PROVISIONAL ANSWER KEY

Question Paper Code: 85/2017/OL Category Code: 054/2013 Exam: Lecturer in Natural Science Medium of Question: English Date of Test 17-10-2017 Department **Collegiate Education** Alphacode А Question1:-The Muslim cultural organization called Muhammadiya Sabha was founded by A:-Makhti Tangal B:-E. Moidu Moulavi C:-Vakkom Abdul Khader Moulavi D:-Hamadani Tangal Correct Answer:- Option-A Question2:-India established full diplomatic relation with Israel in the year A:-2016 B:-1998 C:-1988 D:-1992 Correct Answer:- Option-D Question3:-Jana Padasala was founded by A:-Sree Narayana Guru B:-Vaikunda Swamikal C:-Swami Vaghbhadananda D:-Chttampi Swamikal Correct Answer:- Option-C Question4:-Who was the first editor of the Malayalam news paper Keralamithram ? A:-C. V. Kunhirama Menon **B:-Kandathil Varghese Mappila** C:-K. C. Maman Mappila D:-Devji Bhimji Correct Answer:- Option-B Question5:-In which year Ayyankali founded the first school for the lower castes in Venganoor ? A:-1909 B:-1927 C:-1917 D:-1907 Correct Answer:- Option-D Question6:-In the beginning, the Malayalam news paper Kerala Kaumdi started it publication from A:-Alapuzha B:-Kollam C:-Mayyanad D:-Thiruvananthapuram Correct Answer:- Option-C Question7:-The Wild Life Photographer who spotted a rare white tiger for the first time in the Nilgiris biosphere reserve in Tamil Nadu is A:-Nilanjan Ray **B:-Steve Bloom** C:-Rohit Varma D:-Moose Peterson Correct Answer:- Option-A Question8:-The Pak test fired short range Surface to Surface ballistic Missile is A:-Babur-3 B:-Nasr C:-Barg D:-Zarb Correct Answer:- Option-B

Ouestion9:-The Chairman of the GST Council is A:-President of India B:-Prime Minister of India C:-Union Finance Secretary **D:-Union Finance Minister** Correct Answer:- Option-D Question10:-The book, Monuments Matter : India's Archaeological Heritage Since Independence is authored by A:-Nayanjot Lahiri B:-B. B. Lal C:-John Marshall D:-Mortimer Wheeler Correct Answer:- Option-A Question11:-A criterion-referenced testing A:-Encourage and reward individual excellence in achievement B:-Sample the domain of a particular achievement area broadly C:-Interpret test scores in relation to established norms D:-Emphasise mastery of specific subject matter by all pupils Correct Answer:- Option-D Question12:-Ability of an individual to generate a variety of ideas, solutions, alternatives, designs and methods is known as A:-Flexibility **B:-Fluency** C:-Originality **D:-Elaboration** Correct Answer:- Option-A Question13:-Perfection in performance is identified under psycho-motor domain as A:-Naturalisation **B:-Articulation** C:-Precision **D:-Manipulation** Correct Answer:- Option-A Question14:-A three-dimensional scene in depth, incorporating a group of modelled objects and figures in a natural setting is called as A:-Moke-ups **B:-Puppets** C:-Diorama D:-Working models Correct Answer:- Option-C Question15:-The technique of presentation of an aversive stimulus or withholding of a positive stimulus to decrease the possibility of a response is A:-Positive reinforcement **B:-Punishment** C:-Negative reinforcement D:-None of the above Correct Answer:- Option-B Question16:-When writing an introduction to a research report the structure proceeds from A:-The general to the specific B:-The specific to the general C:-The general to the specific and back to the general D:-The general to the results of the research Correct Answer:- Option-A Question17:-Plagiarism in research is A:-Provide citation whenever another person's work is used your thinking B:-Use paragraph after paragraph out of one or more sources and present them as a paper with citations C:-Use someone else words/ideas in research without proper citation D:-None of the above Correct Answer:- Option-C Question18:-A qualitative research approach in which you study cultural groups in natural setting over a prolonged period of time with a holistic view of culture is known as A:-Content Analysis **B:-Ethnography**

C:-Case study D:-Phenomenology Correct Answer:- Option-B Question19:-In an experimental design measures what it intended to measure, that design has a high level of A:-Reliability **B:-Ecological validity** C:-External validity D:-Internal validity Correct Answer:- Option-D Question20:-The significance of stratified sampling is that A:-It reduces non-response bias B:-It ensures members of different segments of a population are represented in a sample C:-It reduces the randomness in sampling D:-None of the above Correct Answer:- Option-B Question21:-What type of government is established in India by the Constitution of India ? A:-Presidential Government **B:-Parliamentary Government C:-Quasi Presidential** D:-Quasi Parliamentary Correct Answer:- Option-B Question22:-When was the Constitution of India adopted by the Constituent Assembly ? A:-`26^(th)` November 1946 B:-`26^(th)`January 1949 C:-`26^(th)` November 1949 D:-`26^(th)` January 1950 Correct Answer:- Option-C Question23:-Article 21A of the Indian Constitution specifies about A:-Right to Education **B:-Right to Property** C:-Right to Equality **D:-Right against Exploitation** Correct Answer:- Option-A Question24:-Name the commission constituted to study and report on the working of centre-state relations in India. A:-Kothari Commission **B:-Mandal Commission** C:-Liberhan Commission D:-Sarkaria Commission Correct Answer:- Option-D Question25:-How many amendments are there in the Constitution of India at present ? A:-86 B:-91 C:-93 D:-101 Correct Answer:- Option-D Question26:-What is the percentage of seats reserved for women in the Women's Reservation Bill passed by the Rajya Sabha on `9^(th)` March 2010? A:-25% B:-33% C:-45% D:-50% Correct Answer:- Option-B Question27:-Which year was the "Protection of Children from Sexual Offences Act" enacted ? A:-2002 B:-2006 C:-2012 D:-2015 Correct Answer:- Option-C Question28:-What is the maximum period within which information under RTI Act 2005 should be received ?

A:-15 days B:-30 days C:-45 days D:-60 days Correct Answer:- Option-B Question29:-How many Sections does the Environment Protection Act 1986 contain ? A:-25 Sections B:-26 Sections C:-30 Sections D:-32 Sections Correct Answer:- Option-B Question30:-Which is the Supreme Court case which held that "right to pollution free air" is also to be included within the scope of "right to life" ? A:-Kesavananda Bharati vs State of Kerala, 1973 B:-Olga Tellis vs Bombay Municipal Corporation, 1985 C:-S. R. Bommai vs Union of India, 1994 D:-M. C. Mehta vs Union of India, 2004 Correct Answer:- Option-D Question31:-Powdery mildew of rubber is caused by A:-Erysiphe **B:-Oidium** C:-Phytophthora D:-Puccinia Correct Answer:- Option-B Question32:-mRNA is synthesized by which RNA polymerase ? A:-RNA Polymerase I **B:-RNA Polymerase II** C:-RNA Polymerase III D:-RNA Polymerase IV Correct Answer:- Option-B Question33:-The organelle directly involves in Apoptosis A:-Mitochondria **B:-Golgi complex** C:-Endoplasmic reticulam D:-Ribosome Correct Answer:- Option-A Question34:-In which Era Angiosperms continued to diversify ? A:-Paleozoic **B:-Mesozoic** C:-Cenozoic D:-Archaeozoic Correct Answer:- Option-C Question35:-The classification of organism based entirely on observed phenotypic similarities and differences are called A:-Phenetics **B:-Cladistics C:-Phyletics** D:-None of the above Correct Answer:- Option-A Question36:-Geosmin is a volatile substance produced by A:-Actinomycetes **B:-Zygomycetes** C:-Basidiomycetes D:-Phycomycetes Correct Answer:- Option-A Question37:-Pollinia are present in which of the following family ? A:-Apocynaceae **B:-Verbenaceae** C:-Asclepiadaceae D:-Lamiaceae

Correct Answer:- Option-C Question38:-Casparian thickening in endodermis is made up of A:-Cutine **B:-Suberine** C:-Pectin D:-Chitin Correct Answer:- Option-B Question39:-Which of the following is a non-nucleated cell ? A:-Companion cell B:-Sieve tube C:-Trachied D:-Collenchyma Correct Answer:- Option-B Question40:-Caryopsis is the type of fruit found in which of the following family ? A:-Asteraceae **B:-Cyperaceae** C:-Poaceae D:-Amaranthaceae Correct Answer:- Option-C Question41:-The stage of meiosis in which chromosomes pairs and cross over takes place A:-Prophase I **B:-Metaphase I** C:-Prophase II D:-Metaphase II Correct Answer:- Option-A Question42:-Which of the following is not an adaptive modification of a xerophytic plant ? A:-Well developed Aerenchyma B:-Sunken stomata C:-Scale leaves **D:-Lacunar tissues** Correct Answer:- Option-A Question43:-Proton motive force during oxidative phosphorylation is generated in mitochondria by A:-Exchanging protons for `Na^(+)` ``ions B:-Pumping protons out in the intermembrance space C:-Pumping OH ions in the mitochondria D:-Hydrolysis of ATP Correct Answer:- Option-B Question44:-Which one of the following compounds is not a part of alkaloid class of secondary metabolite ? A:-Lignin B:-Indole C:-Propane D:-Pyrrolidne Correct Answer:- Option-A Question45:-Which one of the following is not true for monocots ? A:-Sieve tubes with companion cells B:-Vascular bundles are numerous C:-Vascular cambium present D:-All of the above Correct Answer:- Option-C Question46:-Which one of the following chemical is a DNA intercalator ? A:-5-bromouracil B:-Ethyl methyl salfonate C:-Acrydine orange D:-None of the above Correct Answer:- Option-C Question47:-In Eukaryotic replication helicase loading occurs with all replications during A:-`G_(0)` phase B:-`G_(1)` phase C:-S phase

D:-`G (2)` phase Correct Answer:- Option-B Question48:-The dye used in gram staining is A:-Methyl blue **B:-Rhodomine** C:-Crystal violet D:-Fast green Correct Answer:- Option-C Question49:-Which of the following makes it possible to calculate the pKa of any acid from the molar ratio of proton donor ? A:-Henderson-Hasselbalch equation **B:-Jennings-Kaback equation** C:-Arnon-Jagendorf equation D:-None of the above Correct Answer:- Option-A Question50:-Which one of the following is a heterosporous Pteridophyte ? A:-Psilotum **B:-Equisetum** C:-Selaginella D:-Pteris Correct Answer:- Option-C Question51:-Which one of the following Bryophyte shows algal association in the thallus ? A:-Riccia **B:-Marchantia** C:-Anthoceros D:-Targionia Correct Answer:- Option-C Question52:-A pie chart or circle graph can be used to display A:-Quantitative data **B:-Qualitative data** C:-Both data D:-None of the above Correct Answer:- Option-C Question53:-Which of the following is not a biodiversity application software ? A:-ALICE **B:-WORLD MAP** C:-LITCHI D:-GLIS Correct Answer:- Option-D Question54:-Lymphocytes that activate B cells and T cells are A:-Macrophage **B:-Helper T cells** C:-Cytotoxic T cells D:-All of the above Correct Answer:- Option-B Question55:-Winged pollen grains are found in A:-Pinus **B:-Gnetum** C:-Podocarpus D:-Cycas Correct Answer:- Option-A Question56:-Circinte vernation is present in which of the following pteridophyte ? A:-Selaginella B:-Lycopodium C:-Marsilia D:-Equisetum Correct Answer:- Option-C Question57:-The system of classification by Hutchinson is an example for A:-Phylogenetic **B:-Artificial**

C:-Natural D:-None of the above Correct Answer:- Option-A Question58:-Hypanthodium is the characteristic inflorescence of A:-Ocimum **B:-Ficus** C:-Sunflower D:-Calotropis Correct Answer:- Option-B Question59:-The actual range of an organism in nature is termed as A:-Fundamental Niche **B:-Realized Niche** C:-Habitat D:-Ecosystem Correct Answer:- Option-B Question60:-A bioinformatic tool used to find the sequence similarity in the subunit of Heamoglobin is A:-FASTA **B:-PSI PLOT** C:-HUMMER D:-BLAST Correct Answer:- Option-D Question61:-During double fertilization in plants, one of the sperm fuse with the egg cell and other sperm fuse with A:-Synergid cell **B:-Central cell** C:-Antipodal cell D:-Nucellus cell Correct Answer:- Option-B Question62:-A cross is made between a pure breeding plant having red colored flowers with a pure breeding plant having white colored flowers. Such a cross is called A:-Test cross **B:-Monohybrid cross** C:-Dihybrid cross D:-Back cross Correct Answer:- Option-B Question63:-Which one of the following is a vital stain ? A:-Cotton blue B:-Ganus green C:-Crystal violet D:-Safranin Correct Answer:- Option-B Question64:-rRNA is synthesized in A:-Nucleus **B:-Nucleolus** C:-Mitochondria D:-Cytoplasm Correct Answer:- Option-B Question65:-Which of the following compound is generally translocated in the phloem ? A:-Sucrose B:-D-glucose C:-D-mannose D:-D-fructose Correct Answer:- Option-A Question66:-Which among the following is the thiamine deficiency disease ? A:-Pellagra B:-Scurvy C:-Beriberi D:-Rickets Correct Answer:- Option-C Question67:-Which theory was proposed by Weismann?

A:-Mutation theory **B:-Germplasm theory** C:-Use and disuse theory D:-Modern synthetic theory Correct Answer:- Option-B Question68:-What is the scientific name of Lion-tailed macaque ? A:-Macaca radiata B:-Trachypithecus johnii C:-Semnopithecus entellus D:-Macaca silenus Correct Answer:- Option-D Question69:-Who invented the technique for sequencing DNA strands ? A:-Craig Venter **B:-Alan Maxam C:-Frederic Sanger D:-Walter Gilbert** Correct Answer:- Option-C Question70:-Which antibody mediate type I hypersensitivity (anaphylactic) reactions ? A:-Ig E B:-Ig G C:-lg M D:-lg D Correct Answer:- Option-A Question71:-Which is a copper containing respiratory pigment ? A:-Chlorocruorin **B:-Haemocyanin** C:-Haemerytrhin D:-Myoglobin Correct Answer:- Option-B Question72:-How will you calculate your pulse pressure ? A:-By adding the maximum and minimum pressures measured B:-By multiplying the maximum and minimum pressures measured C:-By dividing the maximum and minimum pressures measured D:-By finding out the difference between the maximum and minimum pressures measured Correct Answer:- Option-D Question73:-Which is the most prominent excitatory transmitter ? A:-Dopamine **B:-Acetylcholine** C:-Glutamate D:-Somatostatin Correct Answer:- Option-C Question74:-Which region is considered as the 'Cradle of Speciation' ? A:-Western Himalaya **B:-Eastern Himalaya** C:-Western Ghats **D:-Gangetic Plain** Correct Answer:- Option-B Question75:-Which among the following has cement glands ? A:-Mytilus **B:-Pholas** C:-Lithophage D:-Chiton Correct Answer:- Option-D Question76:-Which genetic element provide palaeontological records of evolutionary events ? A:-Junk DNA **B:-Transposons** C:-Overlapping genes D:-Pseudogenes Correct Answer:- Option-A

Question77:-Which enzyme is serving as 'molecular glue' that is used to produce recombinant DNA ? A:-Lyases **B:-Ligases** C:-Polymerases D:-Endonucleases Correct Answer:- Option-B Question78:-What is spelaeology ? A:-Study of desert B:-Study of grassland C:-Study of caves D:-Study of tundra Correct Answer:- Option-C Question79:-Who poposed the term 'eugenics' ? A:-Muller B:-Clintock C:-Morgan D:-Galton Correct Answer:- Option-D Question80:-Which learning behaviour helps a baby bird to identify its mother ? A:-Sexual imprinting **B:-Filial imprinting** C:-Imitation D:-Sensitization Correct Answer:- Option-B Question81:-Which law of Mendel is called as the 'Law of purity of gametes' ? A:-Law of dominance B:-Law of independent assortment C:-Law of segregation D:-All of these Correct Answer:- Option-C Question82:-Name the technique which is used for the detection of proteins by the use of antibodies. A:-Northern Blotting **B:-Southern Blotting C:-Western Blotting** D:-PAGE Correct Answer:- Option-C Question83:-Among the following which explains the sex chromatin body and gene dosage compensation in mammals ? A:-Lyon hypothesis **B:-Mutation theory** C:-Chromosome theory D:-Genic balance theory Correct Answer:- Option-A Question84:-What would happen through the trisomy to the `` `21^(st)` ``pair of autosomes ? A:-Klinefelter's syndrome B:-Down's syndrome C:-Turner's syndrome D:-Edward's syndrome Correct Answer:- Option-B Question85:-Evolution of bat is an example for A:-Macro evolution **B:-Micro evolution** C:-Coevolution D:-Mega evolution Correct Answer:- Option-D Question86:-Egg of which organism exhibit holoblastic equal cleavage ? A:-Bony fish B:-Frog C:-Amphioxus D:-Bird

Correct Answer:- Option-C Question87:-Which among the following is a Japan based database ? A:-Genbank B:-DDB C:-EMBL D:-None of these Correct Answer:- Option-B Question88:-Which germ layer shows epiboly ? A:-Ectoderm **B:-Endoderm** C:-Mesoderm D:-All of these Correct Answer:- Option-A Question89:-What is the name given to the organism which live at the air-water interface ? A:-Periphyton **B:-Nekton** C:-Neuston D:-Benthos Correct Answer:- Option-C Question90:-Which is the first step of ecological succession ? A:-Nudation **B:-Ecesis** C:-Aggregation D:-Reaction Correct Answer:- Option-A Question91:-Which is the first phase of the cardiac cycle ? A:-Isovolumetric contraction period B:-Ventricular ejection period C:-Isovolumetric relaxation period D:-Ventricular filling period Correct Answer:- Option-D Question92:-Melatonin is a derivative of which amino acid ? A:-Glutamate **B:-Valine** C:-Tryptophan D:-Methionine Correct Answer:- Option-C Question93:-Name the graph that contains frequencies in the form of vertical rectangles. A:-Histogram **B:-Line graph** C:-Bar diagram D:-Range chart Correct Answer:- Option-A Question94:-What is the product of the fusion between a plasma cell and a tumour cell ? A:-Lymphoma **B:-Hybridoma** C:-Myeloma D:-Natural Killer cell Correct Answer:- Option-B Question95:-Which cycle is known as Warburg-Dickens-Horecker pathway ? A:-Krebs cycle **B:-Ornithine cycle** C:-Pentose phosphate cycle D:-EMP pathway Correct Answer:- Option-C Question96:-Which group of genes respond to same environmental signal even though they may encode different proteins whose functions are different ? A:-Modulon **B:-Operons**

C:-Regulons D:-Stimulons Correct Answer:- Option-D Question97:-Among the following which is a primary inductor ? A:-Chorda mesoderm B:-Optic vesicle C:-Lens D:-Cornea Correct Answer:- Option-A Question98:-In which type of learning behavior, reasoning ability is used to solve problems rapidly ? A:-Latent learning **B:-Imitation** C:-Insight learning D:-Imprinting Correct Answer:- Option-C Question99:-According to whom each organic being is continuously improved by nature ? A:-Darwin **B:-Lamarck** C:-Henslow D:-Mayr Correct Answer:- Option-A Question100:-Who reported the presence of respiratory centre in the medulla of brain ? A:-Eccles **B:-Berger** C:-Walter D:-Mislavsky Correct Answer:- Option-D