

## **Workshop on “Outcome Based Education”**

Organised by CCLPE and IQAC, JSSAHER

Education Unit of School of Life Sciences, Mysuru/Life Sciences Departments, JSS AHER  
&

Department of Health System Management Studies, JSS AHER.

**12<sup>th</sup> & 13<sup>th</sup> April 2023**

Workshop on “Outcome Based Education” was organised by CCLPE and IQAC JSS AHER, for the faculties of School of Life Sciences, Mysuru/Life Sciences Departments, JSS AHER & Department of Health System Management Studies, JSS AHER. The program was held at Medical Education Unit, JSS Medical College.

### **Objectives of the workshop:**

1. Participants should be able to understand the principles of OBE, the importance learning outcomes, aligning teaching methods and assessments with those outcomes.
2. Participants should be able to create clear and measurable learning outcomes that are aligned with program outcomes.
3. Participants should be able to design teaching methods and assessments that are aligned with learning outcomes, including the use of formative and summative assessments.
4. Participants should be able to understand how to apply OBE principles in curriculum development, including the design of courses and programs that are focused on achieving specific learning outcomes.
5. Participants should be able to use data to monitor student progress and identify areas for improvement in teaching and learning.

The program was started by offering Pranams to lotus feet of His Holiness Jagadaguru Dr. Sri Shivarathri Rajendra Mahaswamiji and seeking the blessings of Jagadguru Sri Shivarathri Deshikendra Mahaswamiji.

Dr. Ashwini P, Associate Professor and Coordinator, Department of Microbiology, JSS AHER and Coordinator of Education Unit of School of Life Sciences, Mysuru/Life Sciences Departments, & Department of Health System Management Studies, JSS AHER welcomed Dr. Mamatha HK, Dean, DHSMS and Dr. Pushpalatha K, Professor, Department of Anatomy, & Convener, CCLPE JSS AHER. Participants were also welcomed to the workshop.

Dr. Mamatha addressed the gathering and emphasized on the importance of OBE in the current scenario of the education system.

Dr. Pushpalatha addressed the participants and encouraged them to actively participate in the workshop and also gave the glimpse of the topics to be covered in the sessions.

Dr. Raveesha KA, Dean, School of Life Sciences/Life Sciences Departments who joined lately was welcomed by Dr. Divya Rao. Sir spoke about the role played by the outcome based education in designing the curriculum for the output of quality education.

Vote of thanks was proposed by Dr. Divya Rao , Associate Professor, DHSMS, JSS AHER and Member Secretary, Education Unit of SLSM/DHSMS.



**Inauguration of the workshop.**

**Ice breaking session** for the participants was conducted by Dr. Divya Rao where the participants were given the chits containing the first part of the proverb and were told to find their partner who has the second half of the proverb. All the faculty actively participated and introduced their respective partners. Faculties also expressed their expectations from the workshop.

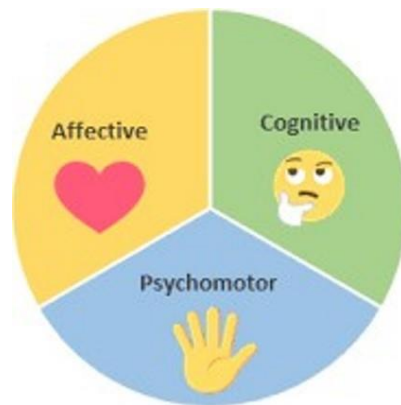


**Ice Breaking Session**

### **Session 1: Introduction to Domains.**

First session on “Domains” was delivered by Dr. Pushpa V H, Associate Professor, Department of Pharmacology, JSS College of Pharmacy, Mysore on 12/04/2023. Dr. Divya Rao, Associate Professor, Department of Health System Management Studies, JSS AHER, delivered a session on “Introduction to Domains” on 13/04/2023. Following are few highlights of the session:

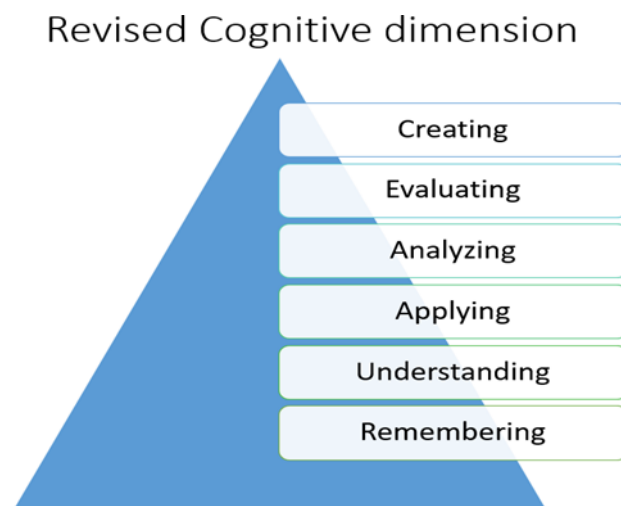
Outcome-based education (OBE) is an approach to education that focuses on defining measurable outcomes or learning objectives that students should be able to demonstrate at the end of a course or program.



**Figure 1: Domains of Learning**

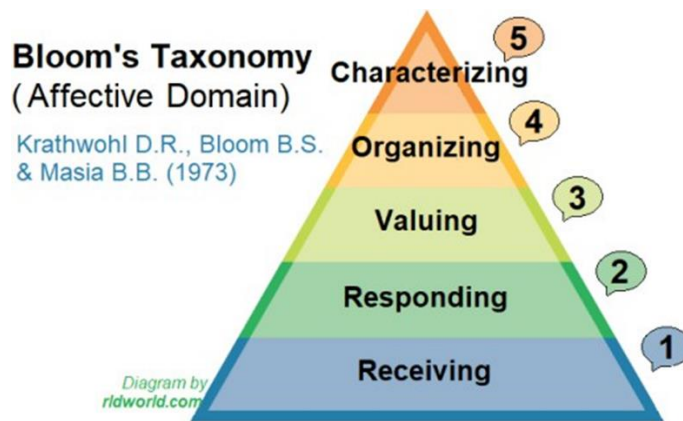
The domains of learning in OBE are typically classified into three categories: cognitive, affective, and psychomotor.

1. **Cognitive Domain:** The cognitive domain refers to intellectual or knowledge-based learning outcomes. It involves the development of intellectual abilities, including knowledge, comprehension, application, analysis, synthesis, and evaluation. Examples of cognitive outcomes include understanding concepts, solving problems, interpreting data, and evaluating arguments.



**Figure 2: Cognitive Domain**

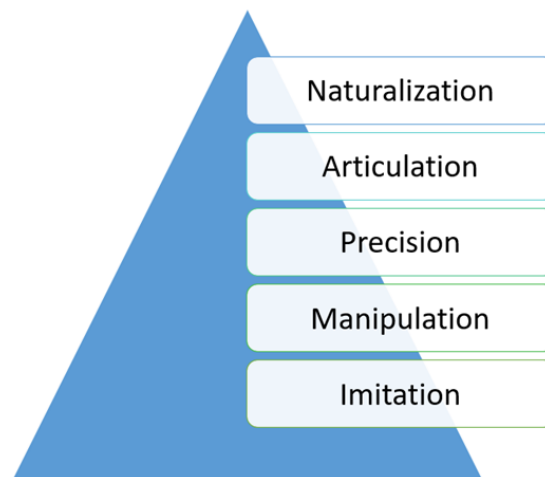
2. **Affective Domain:** The affective domain deals with the development of attitudes, values, beliefs, and emotions. It involves the development of emotional and social skills that enable students to interact effectively with others. Examples of affective outcomes include developing a positive attitude towards learning, appreciating cultural diversity, and showing empathy towards others.



**Figure 3: Affective Domain**

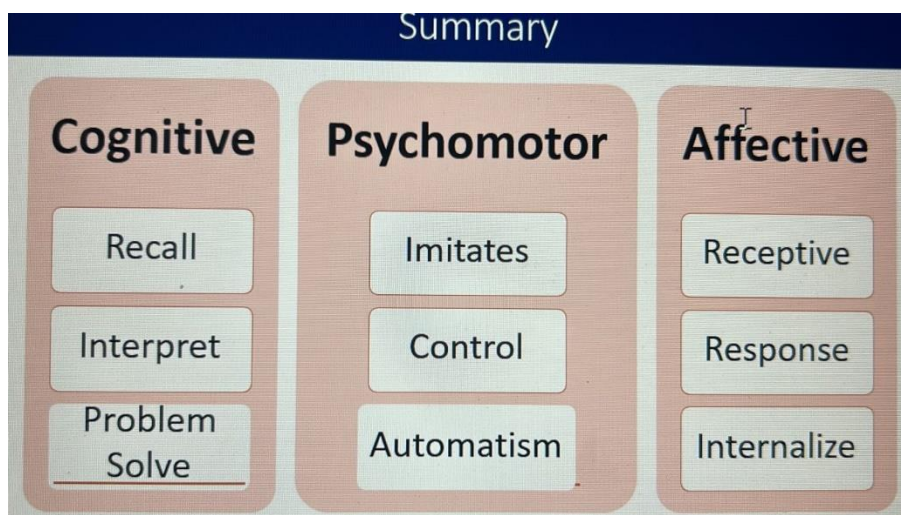
3. **Psychomotor Domain:** The psychomotor domain focuses on the development of physical skills and abilities. It involves the acquisition of motor skills, coordination, and dexterity. Examples of psychomotor outcomes include learning how to swim, ride a bike, or perform a surgical procedure.

#### Psychomotor Domain



**Figure 4: Psychomotor Domain Levels**

Finally the session was summarized by the speaker that it is important for teachers to adopt a teaching strategy, which combines various domains of learning to enable teaching and learning to be considered as effective



**Figure 6: Summary of Domains**

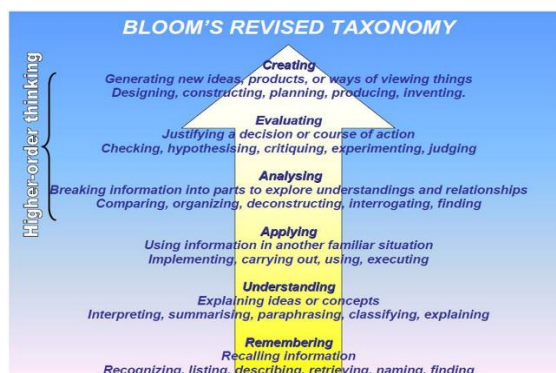
There was a short break for tea. The second lecture was delivered by “Outcome Based Education” was delivered by Dr. Ashwini P, Associate Professor and Coordinator, Department of Microbiology, JSS AHER.

## Session 2: Outcome Based Education

Session on “Outcome Based Education” was delivered by Dr. Ashwini P, Associate Professor and Coordinator, Department of Microbiology, JSS AHER on 12/04/2023 and 13/04/2023. The session emphasizes on the significance of outcome-based education. Outcome-based education (OBE) is an educational approach that focuses on defining the desired learning outcomes and assessing whether students have achieved those outcomes. The importance of OBE lies in the following areas:

- Clarity of learning objectives
- Student-centered approach
- Accountability and assessment
- Continuous improvement

The session focused on formulating the program outcomes in a broader way and course outcomes according to Bloom’s Taxonomy.



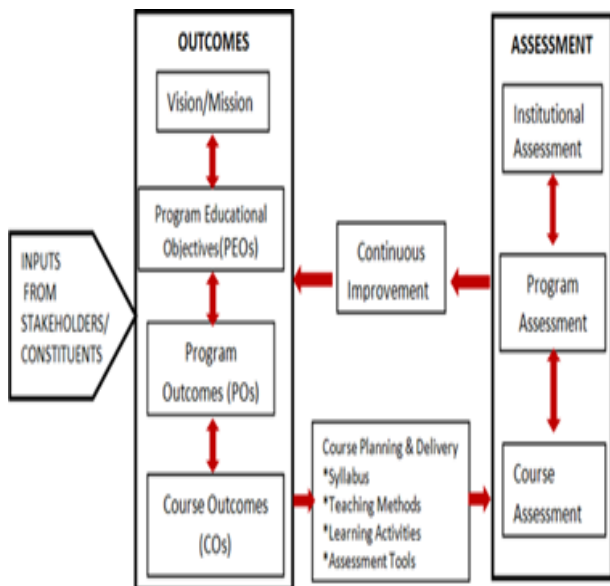
**Figure 5: Revised Bloom’s Taxonomy**

The session also focused on the program outcomes, program specific outcomes and graduate attributes. Few examples of course outcomes from various universities across the world were quoted. The speaker also mentioned about the “Washington Accord” an accord signed initially among six countries (Australia, Canada, Ireland, New Zealand, United Kingdom and United States) in the year 1989. Its purpose is to mutually recognize and accept the qualifications, degrees, accredited by signatories of the accord. India has become a signatory of the Washington accord on June 13, 2014. The member countries follow Outcome-based accreditation of the U.G Programs.

Finally, the session was ended by emphasizing the framing of the program outcomes and course outcomes as the outcome is finally to attain the vision and mission of the institute.



**Figure 6: Vision & Mission Attainment**



**Figure 7: OBE Framework.**

### Session 3: Competencies and Objectives

Session on “Competencies and Objectives” was delivered by Dr. Arun M, Professor and Head, Department of Forensic Medicine, JSS Medical College on 12/04/2023.

Dr. Vijaya Vageesh, Associate Professor, Department of Physiology, delivered lecture on “Competencies and Objectives” on 13/04/2023.

The objectives of the session were to list the differences between competencies and specific learning objectives (SLOs), Design SLOs for given competencies and link competencies, SLOs and assessment methods.

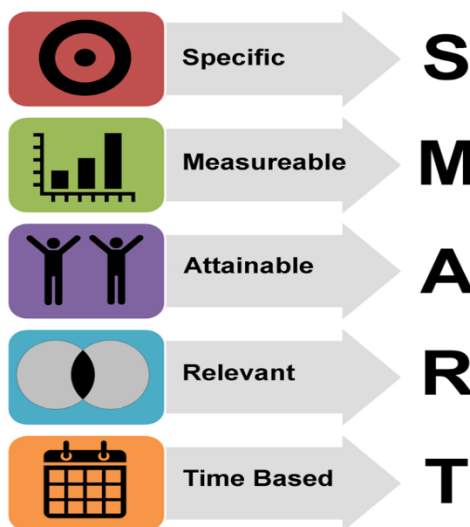
Competency: A general statement detailing the desired knowledge and skills of student graduating from the course or program.

Objective: A very general statement about the larger goals of the course or program.

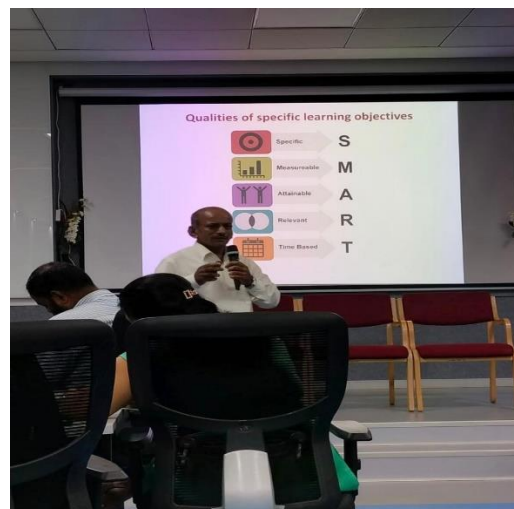
Competencies	SLOs
Define the applied skills and knowledge that enable people to successfully perform their work.	Describe what the learner should be able to achieve at the end of a learning period
Relevant to an individual's job responsibilities, roles and capabilities.	Should be specific, measurable statements and written in behavioural terms
Student and workplace focused	Student focused
At the end of this course	At the end of this T-L session
At the end of the program	
Broad/ complex	Specific
Often encompass all domains	Often relate to one domain

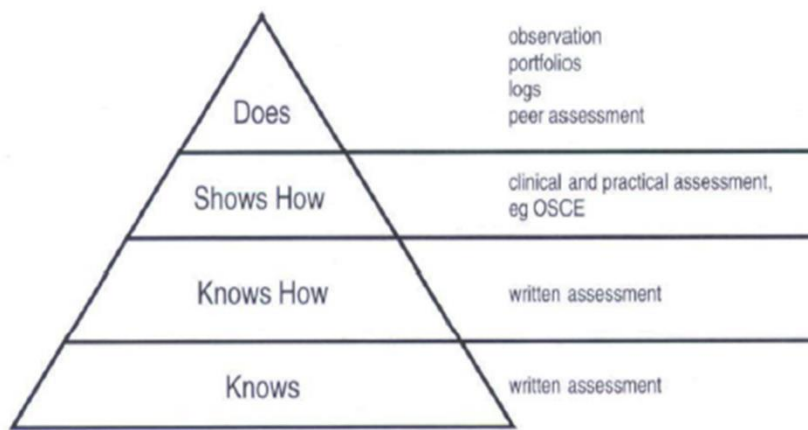
**Figure 8: Competencies and SLOs**

The session also focused on how the SLOs should be specific. They should be relevant, unequivocal, observable and feasible. The speaker also explained and demonstrated how to link the competencies and SLOs to the assessment.



**Figure 9: Qualities of SLOs**





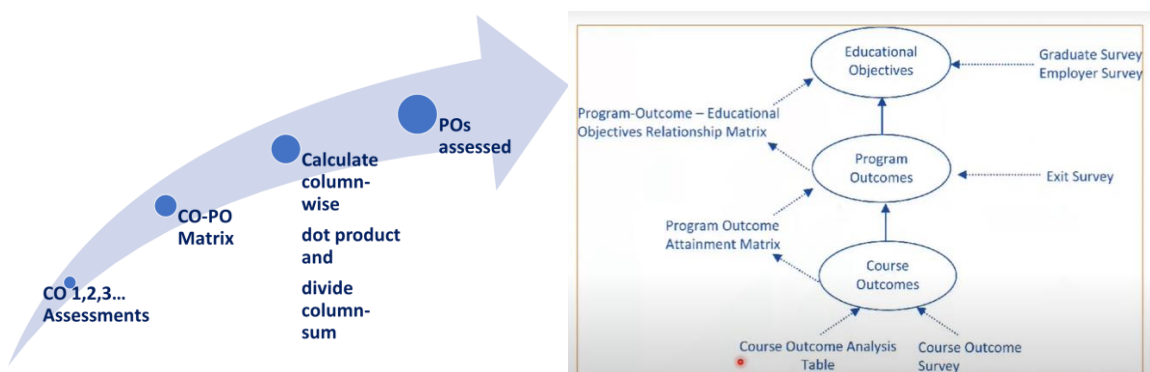
**Figure 10: The Learning assessment pyramid.**

Fourth session was started after lunch break. The session was delivered by Dr. Pushpalatha. K, Convener of CCLPE, JSS AHER on the topic “Attainment and alignment of Course outcome and Program outcome”.

**Session 4: Attainment and alignment of Course outcome and Program outcome**

Program outcomes refer to the learning objectives or expected results of a broader educational program or curriculum, rather than a specific course. These outcomes define what students should know, understand, and be able to do by the time they complete the program. Course outcomes refer to the learning objectives or expected results of a particular course. These outcomes define what students should know, understand, and be able to do by the end of the course.

The session was focused on the mapping of Course outcomes with the program outcomes. Course outcomes and program outcomes mapping is the process of aligning the learning objectives or expected results of individual courses with the broader learning objectives of a program or curriculum. The purpose of this mapping is to ensure that the course outcomes are aligned with the program outcomes and contribute to the overall achievement of the program objectives.



**Figure 11: Process of PO attainment**



Speaker also emphasized on how to assess the outcomes by direct and indirect attainment using various assessment tools. The teacher is the subject expert, who decides the course outcomes. These course outcomes then are mapped to the Program Outcomes which we name as course articulation matrix and was explained by the speaker with the suitable example.

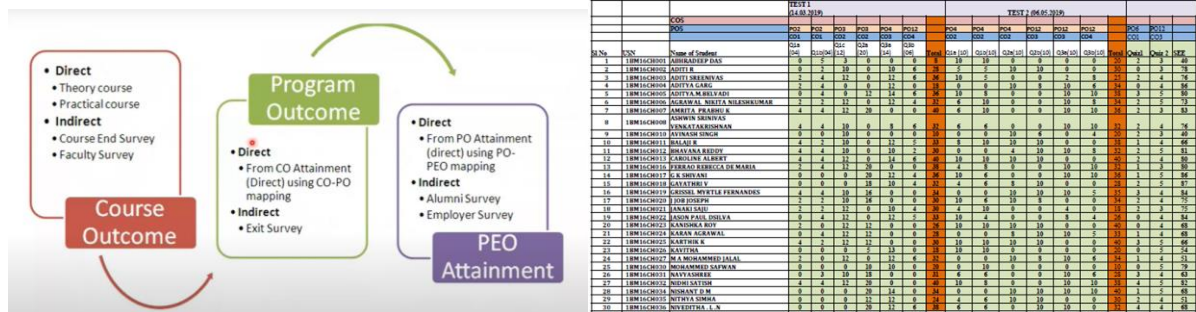


Figure 12: Assessment tools and example of mapping the CO & PO

After the completion of the session, the faculties had a hands on training where they designed the course outcomes and program outcomes on their own and mapped the course outcomes with the program outcomes.





The workshop was concluded with the remarks of Dr. Madhusudhan Purohit, Dean, IQAC, JSSAHER. Sir congratulated the faculties for their active participation in the workshop and asked them to make use of the training program in designing the quality course and program outcomes.

Participants also gave their feedback and thanked CCLPE and IQAC for organizing the training program which helped them to better understand the concept of outcome based education and mapping of CO-PO.



## Outcome of the workshop

The expected outcomes of this OBE workshop are to equip participants with the knowledge and skills necessary to implement OBE principles in their teaching and curriculum development, leading to improved student learning outcomes and better alignment with program objectives. Participants should leave the workshop with a clear understanding of the benefits of OBE and a practical roadmap for applying these principles in their teaching practice.

The expected outcomes of the workshop:

1. Effective sharing of knowledge in support for the designing of the course outcomes.
2. Designing of the programme outcomes in alignment with the mission and vision of the institution.
3. Mapping of the course outcomes with the programme outcomes
4. Mapping of the CO - PO and their attainment calculation

### Beneficiaries of the workshop:

Teaching faculties of School of Life Sciences, Mysuru & Life Sciences Departments, JSS AHER and Department of Health System Management Studies, JSS AHER, Mysuru.

List of Participants is attached below:

Sl. No	Group- 1 (12/04/2023)	Sl. No	Group-2 (13/04/2023)
1.	Dr. Shanmukappa K Asso. Professor	1.	Dr. Raghu Ram Achar Asst. Professor
2.	Dr. T S Gopenath Asso. Professor	2.	Dr. Chaithra N Asst. Professor
3.	Dr. H P Shivaraju Asso. Professor	3.	Dr. Bheemaraju Asst. Professor
4.	Dr. Asha Srinivasan Asst. Professor	4.	Dr. Shankamma K Asst. Professor
5.	Dr. Raghu N Asst. Professor	5.	Ms. Arunakumari S Asst. Professor
6.	Dr. Stavelin Abhinandithe Asst. Professor	6.	Dr. Deepa L Hungud Asst. Professor
7.	Mrs. Muktha Sathisha Asst. Professor	7.	Mrs. Bhaya Shree P Asst. Professor
8.	Mrs. Sowmya K N Asst. Professor	8.	Dr. D. Guru Kumar Asst. Professor
9.	Dr. J.R. Kumar Asst. Professor	9.	Dr. Charukesi R Asst. Professor
10.	Mr. Sawant Sushant Anil Asst. Professor	10.	Dr. Sumitha E Asst. Professor

11.	Ms. Patteswari D Asst. Professor	11.	Dr. Saravanan Asst. Professor
12.	Dr. Shiva S Asst. Professor	12.	Dr. Umamaheshwari . S Asst. Professor
13.	Dr. Kiran Kumar M N Asst. Professor	13.	Dr. Jamuna Bai A Asst. Professor
14.	Dr. Ramith Ramu Asst. Professor	14.	Dr. Jagadeep Chandra S Asst. Professor
15.	Dr. Mohan T C Asst. Professor	15.	Dr. Sunita C Mesta Asst. Professor
16.	Dr. Archer Ann Catherine Asst. Professor	16.	Dr. Manasa Ravindra Walmiki Asst. Professor
17.	Dr. Nagalambika Prasad Asst. Professor	17.	Dr. Vadiraj K T Asst. Professor
18.	Dr. Supreeth. M Asst. Professor	18.	Dr. Anilkumar K M Asst. Professor
19.	Dr. Sindhu R Asst. Professor	19.	Dr. Satish Kumar. J Asst. Professor
20.	Dr. Pallavi N Asst. Professor	20.	Dr. Divya. J Asst. Professor
21.	Dr. Lingaraju H G Asst. Professor	21.	Dr. Vanitha Reddy P Asst. Professor
22.	Dr. Shweatha H E Asst. Professor	22.	Dr. Netravati H Asst. Professor
23.	Dr. Veena B M Asst. Professor	23.	Dr. Sudha Sairam Asst. Professor
24.	Dr. Sushma B V Asst. Professor	24.	Ms. Syeda Farha S Asst. Professor
25.	Ms. Ragavi M Asst. Professor	25.	Ms. Pallavi R Asst. Professor
26.	Mr. Vinay A Asst. Professor		
27.	Dr. Siddesha J M Asst. Professor		
28.	Ms. Khansa Fathima Asst. Professor		
<b>Department of Health System Management</b>			
29.	Mr. Chethan Kumar R M Asst. Professor	26.	Dr. Mamatha H K Associate Professor & Dean, DHSMS
30.	Mr. Mahadevaswamy R M Asst. Professor	27.	Dr. Shalini N Asst. Professor
31.	Mr. Srikanta M Asst. Professor	28.	Mr. Harshith N Asst. Professor
<b>Biomedical Sciences</b>			
		29.	Dr. Ashwini N Asst. Professor