



हेमचंद यादव विश्वविद्यालय, दुर्ग (छ.ग.)

(पूर्व नाम— दुर्ग विश्वविद्यालय, दुर्ग)

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// अधिसूचना //

क्रमांक 1329 / गोपनीय / 2021

दुर्ग, दिनांक 25/11/2021

हेमचंद 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— Mathematics में निम्नलिखित 01 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	2110006	NETRA KUMAR GUPTA	58	QUALIFIED	

संलग्न:- उपरोक्तानुसार।

कुलसचिव
हेमचंद यादव विश्वविद्यालय, दुर्ग (छ.ग.)

पृ.क्र. 1330 / गोपनीय / 2021

दुर्ग, दिनांक 25/11/2021

प्रतिलिपि:-

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

उपकुलसचिव
हेमचंद यादव विश्वविद्यालय, दुर्ग (छ.ग.)

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)

Ph.D. Coursework Examination 2021

माननीय कुलपति महोदया 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 Mathematics

Sr. No.	ROLL NO	NAME OF STUDENT	Written Exam (Marks)	RESULT	Remarks
1	2110001	ANIL KUMAR MISHRA	50	NOT QUALIFIED	
2	2110002	HEENA SONI	56	QUALIFIED	
3	2110003	HEERAMANI TIWARI	62	QUALIFIED	
4	2110004	KALYAN	ABSENT	NOT QUALIFIED	
5	2110005	KULESHWARI	58	QUALIFIED	
6	2110006	NETRA KUMAR GUPTA	58	QUALIFIED	
7	2110007	PRATIK SINGH THAKUR	58	QUALIFIED	
8	2110008	RASHMI VERMA	60	QUALIFIED	
9	2110009	SHRUTI SHUKLA	46	NOT QUALIFIED	
Exempted Category					
10		MAHESHWARI	EXEMPTED	EXEMPTED	M.PHIL
11		KAILASH KUMAR KAKKAD	EXEMPTED	EXEMPTED	M.PHIL
12		NIDHI SHARMA	EXEMPTED	EXEMPTED	M.PHIL


Registrar

HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)

Ph.D. Coursework Examination - 2021

Answer Key

Subject :- Mathematics

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

प्रश्न क्र. 20, 32, 33 एवं 34 विलोपित, बोनस अंक प्रदत्त।



HEMCHAND YADAV VISHWAVIDYALAYA, DURG (C.G.)

Ph.D. Course Work Examination 2021

MATHEMMATICS

PAPER - FIRST (PART-I)

(Research Methodology, Quantitative Techniques & Computers)

&

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)

1. What is the main role of research in education :
 - (a) To upsurge one's social status.
 - (b) To increase one's job prospects.
 - (c) To augment one's personal growth.
 - (d) To help an applicant in becoming a renowned educationalist.
2. In order to pursue the research which of the following is priority required:
 - (a) Developing a research design.
 - (b) Formulating a research question.
 - (c) Deciding about the data analysis procedure
 - (d) Formulating a research hypothesis.
3. The main aim of the scientific method in the research field is to
 - (a) Improve data interpretation
 - (b) Conform triangulations
 - (c) Introduce new variables
 - (d) Eliminate spurious relations
4. Who can successfully conduct research?
 - (a) Someone who is a hard worker
 - (b) Possesses post graduation degree
 - (c) Has studied research methodology
 - (d) Possesses thinking and research ability
5. In a qualitative research proposal you would not expect to see a
 - (a) Research question
 - (b) Research aim
 - (c) Hypothesis
 - (d) Operational definition

6. Research design is a blue print, outline and a
- (a) Guidance
 - (b) Control
 - (c) Plan
 - (d) Strategy
7. Ethics can be defined as :
- (a) A process of reasoning in terms of the right thing to do
 - (b) Rules governing society
 - (c) The basis of the criminal code
 - (d) A list of rights and wrong
8. In the function $y = f(x)$, the f is classified as :
- (a) Name of function
 - (b) Value of function
 - (c) Upper limit of function
 - (d) Lower limit of function
9. In solving mathematical problems the mathematical function work as :
- (a) Output-input device
 - (b) Input-Output device
 - (c) Solving function
 - (d) Terminating function
10. How calculations work in Tensor- flow
- (a) Through vector multiplications
 - (b) Through RDDs
 - (c) Through computational graph
 - (d) Through map reduce tasks
11. For customizing vi, which of the following commands is used ?
- (a) set
 - (b) map
 - (c) abbr
 - (d) set, map, abbr
12. Which command is used for mapping key of a keyboards ?
- (a) set
 - (b) map
 - (c) abbr
 - (d) auto write

13. The amount of vertical space between lines of text in a document is called
- (a) double space
 - (b) line spacing
 - (c) single space
 - (d) vertical spacing
14. The row vector can also be created using the ?
- (a) bracket operator
 - (b) Colon operator
 - (c) hash operator
 - (d) and operator
15. A vector can be either a row vector or a column vector -
- (a) Yes
 - (b) No
 - (c) can be say yes or no
 - (d) can not say
16. Vector and matrices are used to store sets of values -
- (a) put
 - (b) get
 - (c) sets
 - (d) None of these
17. Matrices can be represented through array.
- (a) single
 - (b) 2-D
 - (c) 3-D
 - (d) Multi- Dimensional
18. The size of array should always be -
- (a) Positive
 - (b) Negative
 - (c) Whole number
 - (d) Real number
19. Which of the following is a derived data type -
- (a) Array
 - (b) Double
 - (c) float
 - (d) Union
20. What is the value of $\lim_{x \rightarrow 4} \frac{x^2 - 2x - 8}{x - 4}$?
- (a) 0
 - (b) 2
 - (c) 8
 - (d) 6

21. What do you understand by the term “Anusandhan” ?
 - (a) Goal oriented
 - (b) following an aim
 - (c) Attaining an aim
 - (d) Praying to achieve an aim
22. Which representation is most efficient to perform arithmetic operation on the numbers?
 - (a) Sign magnitude
 - (b) 1's complements
 - (c) 2's complements
 - (d) None of the mentioned
23. The polynomial $y = f(x)$ satisfying the data is called
 - (a) Dividing polynomial
 - (b) Interpolating polynomial
 - (c) Extrapolating polynomial
 - (d) polynomial
24. Interpolation is done by -
 - (a) Curve fitting
 - (b) Regression Analysis
 - (c) Curve fitting and regression analysis
 - (d) None of the mentioned
25. What is the output of the following code -
 - (a) No such command
 - (b) A part of a parabola
 - (c) A parabola
 - (d) Error
26. Inline functions can be plotted by the command -
 - (a) `ezplot ()`
 - (b) `plot 3 ()`
 - (c) `plot ()`
 - (d) Cannot be done
27. What is the period of square wave generated by the `square ()` command.
 - (a) User defined
 - (b) π
 - (c) $\pi/2$
 - (d) 2π
28. What is the default range used by the `fplot` command?
 - (a) $[-5, 5]$
 - (b) $(-5, 5)$
 - (c) No default range
 - (d) No such command

29. What is the nature of z in `surf(x,y,z)` ?
- (a) Integer
 - (b) Vector
 - (c) Matrix
 - (d) String
30. How do we create horizontal bar graph in MATLAB ?
- (a) `bar 3h()`
 - (b) `bar h()`
 - (c) `bar 3()`
 - (d) not possible
31. Which command is used to display the operating system name -
- (a) `os`
 - (b) `unix`
 - (c) `kernal`
 - (d) `uname`
32. Eight-bit code that define 256 symbols, is -
- (a) EBCDIC
 - (b) ASCII
 - (c) Unicode
 - (d) Extended ASCII
33. Which of the following PHP functions accepts any number of parameters -
- (a) `func_get_argv()`
 - (b) `func_get_args()`
 - (c) `get_argv()`
 - (d) `get_argc()`
34. When array name is passed to `printf()` function -
- (a) A
 - (b) B
 - (c) A, B
 - (d) B, D
35. Index of an array in MATLAB start with-
- (a) 0
 - (b) 1
 - (c) depends on the class of array
 - (d) unknown

(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
- illegal.
 - permissible under certain conditions.
 - methodologically unsound.
 - 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?
- Physical injury
 - Stress and anxiety
 - Impaired development
 - All of the above
44. What do we advise as a good rule of thumb about sample size for group based quantitative projects?
- Aim to recruit 20 participants per condition of your design
 - Aim to recruit 20 participants per member of the group
 - Aim to recruit 100 participants per condition of your design
 - Aim to recruit 100 participants per member of the group
45. Classification of all types of libraries has been made by-
- IFLA
 - UNISIST
 - UNESCO
 - INSDOC
46. Which of the following is/are the potential benefits of using tools for testing?
- Reducing the repetitive work.
 - Increasing consistency and repeatability.
 - Over-reliance on the tool.
- i and ii only
 - ii and iii only
 - i and iii only
 - All i, ii and iii
47. urkund is a :-
- writing tool
 - grammar correction tool
 - plagiarism checker
 - 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
