxylic	b	Pycnoxylic
94	Which enzyme complex is involved in alcoholic fermentation?					
	a) Zymase	b) Invertase	c) Lipase	d) Amylase	a	Zymase
95	The amide involved in Nitrogen metabolism is **_____.**					
	a) Serine	b) Cysteine	c) Valine	d) Glutamine	d	Glutamine
96	Which of the lipid was first isolated from Spider?					
	a) Arachidonic acid	b) Stearic acid	c) Palmatic acid	d) Oleic acid	a	Arachidonic acid
97	Which one of the following organelles doesn't involve in Photorespiration?					
	a) Chloroplast	b) Mitochondria	c) Peroxisome	d) Endoplasmic reticulum	d	Endoplasmic reticulum
98	*Which is the* water-soluble photosynthetic pigment?					
	a) Chlorophyll a	b) Xanthophyll	c) Chlorophyll b	d) Anthocyanin	d	Anthocyanin
99	Name the pigment which is responsible for the yellow colour of leaves in autumn and orange colour of carrots?					
	a) Carotenoids	b) Chlorophylls	c) Phycobilins	d) Bacteriochlorophyll	a	Carotenoids
100	The delay in senescence is due to **_____.**					
	a) ascorbic acid	b) gibberellins	c) auxins	d) cytokinins	d	cytokinins