



Response to DVV Findings

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the Following:

1. Inclusion of Research Ethics in the Research Methodology Course Work
2. Presence of Ethics Committee
3. Plagiarism Check through Software
4. Research Advisory Committee

Clarification: This is to certify that, our Institution ensures the implementation of its stated Code of Ethics for research through the Following:

1. **Inclusion of Research Ethics:** Research ethics are included in the Research Methodology paper in the course work of Ph.D. Students
 3. **Plagiarism Check through Software:** All the faculties / Research guides / Research students of our college are having plagiarism check for their research work through the software (URKUND) recommended by UGC. This facility is made available by our parent University
 4. **Research Advisory Committee:** Each of the Ph.D. students working under research guides of our college have Research Advisory Committee to review the progress reports. Research Advisory Committee reviews the progress report of Ph.D. students once in six months.
- All the uploaded documents are herewith attested


PRINCIPAL
GOVT. COLLEGE
GULBARGA

510
530-15 KRL

PAPER - I : RESEARCH METHODOLOGY

510.102E

Max. Marks: 100 (70 Theory + 30 I.A.)
Credits : 5 (4 Theory + 1 Tutorial)

UNIT - I:

Research: Meaning and Definition, need and purpose of research; Types of research ; Barriers to research. } 3

Identification, Selection and Formulation of a research problem hypothesis: Meaning and definition of, types, formulation and testing of hypothesis. Research design: Design, types and their characteristics; Preparation of a research proposal. (16 Hours)

UNIT - II:

Laplace Transforms: Inversion contours, significance of poles and zeros. Solution of simple problems such as motion of damped harmonic oscillator due to an impulse, concept of transfer function and (waves on a semi finite string)] 1

Fourier Transforms: Solution of initial value problem for the diffusion equation, concept of Green function and steady state heat flow in a semi-infinite domain. (16 Hours)

UNIT - III:

Finite Element Method(FEM): Introduction, basic concept of FEM, approximation of the circumference of a circle, solution of differential equation, shape functions to various channels/ducts. A. (16 Hours) } 1

UNIT - IV:

Mathematical Statistics (Random variables and Distribution functions - (1) Random variable, distribution function, properties of distribution function) (discrete random variable, probability mass function, continuous random variable, probability density function, continuous distribution function); Mathematical Expectation and Generating Functions - Mathematical expectation, expectation of a function of a random variable, addition theorem of expectation, multiplication theorem of expectation, expectation of linear combination of random variables, covariance, variance of linear combination of random variables. (16 Hours) } 1

References :

1. Basha C.H. and Harter S. P., Research Methods in Librarianship, Academic (New York), 1980.
2. Fowler F. J. Jr., Survey Research Methods, SAGE, New Delhi, 1993.
3. Glazer J. D. and Powel R. R., Qualitative Research in Information Management.
4. Goode W. J. and Hatt P. K., Methods in Social Science Research, McGraw-Hill, Auckland, 1981.
5. Simpson I. S., How to interpret Statistical Data, LA, London, 1990.
6. Erwin Kreyszig, Advanced Engineering Mathematics, Wiley Student Edition, India, 2004.
7. Arfken & Weber, Mathematical Methods for Physicists, Elsevier, Academic Press, 2005.
8. J. N. Reddy, An Introduction to the Finite Element Methods, McGraw-Hill.
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10. Gupta S. C. and Kapoor V. K., Mathematical Statistics, S Chand & Sons, 1998.

Urkund Analysis Result

Analysed Document: Shilpa Veerasangappa Chare, Dept of Mathematics.docx
(D79590050)
Submitted: 9/21/2020 8:32:00 PM
Submitted By: kumbargoudar@gmail.com
Significance: 11 %

Sources included in the report:

Kemparaju MC.Mathematics.pdf (D30566423)
Raveendra N.Mathematics.pdf (D30769336)
Samrat Shivappa Payad.Dept of Mathematics.pdf (D40591146)
<https://www.scientific.net/DDF.389.18>
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https://www.researchgate.net/publication/223860134_Viscous_flow_and_heat_transfer_over_a_nonlinearly_stretching_sheet
https://www.researchgate.net/publication/230688828_Hydromagnetic_nanofluid_flow_due_to_a_stretching_or_shrinking_sheet_with_viscous_dissipation_and_chemical_reaction_effects
https://www.researchgate.net/publication/282433754_Magneto hydrodynamic_Stagnation_Point_Flow_and_Heat_Transfer_of_Casson_Nanofluid_Past_a_Stretching_Sheet_with_Slip_and_Convective_Boundary_Condition
https://www.researchgate.net/publication/236007932_Effects_of_thermal_radiation_on_micropolar_fluid_flow_and_heat_transfer_over_a_porous_shrinking_sheet

Instances where selected sources appear:

125


Dr. K. Praveenkumar
University Librarian
Gulbarga University
Kalaburagi - 585 106, Karnataka.

Proceedings of the Research Advisory Committee meeting held on at in 2-30 PM in the Department of Mathematics, Gulbarga University, Kalaburagi.

Date: 3.02.2021

Name of the Research Scholar : Vaishali Saibanna.

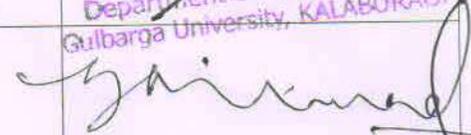
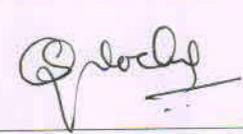
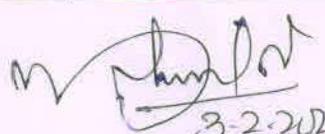
Name of the Research Supervisor : Dr. Mahantesh.M.N.

I. Progress Report

(i). Sixth Progress report for the period from 07-05-2020 to 07-11-2020.

The research advisory committee reviewed the sixth progress report and found satisfactory.

The following Ph.D advisory committee board members were present.

			Signature
1.	Prof.J.Prathap Kumar Chairman, Department of Mathematics.	Chairman & Member	 Professor & Chairman Department of Mathematics Gulbarga University, KALABURAGI
2.	Prof.S.N Gaikwad	Member	
3.	Prof.C.Sulochana	Member	
4.	Dr. Mahantesh.M.N	Research Guide & Converner	 3-2-2020

Dr. Mahantesh M. Nandeppanavar
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Gulbarga University, Kalaburagi

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