

## CURRICULUM VITAE

**Name** : Dr. K. Sridevi  
**Designation** : Associate Professor  
**Department** : Mathematics  
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Dr. B. R. Ambedkar Open University  
Road No - 46, Jubilee Hills,  
Hyderabad- 500033, Telangana.

**Educational Qualifications** : P.hd ( Mathematics) in 2007 , JNTU, Hyderabad  
M.Sc (Mathematics) in 2003 , JNTU, Hyderabad

**Teaching Experience** : 15 Years

- Lecturer (2004-2006) , JNTU, Hyderabad
- Assistant Professor (2010 - 2022) , Dr. BRAOU, Hyderabad
- Associate Professor (2022 to till date) , Dr. BRAOU, Hyderabad

**Present Position** : **Head** , Dept. of Mathematics  
**Deputy Director** of Centre for Internal Quality Assurance (CIQA)

**Research Experience** : 15 Years

**Area of Interest** : Number Theory

**Administrative Experience**: 2 Years (2016-2018) as Head (I/C), Dept. of Mathematics

### Academic Work

- Acted as Course Writer for UG (CBCS) and PG - 91 Lessons / Units
- Acted as Translator for UG - 70 Lessons / Units
- Acted as Course Coordinator for UG (CBCS) and PG - 13 Courses
- Acted as Associative Editor for UG (CBCS) and PG - 15 Courses
- Acted as Resource Person for Audio & Video lessons - 58

and Coordinated / Participated in Teleconference Programmes - 06

- Written 4 UG (CBCS) Books (2 Theory +2 Practical Manual) with Translation at Dr. BRAOU , Hyderabad.

### **Research Work**

- Research Articles Published in Journals – 26
- Research Articles Published in ISBN – 03
- Papers Presented and Participated in International Conferences - 19
- Papers Presented and Participated in National Conferences - 7
- Act as Research Supervisor for 2 - M.Phil Scholars and 2 - P.hd Scholars.

### **Attended Conferences / Seminars / FDPs / Work Shops**

- Attended International/ National Conferences - 07
- Attended International /National Seminars or Webinars - 09
- Attended Refresher/Orientation/Short term Programmes (UGC) - 07
- Attended Faculty Development Programmes/ Work Shops / Training Programmes - 21

### **Membership**

**Life member:** Andhra Pradesh Telangana Society for Mathematical Sciences.

**Life member:** Uttara Andhra Society for Mathematical Sciences.

**Member:** Board of Studies , Faculty of Sciences , Dr. BRAOU , Hyderabad.

**Member:** Board of Studies , Department of B.Sc Mathematics Statistics and Computer Science , Layola Academy, Old Alwal , Secunderabad.

**Member:** Departmental Research Committee , Dr. BRAOU, Hyderabad

**Core Committee Member:** Women Development and Extension Cell , Dr. BRAOU, Hyderabad.

## Publications in Journals

1.  **$\beta$  - Multiplicative Functions** ; International Journal of Mathematical Sciences , Volume. 4, No. 2, December 2005 , ISSN: 0972-754X, © Serials Publications, Pages: 297-308.
2. **Some Properties of  $\beta$  - Multiplicative Functions of one Variable and two Variables** ; International Journal of Mathematical Sciences, Volume-15, Nos. 3-4, (July-December 2016) , ISSN: 0972-754X , © Serials Publications, Pages: 197-207.
3. **Some Properties of  $\beta$  - Multiplicative and Quasi -  $\beta$  - Multiplicative Functions, Aryabhata Journal of Mathematics and Informatics** ; Volume-08, Issue-02, (July-December 2016) , ISSN: 2394-9309 , Pages: 31-46.
4. **Fixed Point Theorems for Digital Contractive Type Mappings in Digital Metric Spaces**; International Journal of Mathematics Trends and Technology (IJMTT) , Volume - 48, Number-3, August 2017, ISSN: 2231-5373, Pages:159-167.
5. **Common Fixed Points for Commuting and Weakly Compatible Self - maps on Digital Metric Spaces** ; International Advanced Research Journal in Science, Engineering and Technology, Volume - 4, Issue - 9, September 2017, ISSN (Online): 2393-8021, ISSN (Print): 2394-1588 , Pages: 21-27.
6. **Common Fixed Point Theorems for Four maps Using Generalized Altering Distance Functions in Seven Variables and Applications to Integral Type Inequalities**; International Journal of Engineering , Science and Mathematics Volume - 6, Issue - 8, December 2017 (Special Issue), Pages: 182-195, ISSN: 2320-0294, Impact Factor: 6.765.
7. **Common Fixed Point Theorems on Metric Space for Two and Four maps using Generalized Altering Distance Functions in Five Variables and Applications to Integral Type Inequalities** ; International Journal of Mathematics And its Applications , Volume -5, Issue- 4-E (2017), Pages: 775-791, ISSN: 2347-1557.
8. **A Common Coupled Fixed Point Theorem Using E.A. like Property in Supernova Spaces** ; International Journal of Statistics and Applied Mathematics , 2018; 3(2): Pages 427-433, ISSN: 2456-1452 , © 2018 Stats & Maths,
9. **Some Algebraic Properties of Partial Multiplicative Arithmetic Functions with respect to Partial Basic Sequence on the set of Square - free Integers** ;

Journal of the Maharaja Sayajirao University of Baroda , Volume - 54, No.2 (X) 2020 , Pages: 11-16, ISSN : 0025-0422 , UGC Care Group I Journal .

10. **Algebraic Properties of Convolution of Arithmetic Functions on the Partial Sub - basic Sequence of Square - free odd Integers ;** Dogo Rangsang Research Journal ,Volume -11, Issue -11, No. 01, November 2021, Pages: 139-144, ISSN : 2347-7180 , UGC Care Group I Journal .
11. **Examples of Partial Sub-basic Sequences of Square - free Integers and Algebraic Properties of Convolution of Arithmetic Functions ;** Dogo Rangsang Research Journal, Volume - 11, Issue - 11, No. 02, November 2021, Pages: 58-64, ISSN : 2347-7180 , UGC Care Group I Journal.
12. **Extremal Hypergraph Theory based on Non-Principal Families ;** Mukht Shabd Journal, ISSN : 2347-3150, Volume - X, Issue - XII, December 2021, Pages: 130-133, UGC Care Group I Journal.
13. **A New Approach to Define Two Types of Binary Operations on Set of Pythagorean Triples to form as at most Commutative Cyclic Semi Group;** Journal of Critical Reviews, Volume - 7, Issue -19, 2020, ISSN: 2394-5125, Pages: 9871 – 9878. UGC Care Group II Journal (Scopus Indexed Journal).
14. **Proof of Fermat's last Theorem by Choosing Two Unknowns in the Integer Solution are Prime Exponents;** Pacific International Journal , ISSN: 2616-4825 [Online], 2663-8991 [Print], Volume-03 , No-03 , 2020, Pages: 127-132.
15. **Transcendental Representation of Diophantine Equation and some of its Inherent Properties;** Materials Today: Proceedings xxx (xxxx) xxx, 2214-7853/ (c) 2021 Elsevier Ltd. Pages: 1- 4. UGC Care Group II Journal (Scopus Indexed Journal).
16. **Cryptographic Coding to Define Binary Operation on Set of Pythagorean Triples ;** Materials Today: Proceedings, xxx (xxxx) xxx , 2214-7853/(c) 2021 Elsevier Ltd. Pages: 1-5. UGC Care Group II Journal (Scopus Indexed Journal).
17. **Existence of Inner Addition and Inner Multiplication on Set of Triangular Nmbers and some Inherent Properties of Triangular Numbers ;** Materials Today: Proceedings, xxx (xxxx) xxx, 2214-7853/(c) 2021 Elsevier Ltd. Pages: 1-5. UGC Care Group II Journal (Scopus Indexed Journal).
18. **A New Approach to Define Algebraic Structure and Some Homomorphism Functions on Set of Pythagorean Triples and Set of Reciprocal Pythagorean Triples;** Journal of Scientific Research of the Banaras Hindu University, Volume - 65, Issue- 9, 2021, ISSN: 0447-9483, Pages: 86-92. UGC Care Group II Journal (Scopus Indexed Journal).

19. **A New Approach to Define A New Integer Sequences of Fibonacci Type Numbers with using of Third order Linear Recurrence Relations ;** International Conference on Advances in Materials, Computing and Communication Technologies , Published by AIP Publishing. Cite as: AIP Conference Proceedings 2385, 130005 (2022); Published Online: 06 January 2022, Pages: 130005-1 to 130005-7. UGC Care Group II Journal (Scopus Indexed Journal).
20. **Algebraic Structure of Reciprocal Pythagorean Triples ;** Advances and Applications in Mathematical Sciences , Mili Publications, India. Volume- 21, Issue - 3, January 2022, Pages: 1315-1327 © 2022, ISSN : 0974-6803, UGC Care Group II Journal (Web of Science (ESCI)).
21. **A New Approach to Define Length of Pythagorean Triples and Geometric Series Representation of Set of Pythagorean Triples ;** RAFAS-2021 , Journal of Physics: Conference Series **2267** (2022) 012059 , IOP Publishing , doi:10.1088/1742-6596/2267/1/012059. Pages: 1-8. UGC Care Group II Journal (Scopus Indexed Journal).
22. **A New Subclass of Meromorphic Functions with Positive Coefficients defined by Integral Operator ;** Stochastic Modeling and Applications ,Volume -25, No. 02, (July-December, 2021), Pages: 327-336, ISSN : 0972-3641. UGC Care Group II Journal (Scopus Indexed Journal).
23. **On A Subclass of Analytic Functions Involving Hurwitz–Lerch Zeta Function ;** Available online at <http://scik.org> , J. Math. Comput. Sci. 2022, 12:174 , ISSN: 1927-5307, Pages: 1-13. UGC Care Group II Journal (Scopus Indexed Journal).
24. **Properties of Analytic Functions Associated with Mittag – Leffler – type Borel Distribution Series ;** Journal of Mathematics and Computer Science (JMCS)[J. Math. Computer Sci., 29 \(2023\)](#), Online: ISSN 2008-949X , Pages:[118–130](#) . UGC Care Group II Journal (Scopus Indexed Journal).
25. **Some properties of differential operator to the subclass of univalent functions with Negative Coefficients;** [Journal of Mathematics and Computer Science \(JMCS\), J. Math. Computer Sci., Volume 29, Issue 3 \(2023\)](#), Online: ISSN 2008-949X, Pages:[295–305](#) .
26. **Transcendental Representation of Diophantine Equation  $x^n + y^n = z^n$  to Generate at most all Pythagorean and Reciprocal Pythagorean Triples;** Journal of Algebraic Statistics, Volume -13, No. 2, 2022, ISSN: 1309-3452, Pages: 3600-3609. UGC Care Group II Journal (Web of Science (ESCI)).

## Publications in ISBN

27. **On Finite Abelian Groups** ; Book of Science and Technology for Sustainable Development, 2022, ISBN: 978-93-93944-17-5, Pages: 173-175.
28. **Recreation in Mathematics: Puzzles of Famous Mathematicians** ; Book of Science and Technology for Sustainable Development, 2022, ISBN: 978-93-93944-17-5, Pages: 176-187.
29. **Probabilistic Analysis of Capacitated Transportation Problem** ; Book of Science and Technology for Sustainable Development, 2022, ISBN: 978-93-93944-17-5, Pages: 214-219.

## Papers Presented and Participated in Conferences

1. Presented a paper entitled : '**Isomorphism Between Groups of Arithmetic Functions  $(A_0, +)$  and  $(M(\beta), O_E)$  and their arithmetic power series**'; in the 13<sup>th</sup> Congress of APSMS , during 10 - 12 th December 2004 . Organised by the Dept. of Mathematics and Humanities , NIT, Warangal , Andhra Pradesh , India.
2. Presented a paper entitled : '**On Pentagonal Numbers in the Generalised Pell Sequence**' ; in the International Conference on Number Theory & Fourier Techniques , during 20 - 21 st December 2004 . Organised by SASTRA , Deemed University, Kumbakonam , Tamilnadu , India.
3. Presented a paper entitled : ' **$\mathcal{B}$  - Multiplicative Functions**'; in the XIV Congress of APSMS , during 9 - 11 th September 2005 . Organised by the Dept. of Basic Sciences and Humanities , College of Engineering , GITAM , Visakhapatnam , Andhra Pradesh , India.
4. Presented a paper entitled : '**Some Properties of  $\mathcal{B}$  - Multiplicative and Quasi  $\mathcal{B}$  - Multiplicative Functions**' ; in the National Conference on New Trends in Number Theory , during 18 - 19 th March 2006 . Organised by Dept. of Mathematics , Osmania University, Hyderabad , India.
5. Presented a paper entitled : '**The Use of Ict on Increasing Openness in Higher Education**' ; in the National Seminar on ICT and Future of Distance Education: Opportunities and Challenges , during 27 - 28th June 2013. Organised by Dr. B. R. Ambedkar Open University , Hyderabad. India.

6. Presented a paper entitled : ‘ **Common Fixed Point Theorems for Four maps Using Generalized Altering Distance Functions in Seven Variables and Applications to Integral Type Inequalities**’, in the International Conference on Mathematical Sciences in Engineering Applications , during 22 - 24 th December 2017.Organised by Baba Institute of Technology & Sciences in Association with Centurion University.
7. Presented a paper entitled : ‘ **Existence of Inner Addition and Inner Multiplication on Set of Triangular Numbers And Some Inherent Properties of Triangular Numbers**’ ; In the International Conference on Research in Science, Engineering, Technology and Management , on 28-12-2020 . Organized by the Department of Computer Science and Engineering ,Vaagdevi College of Engineering , Bollikunta, Warangal, Telangana , India.
8. Presented a paper entitled : ‘ **Cryptographic Coding to Define Binary Operation of Set of Pythagorean Triples**’ ; In the International Conference on Research in Science, Engineering , Technology and Management , on 28-12-2020 . Organized by the Department of Computer Science and Engineering ,Vaagdevi College of Engineering, Bollikunta , Warangal , Telangana , India.
9. Presented a paper entitled : ‘ **Transcendental Representation Of Diophantine Equation And Some Of Its Inherent Properties**’ ; In the International Conference on Research in Science , Engineering , Technology and Management , on 28-12-2020. Organized by the Department of Computer Science and Engineering ,Vaagdevi College of Engineering , Bollikunta , Warangal , Telangana , India.
10. Presented a paper entitled : ‘ **Cryptographic Coding Reciprocal Pythagorean Triples**’; In the International Symposium On Computational Operations Research And Algorithmic Game Theory , during 29 - 31 st March 2021. Organized by Indian statistical institute , Delhi.
11. Presented a paper entitled : ‘ **Cryptographic Coding to Generate Reciprocal Pythagorean Triples and Some of Its Inherent Properties**’; in the International Conference on Recent Advancements in Mathematics, during 9 - 10 th April 2021. Organized by PG and Research Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur , Tamilnadu.
12. Presented a paper entitled : ‘ **Varies Representations of Third and Higher Order Linear Recurrence Relation of Fibonacci Type Numbers**’ ; in the 3<sup>rd</sup> International Conference on Recent Advances in Fundamental and Applied Sciences , during 25 -26 th June 2021. Organized by School of Chemical Engineering and Physical Sciences, Lovely Faculty of Technology & Sciences , Lovely Professional University, Punjab, india.

13. Presented a paper entitled : ‘ **A New Approach to Define Length of Pythagorean Triples and Geometric Series Representation of Pythagorean Triples**’; in the 3<sup>rd</sup> International Conference on Recent Advances in Fundamental and Applied Sciences , during 25 -26 th June 2021. Organized by School of Chemical Engineering and Physical Sciences, Lovely Faculty of Technology & Sciences , Lovely Professional University, Punjab, india.
14. Presented a paper entitled : ‘ **Algebraic Structure and some Homomorphism Functions on Set of Pythagorean and Set of Reciprocal Pythagorean Triples**’; in the 4<sup>th</sup> International Conference on mathematical modelling , Applied analysis and computation, during 5 -7 th august 2021, Organized by the Department of Mathematics , Faculty of Science , JECRC University, Jaipur (Raj.), India.
15. Presented a paper entitled : ‘ **Algebraic Structure of Reciprocal Pythagorean Triples**’ in the 1st International Conference on Mathematical Modelling and its Soft Computing Applications , during 29-30 th November 2021 . Organized by the Department of Humanities and Sciences , Sanskrithi School of Engineering , Puttaparthi , Andhra Pradesh , India.
16. Presented a paper entitled : ‘ **Subclass of Analytic Functions Associated With Gegenbaur Polynomials**’ ; in the International Conference on Recent Trends in Mathematics and its Applications (ICRTMA- 2021), during 2 - 3 rd December 2021, organised by the Department of Mathematics , GITAM Deemed to be University, Bengaluru , Karnataka , India.
17. Presented a paper entitled : ‘ **A note on Certain Subclass of Uniformly Convex Functions involving Borel Distribution series**’ ; in the International Conference on Recent developments in mathematics , during 24 -26 th August 2022. Organized by the Faculty of Engineering , Applied Science and Technology , Canadian University Dubai , Dubai .
18. Presented a paper entitled : ‘ **A Study of Higher Order Linear Recurrence Relations of Fibonacci type Numbers**’ ; in the International Conference on Recent Developments in Mathematics , during 24 -26 th August 2022. Organized by the Faculty of Engineering , Applied Science and Technology , Canadian University Dubai , Dubai .
19. Presented a paper entitled : ‘ **Transcendental Representation of Diophantine Equation  $x^n + y^n = z^n$  to Generate at most all Pythagorean and Reciprocal Pythagorean Triples**’ ; in two day International Conference on Mathematics , Statistics and Applications , during 10 -11 th June 2022. Organised by the Dept. of Mathematics and Statistics , Vignan’s Foundation for Science , Technology & Research, Guntur, Andhra Pradesh, India.



20. Presented a paper entitled : ‘ **A Study of Higher Order Linear Recurrence Relations of Fibonacci Type Numbers**’ in International Conference on Recent Developments in Mathematics (ICRDM) , during 24 -26 th August 2022. Organised by the Faculty of Engineering Applied Science and Technology Canadian University Dubai, Dubai, UAE.
21. Presented a paper entitled : “ **Migration & Logical Approach**” in the 1 st International Conference on English Language, Literature and Culture , during 10 -11 th December 2022. Organised by the Achievers Foundation for English Studies , Bhadohi, UP, India.
22. Presented a paper entitled : ‘ **A New Approach to Generate Set of Prime Numbers With Using Non-Overlapping and Non-Empty Sets**’ ; in the 3<sup>rd</sup> International Conference on Advances in Science , Engineering & Management (ICASEM- 2022), during 18 - 19 th November 2022. Organised by the Lords Institute of Engineering and Technology, Hyderabad, in association with Institute for Engineering Research and Publication (IFERP).
23. Presented a paper entitled : ‘ **A New Approach to Generate Trees of Primitive Solutions of Diophantine Equation  $x^2 +dy^2- z^2 = 0$ , where  $d$  is a Positive Square Free Integer, with using a General Interval Decomposition**’; in the 3<sup>rd</sup> International Conference on Advances in Science , Engineering & Management (ICASEM- 2022), during 18 - 19 th November 2022. Organised by the Lords Institute of Engineering and Technology, Hyderabad, in association with Institute for Engineering Research and Publication (IFERP).
24. Presented a paper entitled : ‘ **Finite Abelian Groups**’; in National Seminar on Science & Technology for Sustainable Development , during 2 nd - 3 rd September 2022. Organised by the Faculty of Sciences, Dr. B. R. Ambedkar Open University, Hyderabad.
25. Presented a paper entitled : ‘ **Recreation in Mathematics : Puzzles of Famous Mathematicians**’; in National Seminar on Science & Technology for Sustainable Development , during 2 nd - 3 rd September 2022. Organised by the Faculty of Sciences, Dr. B. R. Ambedkar Open University, Hyderabad.
26. Presented a paper entitled : ‘ **Probabilistic Analysis of Capacitated Transportation Problem**’; in National Seminar on Science & Technology for Sustainable Development , during 2 nd - 3 rd September 2022. Organised by the Faculty of Sciences, Dr. B. R. Ambedkar Open University, Hyderabad.

## **Attended and Participated in Conferences**

1. Attended and Participated in the '**National Seminar on Science for Shaping the Future of India**', during 28 - 29 th November 2012. Jointly organised by ISCA-Hyderabad Chapter, Osmania University and ANGR Agricultural University, Hyderabad.
2. Attended and participated in the 'Complimentary Seminar on MATLAB & Simulink for Engineering Education' on 26<sup>th</sup> July 2013 . Organised by Math Works India at Hyderabad , AP
3. Attended and Participated in the National Symposium on '**Spirit of National Movement - Legacy and Relevance** ', on 22<sup>nd</sup> August, 2016. Organised by Dept. of History , Faculty of Social Sciences, Dr.BRAOU, Hyderabad.
4. Attended and Participated in the International Conference on '**Equipping the Unequipped - Empowerment Through Knowledge, Technology and Skills**', during 10-12 th November 2018. Organised by Dr.BRAOU, Hyderabad, Telangana.
5. Attended and Participated in the 'International Conference on '**Recent Advances in Nonlinear Functional Analysis and its Applications - 2022**'(ICRANFAA-2022) , during 29 - 30 th January 2022. Organised by Dept. of Mathematics, Andhra University, Visakhapatnam , AP.
6. Attended and Participated in the International E-Seminar on '**Advances in Mathematical Sciences (ISAMS-2022)**', during March 14-16, 2022. Organised by Department of Mathematics, School of Physical Sciences, Central University of Karnataka, Kalaburagi-585 367, India, in Association with Department of Mathematics, Sri Venkateswara University, Tirupati-517 502, India.
7. Attended and Participated in the '**International Seminar on 'Indian Mathematicians and their Contributions (ISIMC-2022)**', during 21-22 nd, December 2022. Organised by Department of Mathematics, School of Physical Sciences, Central University of Karnataka, Kalaburagi-585 367, India.

## **Webinars**

1. Attended and Participated in the Webinar on '**Guidelines for Research Paper Writing and Publishing** ', on 12 th June 2020. Organised by Dept. of Mechanical Engineering in Association with Research and Development Cell at SITAMS , Chittoor, AP.

2. Attended and Participated in the two day International Webinar on '**Recent Advances in Mathematics & Covid - 19**', during 15 th & 16 th June 2020. Organised by Dept. of Mathematics and Statistics & IQAC, St. Joseph's College for Women (A), Visakhapatnam, AP in association with UASMS & SMSMS.
3. Attended and Participated in the National Webinar on '**Mathematical Modelling & Sample Size Determination in Research**', on 11 th July 2020. Organised by Dept. of Mathematics , GITAM , Visakhapatnam , AP.
4. Attended and Participated in the National Webinar on '**Leadership Challenges During Corona Crisis**', on 30 th July 2020. Organised by Dept. of Commerce , Dr. BRAOU, Hyderabad, Telangana.
5. Attended and Participated in the Webinar on '**National Statistics Day - 2021**', on 29 th June 2021. Organised by Dept. of Mathematics and Economics , Sri Sarada College for Women , Tirunelveli , Tamilnadu.
6. Attended and Participated in the one day National Webinar on '**Applications of Mathematical Sciences**', on 29 th June 2021. Organised by Dept. of Mathematics and Statistics, St. Joseph's College for Women (A), Visakhapatnam, AP in association with UASMS & SMSMS.
7. Attended and Participated in the one day National Webinar on '**Visual Content – A Key to Success in Digital Marketing**', on 27 th July 2021. Organised by Dept. of Commerce with Computer Applications, V.H.N. Senthikumara Nadir College (A), Virudhunagar , Tamilnadu.
8. Attended and Participated in the National Webinar on '**Recent Advances in Artificial Neural Networks & Computational Techniques in Engineering and Humanities**' RAANNCT-2021', on 31 st July 2020. Organised by Dept. of EECE(GIT) in collaboration with Dept. of Mathematics (GIS) , GITAM , Visakhapatnam , AP.
9. Attended and Participated in the 2 nd International Webinar on '**Recent Developments in Number Theory -2021**', during 1- 4 th October 2021. Organised by Dept. of mathematics , School of Applied Sciences, KIIT Deemed to be University, Bhubaneswar, Odisha, India.

### **Refresher / Orientation / Short Term Programmes – UGC , MHRD**

1. Participated in the Professional Development Programme on '**e - Learning , e - Content Development**', during 06 -12 th January 2012. Organised by UGC - Academic Staff College , University of Hyderabad , Hyderabad , AP.

2. Participated in the Orientation Course , during 02 -30th March 2012. Organised by UGC - Academic Staff College , Osmania university , Hyderabad , AP.
3. Participated in the Refresher Course in Mathematics , from 13-09-2012 to 03-10-2012. Organised by UGC - Academic Staff College , University of Hyderabad, Hyderabad , AP.
4. Participated in the Orientation Course on ‘**e – Content Development and e - Learning Technologies**’, for four weeks in three different spells during 26-08-2013 to 25 -10- 2013. Organised by CSTD , Dr. BRAOU, Hyderabad in collaboration with CDAC , A Scientific Society of the Ministry of Communications and Information Technology, Gov. of India.
5. Participated in the Refresher Course in Mathematics , during 14-09-2016 to 04-10-2016. Organised by UGC - HRDC (UGC - Academic Staff College) , University of Hyderabad , Hyderabad , Telangana.
6. Participated in the Short Term Course on Research Methodology , during 31-10-2018 to 06-11-2018. Organised by UGC - HRDC (UGC - Academic Staff College) , University of Hyderabad , Hyderabad , Telangana .
7. Participated in the Refresher Course on ‘ **Information and Communication Technology** ’, during 24-08-2020 to 05-09-2020. Organised by UGC - HRDC (UGC - Academic Staff College) , University of Hyderabad , Hyderabad , Telangana.

### **Work Shops**

1. Attended and Participated in the two day Work Shop on ‘ **e - Learning Moodle Software**’ , during 24-25 th February 2012. Organised by Dr. BRAOU, Hyderabad, AP.
2. Attended and Participated in the Work Shop on ‘**Audio-Visual Presentation and Anchoring of Educational Programmes**’ during 05-12 th October 2012. Organised by CSTD, Dr. BRAOU , Hyderabad , AP.
3. Attended and Participated in the three day District Level Training Programme on ‘**A Foundation Course in Human Values and Professional Ethics**’, during 8-10/15-17/22-24 th July 2013. Organised by Commissioner ate of Collegiate Education , Gov. of AP, Gov. Degree College for Women , Begumpet , Hyderabad , AP.
4. Attended and Participated in the seven day Work Shop on ‘ **Research Methodology & Research Support** ’, during 02 - 09th December 2014. Organised by CSTD, Dr. BRAOU, Hyderabad , Telangana.

5. Attended and Participated in the National Work Shop on ‘ **Choice Based Credit System in ODL**’, during 28-29 th July 2016. Organised by GRADE , Dr. BRAOU, Hyderabad ,Telangana.
6. Attended and Participated in the seven day Work Shop on ‘ **Self Learning Material (SLM)**’ for Faculty Teachers ’ , from 27-01-2017 to 02-02-2017 . Organised by CSTD , Dr. BRAOU , Hyderabad , Telangana.
7. Attended and Participated in the three day Work Shop on ‘ **Professional - Developmant Programme on Online Teaching Learning and Assessment using OERs , Education Technology Tools & Moodle MOOC Platform** ’ during 08 -10 th February, 2018. Organised by GRADE & CIQA , Dr.BRAOU, H yderabad ,Telangana.
8. Attended and Participated in the two day Work Shop on ‘ **Translation from English to Telugu**’, during 12-13 th June 2018. Organised by CSTD, Dr. BRAOU, Hyderabad , Telangana.
9. Attended and Participated in the one day Training Programme on ‘ **Digital on Screen Evaluation** ’, on 20<sup>th</sup> July , 20168. Organised by CSTD, Dr. BRAOU, Hyderabad , Telangana.
10. Attended and Participated in the two day work shop on ‘ **Translation from Telugu to English**’, during 10-11 th December 2019 . Organised by CSTD , Dr. BRAOU, Hyderabad , Telangana.
11. Attended and Participated in the Virtual work shop on ‘ **Latex for Technical Writing**’, on 24 th September 2022 . Organised by the Department of Mathematics, M.O.P. Vaishnav College for Women , Chennai – 34.
12. Attended and Participated in the one day work shop on ‘ **SPSS v28.0 Software**’, during 23 rd November 2022 . Organised by CSTD, Dr. BRAOU, Hyderabad , Telangana.

### **Faculty Development Programmes / Training Programmes**

1. Attended and Participated in the one day online FDP on ‘ **Research Methodology - The Art of Writing Persuasive Project Proposals**’, on 14th June 2020 . Organised by Dept. of ECE , Santhiram Engineering College , Nandyal , AP.
2. Attended and Participated in the one week online International FDP on ‘ **Importance of Mathematics in Science and Technology** ’ , during 25-29 th June

2020 . Organised by Mathematics Division of Department of Basic Sciences and Humanities, GMR Institute of Technology , Rajam , AP.

3. Attended and Participated in the National Level FDP on ‘ **Role of Teachers in Building an Emotionally Intelligent Generation**’, on 11 th August 2021 . Organised by Queens College of Arts and Science for Women , Punalkulam , Tamilnadu.
4. Attended and Participated in the one day Training Programme on ‘ **Online Teaching Tools and Content Management**’, on 27 th October 2021 . Organised by CSTD, Dr. BRAOU, Hyderabad , Telangana.
5. Attended and Participated in the online FDP on ‘ **MOOC on Online Course Development for SWAYAM** ’, on 27 th October 2021 . Organised by CSTD, Dr. BRAOU, Hyderabad in collaboration with CEMCA .
6. Attended and Participated in one-week online collaborative Faculty Development Program on ‘**Role of Basic Sciences**’, from 09 th –14 th March, 2022. Organized jointly by National Institute of Technology Mizoram & GMR Institute of Technology, Rajam , Andhra Pradesh .
7. Attended and Participated in 2 weeks Online Capacity Building Programme for Teachers in Higher Education on ‘**Blended Learning In Higher Education Institutions**’, From 14th March 2022 to 25th March 2022. Organised by CSTD, Dr. BRAOU, Hyderabad , Telangana, in Collaboration with CEMCA.
8. Attended and Participated in the one day Training Programme on ‘**e – office Implementation**’, on 4 th November 2022 . Organised by CSTD, Dr. BRAOU, Hyderabad , Telangana.
9. Attended and Completed the Self Learning Online Course on Understanding Open Educational Resources (OER), on Nov 18 2022, from Commonwealth of Learning .

### Course Writing ( Theory) - UG

Theory			
S. No.	Programme	Title of the Course	Unit No(s) and Title of the Unit(s)

1	UG (CBCS) I Semester , I Year	Differential Calculus (Core)	<ol style="list-style-type: none"> <li>1. Limits and Continuity</li> <li>2. Differentiability of Functions</li> <li>3. Methods of Differentiation</li> <li>4. Successive Differentiation - Leibnitz's Theorem</li> <li>5. Partial Differentiation - Euler's Theorem on Homogeneous Functions</li> <li>6. Mean Value Theorems</li> </ol>
2	UG (CBCS) II Semester , I Year	Differential Equations (Core)	<ol style="list-style-type: none"> <li>4. Introduction and Formation of Differential Equations</li> <li>5. Differential Equations of First Order and First Degree (Variables separable; Homogeneous and Non-Homogeneous Equations; Linear and Bernoulli's Equations)</li> <li>6. Exact Differential Equations</li> </ol>
3	UG (CBCS) IV Semester, I Year	Algebra (Core)	<ol style="list-style-type: none"> <li>1. Sets, Relations and Functions</li> <li>2. Groups</li> <li>3. Subgroups and Cyclic Groups</li> <li>4. Cosets and Lagrange's Theorem for Finite Groups</li> <li>5. Normal Subgroups and Quotient Groups</li> <li>6. Homomorphisms and Permutation Groups</li> <li>7. Rings and Subrings</li> <li>8. Integral Domains and Fields</li> <li>9. Ideals and Quotient Rings</li> <li>10. Ring Homomorphism</li> <li>11. Euclidean Domains and Polynomial Rings</li> <li>12. Unique Factorization Domains</li> </ol>
4	UG (CBCS) V Semester , I Year	Three Dimensional Geometry (Elective)	<ol style="list-style-type: none"> <li>1. Cartesian Co-ordinates, Direction Cosines and Direction Ratios</li> <li>2. The Plane and Various Forms of the Equation of a Plane</li> <li>3. Bisectors of the Angles Between Two Planes and Two Sides of a Plane</li> <li>4. Straight Line and Various Forms of the Equation of a Straight Line</li> <li>5. Skew Lines and Shortest Line Segment Between Two Skew Lines</li> <li>6. Change of Axes</li> </ol>
5	UG (CBCS) VI Semester, I Year	Numerical Methods (Core)	<ol style="list-style-type: none"> <li>1. Solutions of Algebraic and Transcendental Equations</li> <li>2. Numerical Solution of Simultaneous Linear Equations -Direct Methods</li> <li>3. Numerical Solution of Simultaneous Linear Equations - Iterative Methods</li> <li>4. Finite Difference Operators</li> <li>5. Newton's Forward and Backward Difference Interpolation</li> <li>6. Central Difference Interpolation</li> <li>7. Lagrange's Interpolation and Newton's Divided Difference Interpolation</li> <li>8. Inverse Interpolation</li> <li>9. Least Squares Approximation</li> <li>10. Numerical Differentiation</li> <li>11. Numerical Integration – I</li> <li>12. Numerical Integration - II</li> </ol>

## Course Writing ( Practical) - UG

<b>Practical</b>			
<b>S. No.</b>	<b>Programme</b>	<b>Title of the Course</b>	<b>Unit No(s) and Title of the Unit(s)</b>
1	UG (CBCS) I Semester , I Year	Differential Calculus (Core)	1. Limits and Continuity 2. Differentiability of Functions 3. Leibnitz's Theorem and Mean Value Theorems 4. Partial Differentiation
2	UG (CBCS) II Semester , I Year	Differential Equations (Core)	3. Differential Equations of First Order and First Degree (Variables Separable; Homogeneous and Non-Homogeneous Equations) 4. Linear, Bernoulli's and Exact Differential Equations
3	UG (CBCS) IV Semester, I Year	Algebra (Core)	1. Groups, Subgroups and Cyclic Groups 2. Cosets and Lagrange's Theorem for Finite Groups 3. Normal Subgroups and Quotient Groups 4. Group Homomorphism and Permutation Groups 5. Rings and Subrings 6. Integral Domains and Fields 7. Ideals and Quotient Rings 8. Ring Homomorphisms and Polynomial Rings
4	UG (CBCS) V Semester , I Year	Three Dimensional Geometry (Elective)	1. Cartesian Co-ordinates, Direction Cosines and Direction Ratios 2. The Plane and Various Forms of the Equation of a Plane 3. Straight Line and Various Forms of the Equation of a Straight Line 4. Skew Lines and Shortest Line Segment Between Two Skew Lines
5	UG (CBCS) VI Semester , I Year	Numerical Methods (Core)	1. Solutions of Algebraic and Trancendental Equations 2. Numerical Solution of Simultaneous Linear Equations 3. Newton's Forward and Backward Difference Interpolation 4. Central Difference Interpolation 5. Lagrange's Interpolation and Newton's Divided Difference Interpolation 6. Least Squares Approximation 7. Numerical Differentiation 8. Numerical Integration



## Course Writing - PG

S. No.	Programme	Title of the Course	Unit No(s) and Title of the Unit(s)
1	PG II Year	Complex Analysis	1. Complex Numbers 2. Complex Functions
2	PG II Year	Numerical Methods	1. Finite Differences: Interpolation 2. Divided Differences : Interpolation 3. Hermite and Spline interpolation 4. Least Squares and Rational Approximations 5. System of Linear Equations 6. Eigen Values and Eigen Vectors 7. System of Non-Linear Equations 8. Differentiation 9. Integration – I 10. Integration – I 11. Single And Multistep Methods 12. Predictor – Corrector Methods 13. Elliptic Equations 14. Parabolic And Hyperbolic Equations 15. Weighted Residual and Variational Methods 16. One and Two Dimensional Elements 17. Applications to Boundary Value Problem 18. Integral Equations
3	PG II Year	Methods of Applied Mathematics	4. Fourier Series

## Course Editing ( As Associate Editor) – UG

Theory		
S. No.	Programme	Title of the Course
1	UG (CBCS) II Semester , I Year	Differential Equations (Core)
2	UG (CBCS) IV Semester, II Year	Algebra (Core)
3	UG (CBCS) IV Semester,	Graph Theory (Skill)

	II Year	
4	UG (CBCS) V Semester , III Year	Three Dimensional Geometry (Elective)
5	UG (CBCS) VI Semester , III Year	Numerical Methods (Core)
6	UG (CBCS) VI Semester , III Year	Vector Calculus (Elective)

<b>Practical</b>		
<b>S. No.</b>	<b>Programme</b>	<b>Title of the Course</b>
1	UG (CBCS) II Semester , I Year	Differential Equations (Core)
2	UG (CBCS) IV Semester, II Year	Algebra (Core)
3	UG (CBCS) V Semester , III Year	Three Dimensional Geometry (Elective)
4	UG (CBCS) VI Semester , III Year	Numerical Methods (Core)
5	UG (CBCS) VI Semester , III Year	Vector Calculus (Elective)

### **Course Editing ( As Associate Editor) – PG**

<b>S. No.</b>	<b>Programme</b>	<b>Title of the Course</b>
1	PG , II Year	Complex Analysis
2	PG , II Year	Numerical Methods

3	PG , II Year	Operations Research
4	PG , II Year	Methods of Applied Mathematics

### **Course Co-ordination – UG**

<b>Theory</b>		
<b>S. No.</b>	<b>Programme</b>	<b>Title of the Course</b>
1	UG (CBCS) II Semester , I Year	Differential Equations (Core)
2	UG (CBCS) IV Semester, II Year	Algebra(Core)
3	UG (CBCS) IV Semester, II Year	Graph Theory (Skill)
4	UG (CBCS) V Semester , III Year	Three Dimensional Geometry (Elective)
5	UG (CBCS) VI Semester , III Year	Numerical Methods (Core)
6	UG (CBCS) VI Semester , III Year	Vector Calculus (Elective)

<b>Practical</b>		
<b>S. No.</b>	<b>Programme</b>	<b>Title of the Course</b>
1	UG (CBCS) II Semester , I Year	Differential Equations (Core)
2	UG (CBCS) IV Semester, II Year	Algebra (Core)
3	UG (CBCS) V Semester ,	Three Dimensional Geometry

	III Year	(Elective)
4	UG (CBCS) VI Semester , III Year	Numerical Methods (Core)
5	UG (CBCS) VI Semester , III Year	Vector Calculus (Elective)

### Course Coordination – PG

S. No.	Programme	Title of the Course
1	PG , II Year	Complex Analysis
2	PG , II Year	Numerical Methods

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