



हेमचंद्र यादव विश्वविद्यालय, दुर्ग (छ.ग.)

(पूर्व नाम- दुर्ग विश्वविद्यालय, दुर्ग)

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// अधिसूचना //

क्रमांक 1335/गोपनीय/2021

दुर्ग, दिनांक 30/11/2021

हेमचंद्र यादव विश्वविद्यालय, दुर्ग द्वारा पी.एच.डी. कोर्सवर्क परीक्षा 2021 का आयोजन किया गया। परीक्षा परिणामों के पुनरावलोकन हेतु विश्वविद्यालय की माननीय कुलपति महोदया द्वारा गठित विशेषज्ञ समिति की अनुशंसा के आधार पर पी-एच.डी. कोर्सवर्क विषय- Zoology में निम्नलिखित 03 शोधार्थी का परीक्षा परिणाम संशोधित करते हुए उन्हें अपात्र से पात्र घोषित किया जाता है:-

शोधार्थियों के विवरण इस प्रकार है:-

Sr. No.	Roll No.	Name of Student	Marks	Corrected Result	Remarks
01	2112002	ARVIND KUMAR	56	QUALIFIED	
02	2112004	GEETANJALI MISHRA	56	QUALIFIED	
03	2112006	MUKESH KUMAR	56	QUALIFIED	

संलग्न:- उपरोक्तानुसार।

कुलसचिव

हेमचंद्र यादव विश्वविद्यालय, दुर्ग (छ.ग.)

पृ.क्र. 1336/गोपनीय/2021

प्रतिलिपि:-

दुर्ग, दिनांक 30/11/2021

1. संबंधित समस्त शोध केन्द्र, हेमचंद्र यादव विश्वविद्यालय, दुर्ग को सूचनार्थ।
2. माननीय कुलपति के सचिव/कुलसचिव के निज सहायक, हेमचंद्र यादव विश्वविद्यालय, दुर्ग को सूचनार्थ।

उपकुलसचिव

हेमचंद्र यादव विश्वविद्यालय, दुर्ग (छ.ग.)

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)

Ph.D. Coursework Examination 2021

माननीय कुलपति महोदय द्वारा गठित विषय विशेषज्ञ समिति के द्वारा पुनरावलोकन उपरांत पी-एच.डी. कोर्सवर्क लिखित परीक्षा 2021 में शोधार्थियों के प्राप्तांक निम्नानुसार हैं:-

Result

Ph.D. in Zoology

Sr. No.	ROLL NO	NAME OF STUDENT	Written Exam (Marks)	RESULT	Remarks
1	2112001	ANJANA CHAUDHURI	46	NOT QUALIFIED	
2	2112002	ARVIND KUMAR	56	QUALIFIED	
3	2112003	BHUNESHWAR BEHRA	52	NOT QUALIFIED	
4	2112004	GEETANJALI MISHRA	56	QUALIFIED	
5	2112005	HARSHAD CHANDRAKAR	44	NOT QUALIFIED	
6	2112006	MUKESH KUMAR	56	QUALIFIED	
7	2112007	SONAL NAGWANSHI	52	NOT QUALIFIED	
8	2112008	SUNIL KUMAR NAYAK	44	NOT QUALIFIED	
Exempted Category					
9		AYUSHI SAO	EXEMPTED	EXEMPTED	M.PHIL


Registrar

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)

Ph.D. Coursework Examination - 2021

Answer Key

Subject :- Zoology

Q.N.	Ans.	Q.N.	Ans.	Q.N.	Ans.	Q.N.	Ans.	Q.N.	Ans.
1	C	11	C	21	B	31	D	41	A
2	C	12	A	22	D	32	D	42	B
3	विलोपित	13	A	23	B	33	A	43	D
4	A	14	C	24	A	34	B	44	A
5	C	15	D	25	विलोपित	35	A	45	C
6	D	16	A	26	C	36	C	46	A
7	B	17	D	27	C	37	D	47	C
8	D	18	A	28	C	38	A	48	B
9	B	19	C	29	C	39	A	49	B
10	B	20	A	30	B	40	B	50	A

प्रश्न क्र. 03, एवं 25 विलोपित, बोनस अंक प्रदत्त।

30.11.21

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)

Ph.D. Course Work Examination 2021

ZOOLOGY

PAPER - FIRST (PART-I)

**(Research Methodology, Advanced Tools & Techniques , Quantitative Data
Analysis and Computer Fundamentals)**

&

PAPER - FIRST (PART-II)

RESEARCH AND PUBLICATION ETHICS (RPE)

Time : Two Hours (For Part-I & Part-II)

Maximum Marks : (Part-I =70 + Part-II=30)=100

Note: - Answer all the questions. Each question carries 02 marks.

(Part-I)

SECTION-A: RESEARCH METHODOLOGY

1. Which of the following is not a criteria of good research-
 - a) It should be systematic
 - b) It should be logical
 - c) It should be irreplicable
 - d) It should be empirical

2. In a research idea, if there are at least two possible outcomes of the course of action and one is preferable to the other, then this an example of -
 - a) Research Methodology
 - b) Logical Research
 - c) Research Problem
 - d) Research Objective

3. Which of the following is NOT a necessary factor for a good research design-
 - a) the availability and skills of the researcher and his staff
 - b) the objectives and nature of the problem
 - c) The review of literature of the problem
 - d) the availability of time and money for the research work

4. The weakness of the interview method of primary data collection is-
 - a) The presence of the interviewer on the spot may over-stimulate the respondent, sometimes even to the extent that he may give imaginary information just to make the interview interesting
 - b) Under the interview method the organization required for selecting, training and supervising the field-staff is not so complex with no formidable problems
 - c) Effective interview presupposes proper rapport with respondents that would hinder free and frank responses
 - d) None of the above

5. Point out the correct statement-
 - a) Data has only qualitative value
 - b) Data has only quantitative value
 - c) Data has both qualitative and quantitative value
 - d) None of the mentioned

6. Which of the following is an example of raw data?
 - a) original swath files generated from a sonar system
 - b) initial time-series file of temperature values
 - c) a real-time GPS-encoded navigation file
 - d) all of the mentioned

7. **Salami** and **Imala** was coined by Professor Povl Riis (1995), the first chairman of the Danish National Ethics Committee; **Salami** is featured by-
 - a) Manipulating the results to obtain a generalized conclusion
 - b) Carving up the results into small parts to publish
 - c) Editing the results speculatively to hide experimental errors
 - d) Sequential publishing of what are essentially the same

8. **Salami** and **Imala** was coined by Professor Povl Riis (1995), the first chairman of the Danish National Ethics Committee; **Imala** is featured by-
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9. Which citation style should be used for biological research?
 - a) APA Style
 - b) CSE Style
 - c) MLA Style
 - d) CHICAGO Style

SECTION-B: ADVANCED TOOLS & TECHNIQUES

10. The part which Electron Microscope does not have-
 - a) Electron Gun
 - b) Objective
 - c) Magnetic lens
 - d) Fluorescent Screen

11. A converging lens and a diverging lens of focal length 10 cm are placed coaxially 5cm apart. The focal length of the combination will be-
 - a) +10cm
 - b) -10cm
 - c) +20cm
 - d) -20cm

12. The Hydraulic capacitance flow control system used in HPLC does not have which of the following features?
 - a) It can be used only for liquids with low viscosity
 - b) It is irrespective of solvent compressibility
 - c) It maintains a constant flow
 - d) It smoothens high pressure pump pulsations

13. In HPLC, which of the following pulse damper consumes some amount of the pulsation energy released to provide smooth pressure without pulsations?
 - a) Flexible bellows or compressible gas passed through tee columns
 - b) Flexible inert diaphragm
 - c) Electronic pulse damper
 - d) Electrical pulse damper

14. Which type of gel is used for large molecule electrophoresis?
 - a) Wedge gels
 - b) Buffer-gradient gels
 - c) Pulse field gels
 - d) Varying the amount of agarose will carry out the separation

15. The method used for further recovery of DNA from gels after electrophoresis is called-
 - a) secondary electrophoresis
 - b) recovery electrophoresis
 - c) denaturing electrophoresis
 - d) electro-elution

16. In DNA Microarray, which of the following is incorrect about Hierarchical Clustering?

- a) The tree-branching pattern illustrates a lower degree of relationship between related gene groups
- b) It is similar to the distance phylogenetic tree-building method
- c) It produces a treelike structure that represents a hierarchy or relative relatedness of data groups
- d) In the tree leaves, similar gene expression profiles are placed more closely together than dissimilar gene expression profiles

17. In Protein sequencing, which of the following order is correct?

- a) Sequencing, ordering and cleaving
- b) Ordering, cleaving and sequencing
- c) Ordering, sequencing and cleaving
- d) Cleaving, sequencing and ordering

18. Which of the following compound is involved in Edman degradation?

- a) Phenylisothiocyanate
- b) CF_3COOH
- c) FDNB
- d) Phenylthiocarbonyl

SECTION-C: QUANTITATIVE DATA ANALYSIS

19. A hypothesis which defines the population distribution is called?

- a) Null Hypothesis
- b) Statistical Hypothesis
- c) Simple Hypothesis
- d) Composite Hypothesis

20. Consider a hypothesis H_0 where $\phi_0 = 5$ against H_1 where $\phi_1 > 5$. Which test is it?

- a) Right tailed
- b) Left tailed
- c) Center tailed
- d) Cross tailed

21. In a Binomial distribution, if 'X' is a random variable, taking values 'x', probability of success and failure being 'p' and 'q' respectively and 'n' trials being conducted, then what is the probability that 'X' takes values 'x'?

- a) $P(X = x) = {}^n C_x p_x q^x$
- b) $P(X = x) = {}^n C_x p_x q^{(n-x)}$
- c) $P(X = x) = {}^x C_n q_x p^{(n-x)}$
- d) $P(x = x) = {}^x C_n p_n q^x$

22. If 'p', 'q' and 'n' are probability of success, failure and number of trials respectively in a Binomial Distribution, what is its Standard Deviation?
- \sqrt{np}
 - \sqrt{pq}
 - $(np)_2$
 - \sqrt{npq}
23. Which test is applied to independent observations made on individuals of two different groups or samples drawn from two populations, to test if the difference between the two means is real or it can be attributed to sampling variability such as between means of the control and experimental groups-
- Paired t-test
 - Unpaired t-test
 - Chi-square test
 - Two way ANOVA
24. Graphical attributes in a scatter diagram such as the sum of squares of the difference between the observations and the line in the horizontal direction can be minimized to obtain the estimates, this is called-
- reverse regression method
 - formal regression
 - logistic regression
 - simple regression
25. Calculate the variance for the observation values given in the table below-
- | | | | |
|-----|-----|-----|-----|
| 4.2 | 4.3 | 4.0 | 4.1 |
|-----|-----|-----|-----|
- 0.27
 - 0.28
 - 0.3
 - 0.31
26. When the standard deviation of a given data is 0.012, the variance will be-
- 0.144
 - 0.00144
 - 0.000144
 - 0.0000144
27. Which of the below given method provides significance levels for the difference between any pair of means, regardless of whether a significant F resulted from an initial analysis of variance?
- ANOVA- One way
 - ANOVA- Two way
 - Multiple Range Test
 - Chi-square Test

SECTION-D: COMPUTER FUNDAMENTALS

28. The maximum number of columns in a table of Microsoft word is-
- 43
 - 53
 - 63
 - 73
29. In Microsoft word what is gutter margin?
- Margin that is added to the left margin when printing
 - Margin that is added to right margin when printing
 - Margin that is added to the binding side of page when printing
 - Margin that is added to the outside of the page when printing
30. What is maximum Zoom percentage in Microsoft Power Point?
- 100%
 - 400%
 - 300%
 - 200%
31. In which view Microsoft Power Point can be used to enter Speaker Comments?
- Slide Show
 - Normal
 - Slide Sorter
 - Notes Page view
32. In Microsoft Excel if we type =A1+A2 into a computer worksheet cell then-
- data is interpreted as a label
 - excel interprets four characters as number
 - data is interpreted as a date function
 - data is interpreted as a formula
33. In Microsoft Excel, the cell whose address is used in formula is called
- reference cell
 - relative referencing
 - advanced referencing
 - absolute referencing
34. Which of the following is not a file extension for MS Access-
- Access database.accdb
 - Access database.adp
 - Access project.adp
 - Access project.mdw
35. In MS Access “Lookup Wizard” is used to
- to select value from another table
 - to select values from Excel Sheet
 - to select from previous values
 - None of the above

(Part-II)

36. What is an ethics committee?
- a) People who like to talk a lot
 - b) A group of people who think about hypothetical research
 - c) A group of experienced people who will consider a research proposal and the degree to which ethical issues have been considered appropriately
 - d) A group of experienced people who are useful to draw on when writing a proposal as an optional extra
37. Essential in ethics and ethical standards is:
- a) A good grasp of research methods.
 - b) The capacity to produce good research.
 - c) A good understanding of business.
 - d) The capacity to distinguish between right and wrong.
38. A gatekeeper is:
- a) Any person or structure that controls access to people, places, structures and/or organizations.
 - b) A person in charge of a gate.
 - c) A security officer or guard.
 - d) A person who controls entrances and exits.
39. The two important components of research responsibility are: sincerity in work and avoiding-
- a) Plagiarism
 - b) writing the thesis
 - c) Research techniques
 - d) Confidentiality
40. In carrying out the research, the researcher should engage properly and thoroughly with:
- a) The media.
 - b) The literature on the topic.
 - c) Their peers.
 - d) Art and science.
41. Ideally, the research participant's identity is not known to the researcher. This is called:
- a) Anonymity
 - b) Confidentiality
 - c) Deception
 - d) Desensitizing

42. The use of deception in social research is
- a) illegal.
 - b) permissible under certain conditions.
 - c) methodologically unsound.
 - d) rare because of federal ethical constraints on its use.
43. Which of the following is a form of harm that might be suffered by research participants?
- a) Physical injury
 - b) Stress and anxiety
 - c) Impaired development
 - d) All of the above
44. What do we advise as a good rule of thumb about sample size for group based quantitative projects?
- a) Aim to recruit 20 participants per condition of your design
 - b) Aim to recruit 20 participants per member of the group
 - c) Aim to recruit 100 participants per condition of your design
 - d) Aim to recruit 100 participants per member of the group
45. Classification of all types of libraries has been made by-
- a) IFLA
 - b) UNISIST
 - c) UNESCO
 - d) INSDOC
46. Which of the following is/are the potential benefits of using tools for testing?
- i). Reducing the repetitive work.
 - ii). Increasing consistency and repeatability.
 - iii). Over-reliance on the tool.
- a) i and ii only
 - b) ii and iii only
 - c) i and iii only
 - d) All i, ii and iii
47. urkund is a :-
- a) writing tool
 - b) grammar correction tool
 - c) plagiarism checker
 - d) none

48. A hash function must meet criteria.

- a) Two
- b) Three
- c) Four
- d) none of the mentioned

49. How many types of indexes are there in sql server?

- a) 1
- b) 2
- c) 3
- d) 4

50. h- index ----- Measures quantity with quality by comparing publications to citations.

- a) True
- b) False
- c) Both
- d) None
