

Memorandum of Understanding (MoU)

Between

**Department of Mathematics, SKVP'S Arts, Science and Commerce College, Hole-Alur
And**

**Department of Mathematics, SVPVV'S Shri Siddrammappa Basappa Mamadapur Arts,
Commerce and Science College, Badami College.**

This Memorandum of Understanding (MoU) is executed on this day of 19-09-2022 to 18-09-2025 between Department of Chemistry, SKVP'S Arts, Science and Commerce College, Hole-Alur as the First party.

And

Department of Mathematics, SVPVV'S Shri Siddrammappa Basappa Mamadapur Arts, Commerce and Science College, Badami as the Second party; herein together referred to as, the Institutions.

Department of Mathematics, SKVP'S Arts, Science and Commerce College, Hole-Alur. It stands high with its virtues of excellence, practical knowledge, modern experimental technique and a contribution to the society at large. It offers a unique educational experience that prepares the next generation of global citizens to lead and make a difference in the world. With its talented and motivated student-body and accomplished faculty, SKVP'S Arts, Science and Commerce College is a leading educational institution in remote rural area of Hole-Alur, district Gadag state Karnataka and it tries to maintain a particular commitment to exceptional undergraduate instructions and aims to be the best college of the region. The faculty of the Mathematics department in this institution is doing its level best to achieve the goal of the College.

Department of Mathematics, SVPVV'S Shri Siddrammappa Basappa Mamadapur Arts, Commerce and Science College, Badami is a under Rani Channamma University, Belagavi. The college is well equipped with modern infrastructural facilities and backed by an excellent and dedicated faculty to cater to the needs and aspirations of the students to meet the challenges of the present day competitive world. Apart from academic pursuits, stress is laid on co-curricular activities and all round development of the student's personality. The vision of the faculty of Mathematics department is to disseminate quality education to the students including those who are underprivileged, so that they may realize their potential and become responsible human beings in society.

Whereas SKVP'S Arts, Science and Commerce College, Hole-Alur has requested SVPVV'S Shri Siddrammappa Basappa Mamadapur Arts, Commerce and Science College, Badami to collaborate to achieve its objectives, through various programs in the Mathematics Department for the academic promotion with the following identified but not limited to:

1. **Faculty Exchange Program-** Faculty members of the Mathematics Department *SKVP'S Arts, Science and Commerce College, Hole-Alur* may take a lecture or a series of lectures at the Mathematics Department, *SVPVV'S Shri Siddrammappa Basappa Mamadapur Arts, Commerce and Science College, Badami* as Resource Persons for portions or special topics of a few identified courses in consultation with the Head of the Education *SVPVV'S Shri Siddrammappa Basappa Mamadapur Arts, Commerce and Science College, Badami* and vice versa- at a mutually convenient timing, during the session.

Student Exchange Program: Student of the Mathematics Department *SKVP'S Arts, Science and Commerce College, Hole-Alur* could attend class or a series of lectures provided by the professor of Mathematics Department, *SVPVV'S Shri Siddrammappa Basappa Mamadapur Arts, Commerce and Science College, Badami*. Similarly student of Mathematics Department, *SVPVV'S Shri Siddrammappa Basappa Mamadapur Arts, Commerce and Science College, Badami* may attend class at *SKVP'S Arts, Science and Commerce College, Hole-Alur*.

Subject to clauses below, both the Institutions may attend this MOU by mutual consent in writing any amendment agreed by the Institutions shall come into effect from the date determined by the signing Institutions on potential areas.

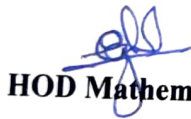
This MOU shall enter into force on the date of signing and shall initially be valid for a period of three years.

SSBM College, Badami.



Principal

**S.S.B.M. Arts, Commerce
& Science College, Badami**



HOD Mathematics

SKVP'S College, Hole-Alur



Principal
PRINCIPAL

**S.K.V.P. Samiti's Arts, Science,
Commerce College & P.G.Center
Hole-Alur - 582 203**



HOD Mathematics



ನ್ಯಾಕ್ ಬಿ+
ಮಾನ್ಯತೆ ಪಡೆದಿದೆ



Accredited
Nacc B+



ಶ್ರೀ ಕಲ್ಮೇಶ್ವರ ವಿದ್ಯಾಪ್ರಸಾರಕ ಸಮಿತಿಯ
ಕಲಾ, ವಿಜ್ಞಾನ, ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ ಹಾಗೂ ಸ್ನಾತಕೋತ್ತರ ಅಧ್ಯಯನ ಕೇಂದ್ರ
ತಾ|| ರೋಣ ಹೊಳೆ ಆಲೂರ-582 203. ಜಿ : ಗದಗ

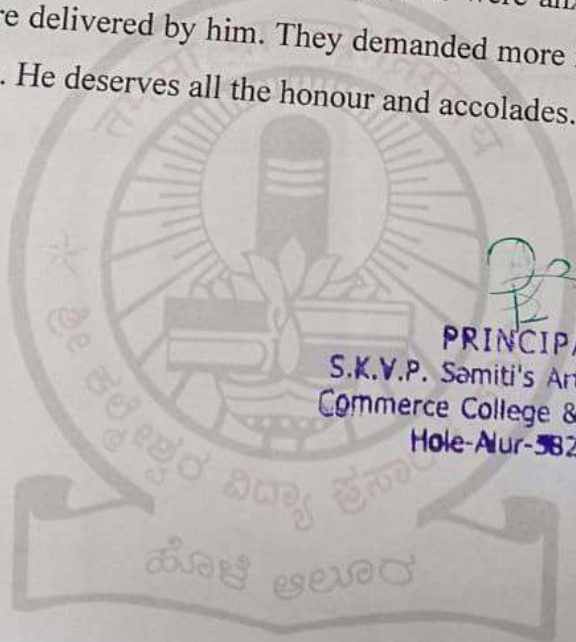
Shri Kalmeshwar Vidya Prasarak Samiti's
ARTS, SCIENCE, COMMERCE COLLEGE & P. G. STUDY CENTER,
Taluk : Ron HOLE-ALUR-582 203. Dist.: Gadag

Ref. No. : SKVP/ASC/30676/2023-24

Date : 3-08-2023

ATTEDANCE CERTIFICATE

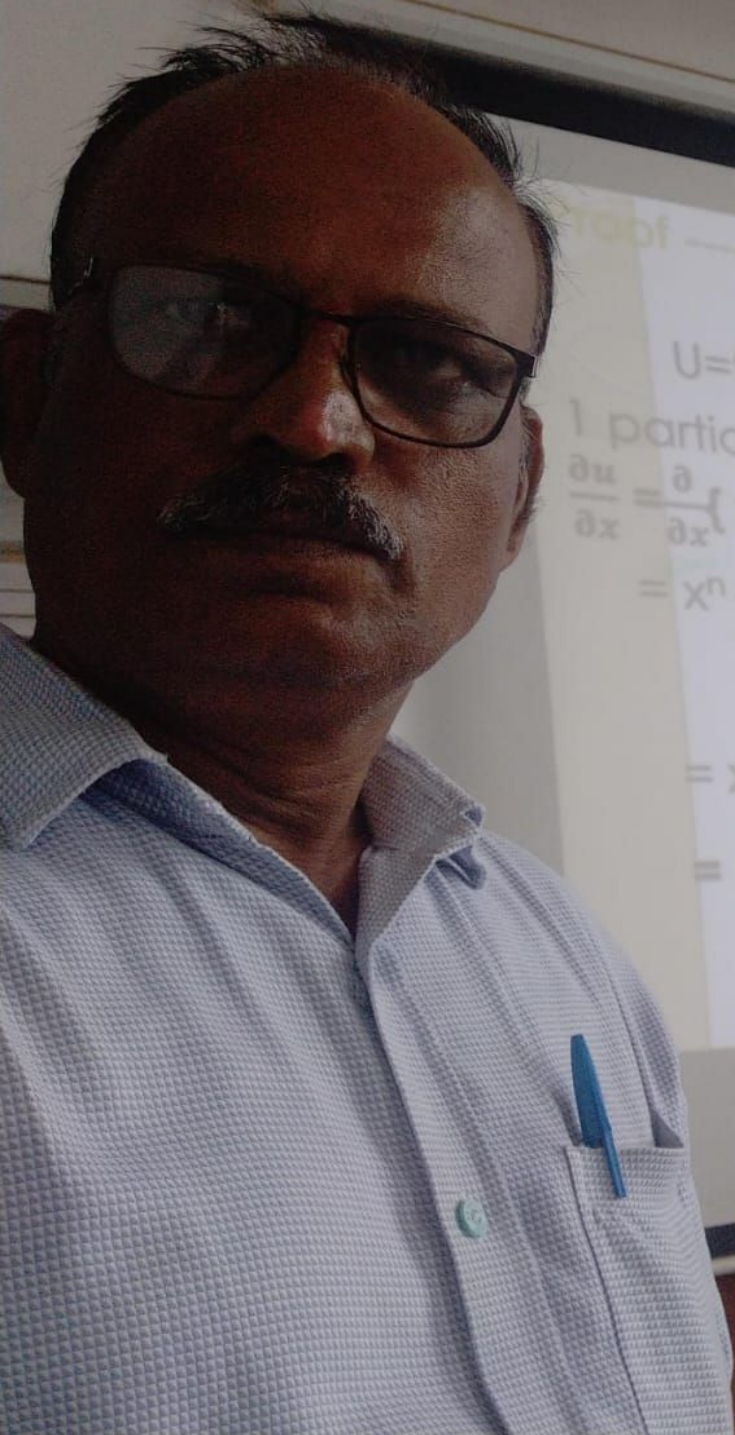
This is to certify that Prof S H Sankanagoudar Department of Mathematics, SSBM Arts, Commerce & Science College, Badami has engaged the B. Sc. VIth semester Mathematics class on topic Topology in our college on 03-08-2023 from 1.30 pm to 2.30 pm in our college. The students were anxious about the thought provoking lecture delivered by him. They demanded more number of classes from him in the future. He deserves all the honour and accolades.



PRINCIPAL
S.K.V.P. Samiti's Arts, Science,
Commerce College & P.G.Center
Hole-Alur-582 203

Topic: Number theory By Prof. Anil Gauran & Assistant Prof. Anil Gauran

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Proof

$$U = f(x, y) = x^n f\left(\frac{y}{x}\right) \quad \text{--- Equation 1}$$

1 partially diff with respect to x & y resp

$$\begin{aligned} \frac{\partial u}{\partial x} &= \frac{\partial}{\partial x} \left\{ x^n f\left(\frac{y}{x}\right) \right\} \\ &= x^n \frac{\partial}{\partial x} f\left(\frac{y}{x}\right) + f\left(\frac{y}{x}\right) \frac{\partial}{\partial x} x^n \\ &= x^n f_1\left(\frac{y}{x}\right) \cdot \frac{\partial}{\partial x} \left(\frac{y}{x}\right) + f\left(\frac{y}{x}\right) n x^{n-1} \frac{\partial}{\partial x} (x) \\ &= x^n f_1\left(\frac{y}{x}\right) \left(\frac{-y}{x^2}\right) + n x^{n-1} f\left(\frac{y}{x}\right) \\ &= \left(\frac{-y x^n}{x^2}\right) f_1\left(\frac{y}{x}\right) + n x^{n-1} f\left(\frac{y}{x}\right) \end{aligned}$$