

Seat No.	
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ZOOLOGY

Total Marks : 100

Time : 11.00 a.m. to 1.00 p.m.

Instructions :

- 1) All questions are compulsory.
- 2) Each question carries 2 marks.
- 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.
- 4) Use black ball point pen only for marking the circle. Do not make any stray mark on the OMR Answer sheet.
- 5) Follow the instructions given on OMR sheet.
- 6) Rough work shall be done on the sheet provided at the end of question paper.
- 7) Only non-programmable calculators are allowed.

- 1) Preliminary data collection is a part of the _____.
 - A) Basic research
 - B) Applied research
 - C) Exploratory research
 - D) Descriptive research
- 2) Which of the following is not true about e journals?
 - A) e journals are always free of cost
 - B) e journals are distributed through digital methods
 - C) e journals have editors or editorial boards
 - D) Due to e journals, there is a wide publicity of the articles.
- 3) Why is it important for researcher to review literature?
 - A) it shows how much time has been spent on a given topic
 - B) it helps the details of work done in given topic earlier
 - C) it identifies like-minded researchers
 - D) it is traditional

P.T.O.

- 4) The main advantage of the research paper is _____
A) To communicate the research work carried out by the researcher
B) To put the results for wider criticism or approval
C) To make the findings available to readers and end users
D) All of these
- 5) A hypothesis is _____
A) a methodical evaluation of research evidence
B) a statement which serves as the basis for further investigation
C) a statement describing the aims of an investigation
D) All of these
- 6) Statement of research problem is preceded by _____
A) objectives
B) review of literature
C) introduction
D) methodology
- 7) Plagiarism can be defined as _____
A) representing another person's work as of your own
B) citing other person's work by giving due credit to the original author
C) using other person's method by giving citation
D) supporting our work by illustrating work of others
- 8) What is a research design?
A) A way of conducting research that is not grounded in theory
B) The choice between using qualitative or quantitative methods
C) The style in which you present your research findings
D) A framework for every stage of the collection and analysis of data
- 9) Which of the following is not a primary purpose of research?
A) To achieve new insights and come up with novel findings
B) To hypothesize the causes of some phenomena
C) To gain familiarity with the new natural phenomenon
D) To get a degree and recognition
- 10) Intelligence Quotient test is used for _____
A) diagnosis
B) improving the learning process
C) counseling and guidance
D) All of these

M/P ENT - 19

- 11) The rabbit population in A community increases by 25% per year while in B community increases at 50% per year respectively. If the present population of A and B are equal, the ratio of number of rabbits in B to A after two years will be?
A) 1.44
B) 1.72
C) 1.90
D) 1.25
- 12) For any research, A researcher said to be good, if he is _____ in his scientific views.
A) Accurate
B) Confused
C) Imaginary
D) Dependent
- 13) What effect does increase in the sample size have upon sampling error?
A) It reduces the sampling error
B) It increases the sampling error
C) It has no effect on the sampling error
D) None of the above
- 14) The group that does not receive the experimental treatment condition is the _____.
A) Experimental group
B) Control group
C) Treatment group
D) Independent group
- 15) In an experimental research, the primary aim is to identify the effect produced by the _____.
A) Dependent variable
B) Extraneous variable
C) Independent variable
D) Confounding variable
- 16) This type of design is one where all participants participate in all experimental treatment conditions.
A) Factorial design
B) Repeated measures design
C) Replicated design
D) Pretest-posttest control-group design
- 17) Which research paradigm is most concerned about generalizing its findings?
A) Quantitative research
B) Qualitative research
C) Mixed-methods research
D) All of these

M/P ENT - 19

- 18) A variable that changes as per the change in another variable is termed as _____
- A) An intervening variable B) A dependent variable
C) An independent variable D) A numerical variable
- 19) In the pyruvate dehydrogenase multienzyme complex E_2 is _____
- A) Pyruvate decarboxylase
B) Thiamin diphosphate
C) Dihydrolipoamide dehydrogenase
D) Dihydrolipoamide acetyl transferase
- 20) Without presence of an adjuvant, freezing is lethal to most mammalian cells due to damage caused by mechanical injury by _____
- A) ice crystals B) concentration of electrolytes
C) dehydration and change in pH D) all the above
- 21) In spectroscopy 100% value of T (Transmission) represents _____ substance
- A) Opaque B) Transperent
C) Preferative D) Analytical
- 22) In the uncompetitive inhibition the inhibitor binds only to _____.
- A) Enzyme B) Substrate
C) Product D) Enzyme substrate complex
- 23) Agarose gels are used for the electrophoresis of _____
- A) Proteins B) Nucleic acids
C) Both Proteins and Nucleic acids D) Lipids
- 24) The rate of centrifugation is specified by the angular velocity measured in _____
- A) RPM B) RPH
C) RPS D) all of these
- 25) Minimum resolution of electron microscope is
- A) 0.2 mm B) 20 nm
C) 100 nm D) 0.2 nm

M/P ENT - 19

- 26) In which of the following biochemical approach in taxonomy “approach is based on the precipitin reaction preferred for the study of soluble antigens”.
- A) Chromatography B) Immunological
C) Electrophoresis D) Histochemical
- 27) Which of the following suffix is used for species-group names based on a geographical name
- A) ensis B) orum
C) arum D) sensu lato
- 28) When two organisms of different species are mutually benefited and they can live independently, this type of interaction is called _____
- A) neutralism B) protooperation
C) mutualism D) parasitism
- 29) The transition area between two adjacent communities/biomes is called _____
- A) Edge effect B) Ecotone
C) Both (A) & (B) D) None of the above
- 30) In biology, histones are highly conserved proteins found in eukaryotic cell nuclei that package the DNA into structural units called _____
- A) Nucleosomes B) Proteasome
C) Peroxisomes D) Endosomes
- 31) The peroxisome is an organelle found in most eukaryotes that is crucial for _____ metabolism.
- A) Protein B) Lipid
C) Carbohydrates D) All of these
- 32) For the management of forest pests the best strategy is _____
- A) Installation of light traps B) Chemical control
C) Fumigation D) Botanical control
- 33) The Insects that cause curling of leaves and sooty mold in plants are
- A) Defoliators B) Borers
C) Miners D) Sucking Pests
- 34) The Dorsal chitinous plates in Grasshopper are called as _____
- A) Sternum B) Tergum
C) Plurites D) None

- 35) Muscardine is _____ disease of silkworm
A) Viral B) Fungal
C) Bacterial D) Protozoan
- 36) A fatty acid with 16 carbon atoms will undergo _____ rounds of β oxidation.
A) 7 B) 4
C) 6 D) 5
- 37) Reaction that depends on concentration of both the reactants is termed as _____.
A) zero order reaction B) first order reaction
C) second order reaction D) higher order reaction
- 38) In electron microscopy a technique in which the specimen is coated with gold palladium or platinum is called _____.
A) Plating B) Shadow casting
C) Electro plating D) freeze fracturing
- 39) The Karl Pearson's correlation measures _____.
A) the degree of linear relationship and direction.
B) the degree to which the relationship is consistently one directional.
C) the degree of the relationship without regard to the form of the relationship.
D) the degree of curvilinear relationship
- 40) Brown color to the feces is due to _____.
A) Bile B) Biliverdin
C) Bilirubin D) Urobilinogen
- 41) The alpha subunit of G protein is inactivated due to _____.
A) hydrolysis of GTP by intrinsic GTPase activity of the alpha subunit
B) replacement of GDP by GTP
C) hydrolysis of ATP
D) detachment of ligand from the receptor
- 42) The resting membrane potential of a cell is maintained by _____.
A) Na^+/K^+ ATPase pump B) ligand sensitive ion channels
C) voltage sensitive ion channels D) calcium ion channels

- 43) _____ is an occasionally dividing cell.
A) embryonic cell B) fibroblast
C) neuron D) bone marrow cell
- 44) Antibodies to the A, B and O antigens called isohemagglutinins are usually of the _____ class
A) IgE B) IgA
C) IgM D) IgD
- 45) The poisonous compound cyanogenic glucoside is present in _____
A) Raw cassava B) peanut
C) Cabbage D) Cotton seed meal
- 46) Immobilized enzymes are attached to _____ support for use and reuse.
A) soluble B) insoluble
C) emulsion D) none of the above
- 47) Horizontal gene transfer in bacteria mediated by bacteriophages is termed as _____
A) conjugation B) transduction
C) transformation D) transfection
- 48) During karyotyping, the treatment of 0.56% KCl to the lymphocytes causes _____
A) fixation of the chromosomes B) swelling of the cells
C) bursting of the cells D) spreading of the chromosomes
- 49) Selection of Hybridoma is carried out using _____ medium.
A) HAT B) M199
C) DMEM D) RPMI
- 50) Fluorochrome tetramethylrhodamine emits _____
A) blue light B) green light
C) red light D) visible light



Rough Work