2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies
Innovative Methods of Teaching and Learning
REPORT OF INNOVATIVE TEACHING METHOD

I Year II Semester, Computer Science Paper: Data Structures involves the study of various algorithms and the students are expected to appreciate the difference between various algorithms in their methodology, complexity and so on.

Prof. Durgakala Sridhar and Prof. Shilpi Dham have devised a mechanism called “Enacting the Algorithm” in which students who are initially standing in register no. order undergo the steps of the algorithm to arrange themselves in increasing order of their heights.

Two algorithms namely “Bubble sort” and “Selection sort” were demonstrated in this manner. The team of students who demonstrated the 2 algorithms participated well with a competing spirit. Ultimately the students in the audience were able to appreciate the difference between the two algorithms and how the relative complexities remained the same, since the end was achieved in same no. of steps.

This was held for two successive years since 2018 and 19.
ALGORITHM ENACTING
1. BUBBLE SORT
2. INSERTION SORT
3. SELECTION SORT
ALGORITHM ENACTING
1. BUBBLE SORT
2. INSERTION SORT
3. SELECTION SORT
DEPARTMENT OF COMPUTER SCIENCE

Feedback For Innovative Teaching Method 2018

"ENACTING THE ALGORITHM" with the Student Participation.

1. Relevance: Do you feel this teaching method is relevant for the subject:
   - Highly Relevant
   - Somewhat Relevant
   - Irrelevant

2. Did the exercise enhance your understanding of the subject? Yes No

3. Did the exercise enhance your understanding of the subject?
   - Yes
   - No
   - Can't say

4. What did you like the most in this approach?
   - Student Participation
   - Play or skit like approach
   - Improvement of understanding
   - Nothing
DEPARTMENT OF COMPUTER SCIENCE

Feedback For Innovative Teaching Method 2018

"ENACTING THE ALGORITHM" with the Student Participation.

1. Relevance: Do you feel this teaching Method is relevant for the subject:
   - Highly Relevant ✓
   - Somewhat Relevant
   - Irrelevant

2. Did the exercise enhance your understanding of the subject?  Yes ✓  No

3. Did the exercise enhance your understanding of the subject?
   - Yes ✓
   - No
   - Can't say

4. What did you like the most in this approach?
   - Student Participation
   - Play or skit like approach
   - Improvement of understanding ✓
   - Nothing
DEPARTMENT OF COMPUTER SCIENCE

Feedback For Innovative Teaching Method 2018

“ENACTING THE ALGORITHM” with the Student Participation.

1. Relevance: Do you feel this teaching Method is relevant for the subject:
   - [ ] Highly Relevant
   - [X] Somewhat Relevant
   - [ ] Irrelevant

2. Did the exercise enhance your understanding of the subject? [X] Yes  No

3. Did the exercise enhance your understanding of the subject?
   - [X] Yes
   - [ ] No
   - [ ] Can’t say

4. What did you like the most in this approach?
   - Student Participation
   - Play or skit like approach
   - Improvement of understanding
   - Nothing
DEPARTMENT OF COMPUTER SCIENCE

Feedback For Innovative Teaching Method 2018

"ENACTING THE ALGORITHM" with the Student Participation.

1. Relevance: Do you feel this teaching Method is relevant for the subject:
   - [ ] Highly Relevant
   - [ ] Somewhat Relevant
   - [x] Irrelevant

2. Did the exercise enhance your understanding of the subject?
   - [x] Yes
   - [ ] No

3. Did the exercise enhance your understanding of the subject?
   - [x] Yes
   - [ ] No
   - [ ] Can’t say

4. What did you like the most in this approach?
   - [x] Student Participation
   - [ ] Play or skit like approach
   - [ ] Improvement of understanding
   - [ ] Nothing
DEPARTMENT OF COMPUTER SCIENCE

Feedback For Innovative Teaching Method 2019

"ENACTING THE ALGORITHM" with the Student Participation.

1. Relevance: Do you feel this teaching method is relevant for the subject:
   - [ ] Highly Relevant
   - [ ] Somewhat Relevant
   - [ ] Irrelevant

2. Did the exercise enhance your understanding of the subject?  [ ] Yes  [ ] No

3. Did the exercise enhance your understanding of the subject?  [ ] Yes  [ ] No  [ ] Can't say

4. What did you like the most in this approach?
   - [ ] Student Participation
   - [ ] Play or skit like approach
   - [ ] Improvement of understanding
   - [ ] Nothing
DEPARTMENT OF COMPUTER SCIENCE
Feedback For Innovative Teaching Method 2019

"ENACTING THE ALGORITHM" with the Student Participation.

1. Relevance: Do you feel this teaching method is relevant for the subject:
   - Highly Relevant
   - Somewhat Relevant
   - Irrelevant

2. Did the exercise enhance your understanding of the subject? Yes □ No □

3. Did the exercise enhance your understanding of the subject? Yes □ No □
   - Can't say

4. What did you like the most in this approach? Yes □ No □
   - Can't say

Student Participation: Play or skit like approach

Improvement of understanding: Nothing

DEPARTMENT OF COMPUTER SCIENCE
Feedback For Innovative Teaching Method 2019

"ENACTING THE ALGORITHM" with the Student Participation.

1. Relevance: Do you feel this teaching method is relevant for the subject:
   - Highly Relevant
   - Somewhat Relevant
   - Irrelevant

2. Did the exercise enhance your understanding of the subject? Yes □ No □

3. Did the exercise enhance your understanding of the subject? Yes □ No □
   - Can't say

4. What did you like the most in this approach? Yes □ No □
   - Can't say

Student Participation: Play or skit like approach

Improvement of understanding: Nothing
Dear students, I have represented operational amplifiers as mindmap. MindMap is a powerful technique to present knowledge corresponding to a subject, topic or idea. It replicates the thinking process of the mind and gives a structural representation to a concept. They summarize the information that you have to study.

[MindMap Image]

usha9205 8 Map1.pdf
PDF
Innovative method of teaching multi-step derivations in the topic – Elasticity for I BSc I semester A section (2020-21)
Theory: Expression for the maximum depression of a loaded cantilever

Consider a cantilever beam of length $l$ fixed at end A and loaded with weight $W$ at end B. The beam undergoes bending. The end B undergoes a depression to the new position $B'$.

i) $x$-axis/moment

Consider a section of the beam corresponding to $P$ at a distance $x$ from end A. The moment of the external couple at this section due to weight $W$ is

$$= \text{Force} \times \text{perpendicular distance about W}$$

$$= W \times P'B$$

$$= W \times (l - x)$$
Since the beam is in equilibrium, the external bending moment is balanced by the internal bending moment.

The expression for internal bending moment is \[ \frac{Y Ig}{R} \]

External bending moment = internal bending moment (opposite)

\[ W \times (l - x) = \frac{Y Ig}{R} \quad \ldots \ldots 1 \]

\[ \frac{1}{R} = \frac{W(l-x)}{Y Ig} \quad \ldots \ldots 2 \]

where
- \( R \) is the radius of curvature of the neutral axis
- \( Y \) is Young’s modulus of the material of the beam
- \( Ig \) is the geometrical moment of inertia of the section of the beam corresponding to \( P \)
ii) Arc length & angle

Consider another section of beam Q at a distance $dx$ close to section P. The arc PQ subtends an angle $d\theta$ at the centre of curvature O.

$$dx = R \, d\theta$$

$$d\theta = \frac{dx}{R} \quad \ldots \ldots \quad 3$$

Substituting for $1/R$ in eqn 3 from eqn 2;

$$d\theta = \frac{W(l-x)\,dx}{YI_g} \quad \ldots \ldots \quad 4$$
iii) *tangents/y-axis*

Draw tangents at P & Q meeting the vertical line BW at C and D respectively.

\[ CD = dy \] (depression in the vertical direction)

Since Q is very close to P,

\[ dy = (l - x)d\theta \]

where \( d\theta \) is the angle between the two tangents

\[ d\theta = \frac{dy}{l-x} \] \[ \ldots \ldots 5 \]

Substituting for \( d\theta \) in eqn 4,

\[ \frac{dy}{l-x} = \frac{W(l-x)dx}{YI_g} \]
\[ dy = \frac{W(l - x)(l - x)dx}{YI_g} \]

\[ dy = \frac{W(l-x)^2dx}{YI_g} \quad \text{...........6} \]

The total depression of the beam at the loaded end is \( BB' = y \).

It is obtained by integrating eqn 6 between the limits \( x = 0 \) and \( x = l \)

\text{iv) Integration with limits}

\[ \int_{x=0}^{x=l} dy = \int_{x=0}^{x=l} \frac{W(l - x)^2dx}{YI_g} \]

\[ y = \frac{W}{YI_g} \int_{0}^{l} (l^2 + x^2 - 2xl) \, dx \]
\[ y = \frac{W}{YI_g} \left( xl^2 - \frac{2l}{2} x^2 + \frac{x^3}{3} \right) \]

\[ x = l \]

\[ y = \frac{W}{YI_g} \left( l^3 - l^3 + \frac{l^3}{3} \right) \]

\[ y = \frac{Wl^3}{3YI_g} \]

If ‘m’ is the mass at the loaded end, \( W = mg \)

**depression of a loaded cantilever**: \( y = \frac{mgl^3}{3YI_g} \)
Special Cases:
1. Rectangular cross-section
   If the breadth of the beam is \( b \) and thickness is \( d \), then
   \[
   a = b \times d \quad \text{and} \quad K^2 = \frac{d^3}{12}.
   \]
   \[
   \therefore \text{Geometrical moment of inertia, } I_g = aK^2 = \frac{bd^4}{12} \quad \ldots(10)
   \]
2. Circular cross-section
   If the radius of the circular cross-section is \( r \), then
   \[
   a = \pi r^2 \quad \text{and} \quad K^2 = \frac{r^4}{4}.
   \]
   \[
   \therefore \text{Geometrical moment of inertia, } I_g = aK^2 = \frac{\pi r^4}{4}.
   \]
Note that bending moment of a beam is directly proportional to \( q \), the value of Young's modulus for its material. The quantity \( qI_g = qAK^2 \) is known as the flexural rigidity of the beam. Flexural rigidity is defined as the bending moment required to produce a unit radius of curvature.

8.10 Cantilever
A cantilever is a beam fixed horizontally at one end and loaded at the other.

Theory: Let \( AB \) represent the neutral axis of the cantilever of length \( l \) fixed at the end \( A \) and loaded at \( B \) with a load \( W \). The end \( B \) is deflected or depressed to the position \( B' \) thereby the neutral axis of the cantilever shifts to the position \( AB' \).

Consider a section \( P \) of the beam at a distance \( x \) from the fixed end \( A \). The moment of the external couple at this section due to the load \( W \) is
\[
=W \times PB = W(l-x)
\]
Since the beam is in equilibrium, the external bending couple at \( P \) is balanced by the internal bending moment.
\[
W(l-x) = \frac{qL^2}{R} \quad \text{or} \quad \frac{1}{R} = \frac{W(l-x)}{qL^2} \quad \ldots(1)
\]
where \( R \) is the radius of curvature of the neutral axis at \( P \) and \( I_s \) is the geometrical moment of inertia of the section of the beam at \( P \).

As we move towards the fixed end \( A \) the moment of the load increases. Hence the radius of curvature will be different at different points and decreases as we move towards \( A \). Consider a point \( Q \) lying very close to \( P \) at a distance \( dx \). The radius of curvature at \( Q \) is practically the same since \( dx \) is very small.

\[
\frac{PQ}{R} = d\theta = dx
\]

or

\[
d\theta = \frac{dx}{R} = \frac{W(l-x)dx}{q's}
\]  

...(3)

Draw tangents at \( P \) and \( Q \) meeting the vertical line at \( C \) and \( D \) respectively. Then the depression of \( Q \) below \( P \) is evidently

\[
CD = dy = (l-x) \frac{d\theta}{R} = (l-x) \frac{dx}{R} \frac{W(l-x)}{q's}
\]  

where \( d\theta \) is the angle between two tangents.

Substituting for \( d\theta \) in Eq. (4), we obtain

\[
\frac{dy}{dx} = \left(1 - \frac{x}{l}\right) \frac{W(l-x)dx}{q's}
\]

\[
\frac{dy}{dx} = \frac{W(1-x)^2}{q's}
\]

...(5)

The total depression \( y = BB' \) of the loaded end \( B \) is obtained by integrating the Eq. (5) between the limits \( x = 0 \) and \( x = l \).

\[
y = \int_0^l \frac{W(l-x)^2}{q's} dx = \frac{W}{q's} \left[ (l^2 - 2lx + x^2) \right]_0^l
\]

\[
y = \frac{W}{q's} \left[ l^2 - 2lx + x^2 \right]_0^l = \frac{W}{q's} \left[ l^3 - l \frac{l^2}{2} \right]
\]

...(6)

**Special Cases:**

1. **Rectangular cross-section**

   For the rectangular cross-section, geometrical moment of inertia is given by \( I_s = \frac{bd^3}{12} \)  
   ...(7)

   where \( b \) is the breadth and \( d \), the thickness of the beam.

   Total depression, \( y = \frac{MB}{4qbd^3} \times 12 = \frac{4MB}{qbd^3} \)  
   ...(8)
Feedback on the innovative method

1. Were the power point presentation slides of the derivations in the topics - Elasticity and Surface tension clearly visible?

   39 responses

   - Yes: 100%
   - No: 0%
2. Were you able to understand the explanation of the derivations that were broken down into sections?

39 responses

- Yes: 100%
3. Do you think that breaking down the derivation into sections is an effective method to remember easily and derive it correctly?

39 responses
3. Do you think that breaking down the derivation into sections is an effective method to remember easily and derive it correctly?

39 responses

- Yes: 92.3%
- No: 7.7%
Zoology – Innovative Methods

BSc 2019 Activity based learning on Genetic recombination
Problem-solving methodologies

Crossword puzzles: This activity was related to aspects which require more terms to remember, the structure, function and position. For example, the topic “prawn appendages” has numerous terms which are confusing and difficult to remember. Hence, a crossword puzzle was created which helped them to remember the terms.
Activity-based Learning

Topic: Genetic recombination
Class: III BSc. B. M.S. Lectures
Date: 22-2-2019 and 23-2-2019

On the above-mentioned dates, one theory class was conducted for III BSc. B. M.S. respectively. It was an activity-based learning in which the topic “Genetic recombination” was demonstrated by the help of teaching aids, which included a paper cut-out of Bacillus subtilis representing E. coli, bacteriophage, a paper strip representing DNA strands, a scissor representing enzyme Eco R I and a gum representing DNA ligase.

The effectiveness of this activity was understood as the topic was measured using the following parameters:

1. Identification of recognition sequence on Donor DNA.
2. Identification of recognition sequence on plasmid of E. coli.
3. Correctness in cutting the DNA strand and ligating the fragment in plasmid.
4. Problems encountered in recombination.
5. Problems encountered in transformation.

The activity is supported by the following photographs and feedback forms.

Number of participants - 80

Dr. Ganesh U
HOD, Zoology
MES-College of Arts, Commerce & Science
Malleswaram, Bangalore 560 003.
Pictures of Innovative teaching practices done by Pankaj Kumar Choudhary on DNA genetic recombination
Feedback from Students on Innovative Teaching Practices

Paper: II (Non-Chordata)

Name: Pranita Shetty
College: M.E.S. Degree College
Class and Section: I B.C. I so
Mobile Number: 8151860594, 6364829221
Date: 06/10/19
Time: 3:00 p.m.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parameters</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Explanation of topic related to activity</td>
<td>Excellent Good Average</td>
</tr>
<tr>
<td>2.</td>
<td>How useful was the practice in improving the understanding of the topic</td>
<td>Excellent Good Average</td>
</tr>
<tr>
<td>3.</td>
<td>Adequacy of clues for the conduct of activity</td>
<td>Excellent Good Average</td>
</tr>
<tr>
<td>4.</td>
<td>Do you feel that this methodology improves teacher-student interaction in the classroom?</td>
<td>Excellent Good Average</td>
</tr>
</tbody>
</table>

Any Suggestions: Try making it more activity.

Signature: ____________________________
# Feedback from Students on Innovative Teaching Practices

**Paper: II (Non-Chordata)**

**Name:** Kevithama K  
**College:** M.E.S Degree College

**Class and Section:** JRS '18  
**Mobile Number:** 9880644585

**Date:** 21/10/2019  
**Time:**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parameters</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Explanation of topic related to activity</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>2.</td>
<td>How useful was the practice in improving the understanding of the topic</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>3.</td>
<td>Adequacy of clues for the conduct of activity</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>4.</td>
<td>Do you feel that this methodology improves teacher-student interaction in the classroom?</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

Any Suggestions:

[Signature]

**Remarks:**

- ✔ Excellent
- ✔ Good
- ✔ Average
- ✗ Poor
**Feedback from Students on Innovative Teaching Practices**

**Paper II (Non-Chordata)**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parameters</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Explanation of topic related to activity</td>
<td>Excellent</td>
</tr>
<tr>
<td>2.</td>
<td>How useful was the practice in improving the understanding of the topic</td>
<td>Excellent</td>
</tr>
<tr>
<td>3.</td>
<td>Adequacy of clues for the conduct of activity</td>
<td>Excellent</td>
</tr>
<tr>
<td>4.</td>
<td>Do you feel that this methodology improves teacher-student interaction in the classroom?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Any Suggestions:**

Signature: [Signatures]
Feedback from Students on Innovative Teaching Practices

Paper: II (Non-Chordata)

Name: Vinayak M
College: MES Degree College
Class and Section: BBA-B
Mobile Number: 7475680529
Date: 9/5/19
Time: 2:00 pm

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parameters</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Explanation of topic related to activity</td>
<td>Excellent</td>
</tr>
<tr>
<td>2.</td>
<td>How useful was the practice in improving the understanding of the topic</td>
<td>Excellent</td>
</tr>
<tr>
<td>3.</td>
<td>Adequacy of clues for the conduct of activity</td>
<td>Excellent</td>
</tr>
<tr>
<td>4.</td>
<td>Do you feel that this methodology improves teacher-student interaction in the classroom?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Any Suggestions:

Signature

M.E.S. DEGREE COLLEGE OF ARTS, COMMERCE AND SCIENCE
MALLESWARAM, BANGALORE – 560 003
DEPARTMENT OF ZOOLOGY
**M.E.S DEGREE COLLEGE OF ARTS, COMMERCE AND SCIENCE**  
MALLESWARAM, BANGALORE – 560003  
DEPARTMENT OF ZOOLOGY

Feedback from Students on Innovative Teaching Practices  

**Paper: II (Non-Chordata)**

Name: Sullithara V  
College: M.E.S Degree College

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parameters</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Explanation of topic related to activity</td>
<td>Excellent / Good</td>
</tr>
<tr>
<td>2.</td>
<td>How useful was the practice in improving the understanding of the topic</td>
<td>Excellent / Good / Average</td>
</tr>
<tr>
<td>3.</td>
<td>Adequacy of clues for the conduct of activity</td>
<td>Excellent / Good / Average</td>
</tr>
<tr>
<td>4.</td>
<td>Do you feel that this methodology improves teacher-student interaction in the classroom?</td>
<td>Yes / No / Average</td>
</tr>
</tbody>
</table>

Any Suggestions:

Signature: [Signature]

Date: \[\]  
Time: \[\]
Activities for the even semester January to May 2019

CURRICULAR ASPECTS
- Prof. Sheela Menon and Prof. Thaddeus Naidu T., from the department are members of the Board of Studies in Zoology, Bangalore University syllabus in Zoology for CBCS programme was revised for the first semester
- Laboratory manuals were revised, updated and the new editions were provided to all the students of LIV & VI semesters.

TEACHING, LEARNING AND EVALUATION
- Remedial coaching classes were conducted for low achievers as well as interested students of II, IV and VI semester. Study material was made available for the students who attended remedial coaching.
- Sanskrit coaching classes were conducted for SC and ST students of II, IV and VI semester. Previous question papers were discussed and study material was made available for the students.
- Assignment topics were given to all students related to the curriculum & the completed assignments were evaluated.
- Students of all semesters were encouraged to present class seminars, power-point presentations related to curriculum topics.
- Two faculty members of the department, Mr. Pankaj Kumar Choudhary and Dr. S. Dsw. Thangam practiced innovative methods of teaching, for the topics r-DNA technology and App-landscapes of Pawan respectively. Both these innovative methods were well received by the students and the student feedback pertaining to the same has been analyzed by the department.

RESEARCH INNOVATION AND EXTENSION
- Prof. Vimala Francis, Dean, Faculty of Science, Mount Carmel College was nominated as external academic advisor, for the Department advisory Committee (DAC) under the research Cell of M.E.S Degree College, for a term of two years from March 2018-2020. The second meeting of the DAC was held on 22nd April 2019.
Experiential Learning
The Department of Chemistry had initiated a Biochemical and Analytical techniques training programme that aimed at enhancing the skills of interested students. As a part of this, students were taken on a 2day workshop conducted in Aristogene Biosciences Pvt. Ltd. to provide hands on exposure to a few techniques.

**Aristogene workshop – 2017**

**Date:** June 30th and July 1st ,2017  
**No of Student participants:** 25  
**Purpose:** Students got to work on sophisticated instrument and have hands on training to a few techniques.

**Job Skills and Personality development workshop- 2017**

The Department of Chemistry had organized a workshop on **Job Skills and Personality development** at 10:30am on **26th August, 2017**. Mrs. Divya Kaveriappa was the resource person for the workshop and it was attended by 15 students.

**Date:** 26th August 2017  
**Students participated:** 15  
**Purpose:** The workshop helped students in acquiring knowledge about personality development and job skills.
The Department of Chemistry in association with Science club had organized a workshop on **Manufacture on Soaps, Detergents and Candles** on 23rd Feb, 2018 at 11am by Prof M.R. Chaya. 100 students and few faculty members participated in the workshop.

**Date:** 23rd Feb, 2018  
**No of Student participants:** 100  
**Purpose:** To encourage students to take up entrepreneurship as a career.
The Department of Chemistry had organized a Lecture on Urine Exosome - as a window into Kidney structure and Function on 5th Feb 2018 at 3pm by Dr. Satish Rao. Approximately 200 students and faculty members attended the lecture.

**Date: 5th Feb 2018**

**No of Student participants : 200**

**Purpose:** The talk enlightened students on the importance of research and motivated them to pursue research as a career.
The Department of Chemistry had organized a Lecture on **Textiles and their Conservation** on 6th August, 2019 at 12pm by Dr. Kannika Bhatia Sachdeva. 200 students and few faculty members participated in the workshop.

**Date:** 6th August, 2019  
**No of Student participants:** Around 200  
**Purpose:** It gave a knowledge on the development of textiles and methods of conservation.
The Department of Chemistry had organized a webinar on **Spirulina – An Immunity booster** on 2nd June, 2020 at 11:30 am by Dr Mahesh R.V, founder-Spirulina foundation, Tumkur. Around 100 students and few faculty members participated in the webinar.

**Date:** 2nd June, 2020

**No of Student participants:** Around 100

**Purpose:** The talk provided elaborate information regarding the nutritional content of spirulina and how it works as an immunity booster.
Historical – Educational Field Trip Report

The department of history organised a trip to the historical places – Talakadu and Somanathapura temples for V semester BA students on 19th October 2019 under the
Chemistry Exhibition by BSc students in 2018

Inauguration of Chemistry Add-on – CHEM-TECH

MES Degree College of Arts, Commerce and Science
Workshop on Aroma Chemicals, Flavours and Fragrance
19th February, 2019

II B.Sc. PCM students gave Poster presentation in National Conference held in Christ University Bangalore, representing Chemistry department.
Commerce

Business and Bestowal (ISR) 2019-20

What it takes to be an Entrepreneur?

- Passion
- Confidence & Belief
- Identity & Reputation
- Expansive Market
- Sales & Marketing
- Taking Calculated Risks
- Communication Skills
- Creativity and Innovation
- Customer Focus
- Flexibility and Adaptable

CONCLUSION

A ONE DAY WORKSHOP ON BUSINESS TAXATION

BY

DR. V. RAJESH KUMAR
FOUNDER & MANAGING PARTNER
VITTAM PRAWNA GURUSHALA

UNION BUDGET 2019-2020
OBJECTIVES OF AN EVENT

It displays Skills in marketing, Purchase management, stock management, accounting knowledge, Profit management and also finance. It also gives exposure in showcasing, co-ordination, display of items, salesmanship & advertising.
• **CHAKRAVYUH 2016-2017 – THE GAME OF ASTRA’S**

To give organizing experience to the students, To provide them experience on budgeting, Given them in hospitality, Identifying the right people for judges, Creativity specifically while choosing the letter framing of the brochure content and to make them understand team dynamics and leadership skills, Develop soft skills regarding inviting teams and in turn networking with all of them.

➢ **VAJRASTRA (TREASURE HUNT):**

• This event was fun filled and it was spread over 2 days. Event consisted 4 rounds in total. Event was managed by Abhishek Arjun and Sneha Ashok of 3rd B.COM.

• Overall Trophy and Rolling Trophy was bagged by “New Horizon College”.

![Image of students]
INDUSTRIAL VISITS 2016-2017

Department of commerce organized an industrial visit to the manufacturing plant of Coca cola at Bidadi, on 12\textsuperscript{th} September 2016.

The Department of Commerce had organized an industrial visit on 28\textsuperscript{th} January 2017 to Sri Sachchidananda Industry which was located in Mysore with 45 students and accompanied with 2 faculty members. Sri Sachchidananda Industries was a small-scale manufacturing company. It produces a variety of automobile parts varying from small spare parts like nuts and bolts to huge accessories such as exhaust system and fuel mechanisms.
Objectives of an Event

To give organizing experience to the students, To provide them experience on budgeting, Given them in hospitality, Identifying the right people for judges, Creativity specifically while choosing the letter framing of the brochure content and to make them understand team dynamics and leadership skills, Develop soft skills regarding inviting teams and in turn networking with all of them.
Three day hands on workshop on Fortran - 2019
The Centre for Nano and Soft Matter Sciences (CeNS) is a leading research institute devoted to research on two frontier areas of 21st-century science. The first of these concerns a broad spectrum of advanced nano-scale materials of relevance to a variety of applications; the other deals with soft matter, a prime example of which is provided by liquid crystals that form an inseparable component of our digital society. The uniqueness of CeNS lies in research being carried out to realize smart nano-soft materials emerging from a judicious combination of the best of these fields.

With a view to stimulating and nurturing scientific curiosity in the young minds, CeNS is embarking on a science initiation programme aimed at students. Under the programme, from the Centre for a half-day there will be visits to your campus and participate in innovative science learning activities, including, brief inspiring talks by the researchers of CeNS, and in-house demonstration experiments. These activities are intended to induce/generate in the young minds an aptitude for relating daily life experiences to scientific principles and at the same time learn to appreciate the importance of scientific research.

Your college is invited to use this opportunity to participate in the programme in the month of July 28th, Saturday. In this regard, you may contact the Coordinator, Dr. S. Krishna Prasad (email: skprasad@cens.res.in) or the facilitator, Mr. S. Deepak, Ph: 9845398214, email: deepak@cens.res.in / 080 23084200/2308250

Thanking You,

Warm Regards

(S Deepak)
To The Principal
MES Degree College of Arts, Commerce and Science
Malleswaram, Bangalore-560003

25.07.2018

Respected Madam,

Subject: Visit of Faculty and Students to Centre for Nano and Soft Matter Sciences (CeNS) on 28.07.2018

Nano material and Soft condensed matter is part of the curriculum for III year B.Sc (V Semester). In this context a visit to Centre for Nano and Soft Matter Sciences (CeNS) is being organised for a batch of 35 students of III year A/D/E and F section students on Saturday the 28th July 2018. This visit is at the invitation of the CeNS as part of their student interaction programme for UG students.

The following faculty members who handle the topic are accompanying them:
1. Ms. Prathibha, K.N.
2. Dr. Kavitha R.

The classes of the faculty have been adjusted and other departments informed about the students going for the visit.

The list of students and the invitation from CeNS is enclosed.

Kindly permit the faculty and students to attend this programme

Thanking you

Yours sincerely

[Signature]

[Stamp]
Poster Presentation on 15th September 2017-Physics department Dr. M K Raghavendra giving a listen to the presentation
Botany

Exhibition organised in the college

Plant collection trip to Savandurga, Ramanagara district for V semester on 1st November 2019
Hands-on experience of plant collection with proper herbarium techniques
Biotechnology

Visit to: Dairy Classic Ice-cream near Kanakapura, Karnataka
On 27th December 2018
No. of students-35
One day workshop on
"SIGNIFICANCE OF INTELLECTUAL PROPERTY RIGHTS AND INNOVATIONS FOR THE SCIENCE STREAM"

On February 25th, 2020 at 10:00 am Venue: MES College Conference Hall
Zoology

Visit organized to IIHR, Hesaraghatta, Bengaluru for III semester Life Science students in 2018
The visit was related to the topic ‘Pisciculture’
Zoology

World Animal Day in the year 2019

Inauguration of Add on course on Biostatistics in the year 2019
Final year BSc 2018 Activity –based learning on the topic- Genetic engineering
Teacher: Pankaj Kumar Choudhary

Participative learning

1. Seminar presentation (individual activity) by students was organized to explain histology topics. The students were given a time limit to prepare the content and present it individually in front of other students. The teacher was guiding them to proceed in a systematic fashion so that a comprehensive understanding of the topic could be achieved.
2. Activity-based learning session (group activity) was organized by the teacher in which the students were asked to do activities using paper, scissors, glue, etc., to understand the highly abstract topic of “genetic engineering.” The students were divided into 8 groups with 6 members in each group. The activity materials were prepared by the teacher and distributed to the groups. Instructions were given regarding conduct of the activity. At the end of session, the students were allowed to show the outcome of their activity and ask questions/doubts regarding the topic. The entire activity was conducted under the supervision of the teacher.
**Feedback from Students on Innovative Teaching Practices**

**Paper: II (Non-Chordata)**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parameters</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Explanation of topic related to activity</td>
<td>Excellent</td>
</tr>
<tr>
<td>2.</td>
<td>How useful was the practice in improving the understanding of the topic</td>
<td>Excellent</td>
</tr>
<tr>
<td>3.</td>
<td>Adequacy of clues for the conduct of activity</td>
<td>Excellent</td>
</tr>
<tr>
<td>4.</td>
<td>Do you feel that this methodology improves teacher-student interaction in the classroom?</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Any Suggestions:
• Industrial visit to KMF (BAMUL), dairy circle Bangalore, was organized for the III semester B.Sc students on 15th-16th September 2017. Faculty members of the department Prof. Nalini Bai G, Ms. Poornima. S, Ms. Jagruthi M, Ms. Ashwini. P and Mr. Pankaj Kumar Choudhary accompanied the students during the visits.
Industrial visit to Ramanagar for Sericulture study, for the II semester B.Sc students was organized on 14th March 2018. Faculty members of the department Mr. Anil G.B, Ms. Jagruthi. M and Mr. Pankaj Kumar Choudhary accompanied the students during the visit.
History
Maths – UG

Workshop on polyhedramodels

Chamarajeshwar of IV sem ‘A’ giving a lecture on “Fourier – The Mathematician”
A peek into Indian Mathematical Heritage – Bhavana Sutra of Bhramagupta
Maths - UG

Mathematical model competition
Psychology

A Experiential learning at the Auroville, Pondicherry on the topic Meditation – an Alternative Therapeutic Technique.
Psychology

Skit- even sem
2020- 4th sem
BA and B.Sc

Class Presentation 4th sem – even sem 2020

Group Discussion -6th sem BA and B.Sc- even sem 2020
<table>
<thead>
<tr>
<th>SL. No</th>
<th>Name of the Faculty</th>
<th>Subject/Class</th>
<th>Date</th>
<th>Signature of Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Sangeetha V</td>
<td>Movie Screening 'Still Alice'</td>
<td>13/11/17</td>
<td>Rajendra Nizam</td>
</tr>
<tr>
<td>17</td>
<td>Sangeetha V</td>
<td>I BA/BSc general psy.</td>
<td>14/11/17</td>
<td>Rajendra Nizam</td>
</tr>
<tr>
<td>18</td>
<td>Sangeetha V</td>
<td>I BA/BSc general psy.</td>
<td>20/11/17</td>
<td>Rajendra Nizam</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Course</td>
<td>Time</td>
<td>Activity</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>-----------</td>
<td>------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>11</td>
<td>Rupashri Murthy</td>
<td>II BA/BSc</td>
<td>10-11 am</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ameetha Sri Kumaar</td>
<td>II B.A.</td>
<td>2:30-4:30</td>
<td>Movie Screening</td>
</tr>
<tr>
<td></td>
<td>Charumathi Sridharan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rupashri N. Murthy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Charumathi Sridharan</td>
<td>II B.Sc '2'</td>
<td>9:10-11:10</td>
<td>Movie Screening</td>
</tr>
<tr>
<td></td>
<td>Sugantha V. Manasa Raman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Manasa Raman</td>
<td>III B.Sc '11'</td>
<td>9:10 to 11:00</td>
<td>Movie Screening</td>
</tr>
<tr>
<td>15</td>
<td>Manasa Raman</td>
<td>III BA/BSc</td>
<td>11:00 to 12:00</td>
<td>Job Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. Charumathi S.  B.A & B.Sc 07/02/2019 12-1 pm

18. Charumathi S. B.A & B.Sc 11/03/2019 4:30 - 5:30

19. Aneetha Sukumar (Social Psy) 20/03/2019 10:00 Am - 1:00 pm

20. Charumathi S. B.A & B.Sc 21/03/2019 12-1 pm

21. Charumathi S. B.A & B.Sc 06/04/2019 4:30 - 5:30

22. Meghna S. B.A & B.Sc 06/09/2019 1:30 - 2:30 B1 020

23. Charumathi S. B.A & B.Sc 07/09/2019 1:30 - 2:30
47. Manasa P  I  BA/BSc  General Psychology  26/12/2013

48. Charumathi Sridharan  In B.Sc 1 Movie Screening - "Still Alice"  27/1/2010
    Megha S. Rao

49. Charumathi Sridharan  In B.A & B.Sc Social Psych  07/03/20

50. Prerana Huli  In B.A & B.Sc only Social Psych popular  05/12/20

51. Manasa  In BSc.  Megha  Beautiful Mind Movie  01/03/20

52. Charumathi Sridharan  In B.A & B.Sc Social Psychology  09/03/20
Journalism

BSY seeks clarification from the chief minister

BSY seeks clarification from the chief minister, P. Rama Reddy, regarding the drought situation in the state. The CM has expressed concern over the lack of rainfall and the consequent water crisis in various districts. He has asked for immediate action to ensure water supply to the affected areas.

The situation in the state is critical, with several districts facing severe water shortage. The CM has directed the concerned departments to take immediate measures to alleviate the situation.

The government has also announced relief measures for the affected farmers. The CM has urged the central government to provide additional financial assistance to help the farmers cope with the crisis.

The CM has also urged the Centre to expedite the release of funds for the drought relief programme. He has said that the state is doing everything within its means to tackle the situation but additional support from the Centre is urgently needed.

The CM has asked for a meeting with the Centre to discuss the situation and seek additional support.

— Ramesh Jha

Deputy CM}

19th April 2023

M S College

Bangalore 560 003

MALLESWARAN
Journalism
MES DEGREE COLLEGE OF ARTS, COMMERCE & SCIENCE
MALLESWARAM, BENGALURU 560003

GUEST LECTURE
PRESENTED BY
The Department of Hindi
For
IVth semester BSc. Students on the Novel
"SUKHATA HUA TALAB"

By
Dr. Mrityunjay
(Dept. of Hindi; MES PU College)

Date
13/02/2019

Time
1:30 - 2:30 P.M.
BISHOP COTTON ACADEMY OF PROFESSIONAL MANAGEMENT
YELAHANKA NEW TOWN, BENGALURU – 560064
www.bcapm.org

Department of Hindi
Webinar on
"सिंहासन खाली है (नाटक)"

Dr. Vinay Kumar Yadav
Professor and Head of the Dept,
Dept of Hindi, Bishop Cottons Women’s Christian College, Bangalore
Member of Board of Examination & Board of Studies of prestigious
institutions
Joint Secretary, Hindi Teachers Association, Bangalore University
Member, Editorial Board, Sahitya Sadhak Manch

Sri Sushil Kumar Singh
Dramatist – Director
Former Dy Director, Doordarshan
Former Director,
Bhartendu Natya Academy, Lucknow

Registration
https://forms.gle/AxplEqdAyY8RubFe7

WhatsApp Link
https://chat.whatsapp.com/JuGkwEq4OSzBnFWEbjYY9y

Tuesday, 14 July, 2020,
11.45 a.m. to 01.30 p.m.

Chief Patron: Rt. Rev. Dr. P. K. Samuel
Chairman & Bishop, Karnataka Central Diocese

Patron: Prof. Sam Martin Christopher
Principal

Convener: Mrs. Rekha Singh
9035192465
CERTIFICATE OF PARTICIPATION

This is to certify that

Ms. Kunica Suraj, Student
M.E.S Degree College of Arts Commerce and Science

has participated in the National Level Webinar titled "सिहासन व्यक्ति है (नाटक)",
organised by Department of Hindi, on 14th July 2020.

Prof. Sam Martin Christopher
Principal

Mrs. Rekha Singh
Convenor & HoD, Hindi

---

CERTIFICATE OF PARTICIPATION

This is to certify that

Ms Nikita Sharma, Student
MES College Of Arts, Commerce And Science

has participated in the National Level Webinar titled "सिहासन व्यक्ति है (नाटक)",
organised by Department of Hindi, on 14th July 2020.

Prof. Sam Martin Christopher
Principal

Mrs. Rekha Singh
Convenor & HoD, Hindi
CERTIFICATE OF PARTICIPATION

This is to certify that

Ms. Neetha P, Student
MES Degree college of Arts, Commerce and Science

has participated in the National Level Webinar titled "सिंहासन खाली है (नाटक)!",
organised by Department of Hindi, on 14th July 2020.

Prof. Sam Martin Christopher
Principal

Mrs. Rekha Singh
Convener & HoD, Hindi

Certificate ID: SNTIFU-CE000048

---

CERTIFICATE OF PARTICIPATION

This is to certify that

Amulya P, Bsc
MES

has participated in the National Level Webinar titled "सिंहासन खाली है (नाटक)!",
organised by Department of Hindi, on 14th July 2020.

Prof. Sam Martin Christopher
Principal

Mrs. Rekha Singh
Convener & HoD, Hindi

Certificate ID: SNTIFU-CE000061
On 14th September 2019 25 students along with 4 Lecturers of BA, BSC and B.com visited the City Civil and Session Court on account of LOK ADALATH – “Free justice for all and coordinated the days event.”
On 8th February 2020, 10 students visited the city civil and session court on account of LOK ADALATH – “Free Justice For All” and actively co-ordinated in the court proceedings.
The department has taken the students of 3rd semester to the library on 22/10/19.

The books pertaining to their syllabus were introduced to them.

<table>
<thead>
<tr>
<th>Name of books</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunology - Kuby</td>
</tr>
<tr>
<td>A Text Book of Biotechnology - B.C. Dubey</td>
</tr>
<tr>
<td>Cell Biology - P.S. Verma</td>
</tr>
<tr>
<td>Environmental Biology - H.R. Singh</td>
</tr>
<tr>
<td>Botany - Indu Shukla</td>
</tr>
<tr>
<td>Genetics - B.D. Singh</td>
</tr>
<tr>
<td>Biotechnology - R.D. Singh</td>
</tr>
<tr>
<td>Immunology - David Malhotra</td>
</tr>
<tr>
<td>Sunita Mitta</td>
</tr>
</tbody>
</table>

Took in charge

[Signature]

Head of the Department

Department of Bio Technology

M.E.S. Degree College of Arts, Commerce & Science

Malleswaram, Bangalore - 560 003.
The department has taken the students at Semester 11 to the library on 23/10/19.

Books:
1. An Introduction to Biophysics and Biochemistry, Publications.
5. Biochemistry by Lehninger.

Books issued to:
- Anuj
- Shashikala
- Pradeep
- Kritika
- Bhavin
- Ravi
- Rohit
- Ravi
- Harsh
- Hiren

Date: 23/10/19

Head of the Department
Department of Bio Technology
MES Degree College of Arts, Commerce & Science
Malleswaram, Bangalore - 560 003.
### M.E.S. COLLEGE OF ARTS, COMMERCCE AND SCIENCE
### DEPARTMENT OF BIOLOGY

**VISIT TO LIBRARY**

The Department has taken the students of ___________ semester to the library on ____________.

To check the following sub-libraries were introduced to them.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIRSED ROHIT C.</td>
<td>KUNICA SWAPM HANS</td>
<td>LAVNANS</td>
<td>RAVINDRA</td>
<td>BANDHAVA LIT SEBHA</td>
<td>BHANUME</td>
<td>GIRDHAR T.</td>
<td>RAMGAON K.</td>
<td>CHOWDHURY I.</td>
<td>HARSHITHA BM</td>
<td>KARTHIK BHAT S.</td>
</tr>
</tbody>
</table>

**Secretary's Signature**

**Teacher's Incharge**

**Head of the Department**

---

**M.E.S. COLLEGE**

**Bangalore 560 028**
The department has taken the students of 3rd semester to the library on 24.10.19.

The books relating to their syllabus were introduced to them.

List of books:
1. Fundamentals of Biochemistry - Bh. L. Jain, Sunjay Jain, Manoj Jain
2. Biochemistry - V. Venk. Ver
4. Biochemistry - D. Subramania
5. Introduction to Biophysics - Macavity R. Rajeshwar

Endorsed by: [Signature]

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Roll No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mohan B.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mahadeva</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Babaji</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Naidu</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Chaupa Devi</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Dharani</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Anya</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Laxmi</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Mangala</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Manasa</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Rakhi</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Sudha</td>
<td></td>
</tr>
</tbody>
</table>

Head of the Department
Department of Bio Technology
MES Degree College of Arts, Commerce & Science
Malleswaram, Bangalore - 560 003
The department has taken the students of III semester to the library on 31-01-2019.

The books pertaining to their syllabus were introduced to them.

Names of books:
1) Biotechnology - Himalaya Publications
2) Biochemistry - P. Chand
3) Biophysics - Verma

LIBRARIAN

M.E.S. College of Arts, Commerce & Science
Malleswaram, Bangalore-560 003

Head of Department

Names of students:
1) Jyothi
2) Praveen
3) Suma
4) Shweta
5) Pooma
6) Rohini S
7) Ranjitha
8) Sakshita
9) Snehal
10) Lampa
11) Nitika
12) Anusha P.
13) Rahul Reddy
14) Praveen
15) Prathvi
16) Krishna
17) Satmetha
18) Manasa
19) Harjula
20) Rakhi
21) Laxitha
22) Vinkaksh
23) Manasa
24) Haretha
25) Nivetha
From,
Sujatha M
HOD, Dept of Biotechnology
MES College of Arts, Commerce and Science
Malleshwaram, Bangalore-03

To,
The Principal
MES College of Arts, Commerce and Science
Malleshwaram, Bangalore-03

Dear Sir,

Sub: Permission to send Final year students to attend one day workshop

Department of Nanoscience and Technology, Mount Carmel College, Bengaluru has organized one day workshop on "Fundamentals of Nanoscience and Technology on 20th Feb 2020. Kindly give the permission to send for the same.

Thanking you,

Sincerely,

Sujatha M
Head of the Department

Students List:

1. Geetha
2. Jahnani
3. Ashwini
4. Bhavya
5. Chaithra
6. Anulka
7. Kavya
8. Gowind Raj
9. Arun
10. Chandana
11. Deekshitha
12. Ashwini
13. Krishna Basad

Registration: Free.
From,
Karthik.G Shanbhag
II B.Sc., 'H' Section
Reg. no. 1SBGS85275
MES Degree College of Arts, Commerce and Science

DATE: 14th July, 2014

To,
The Principal
MES Degree College of Arts, Commerce and Science

Respected Madam,

Subject: Request to grant permission for not attending college.

I Karthik.G Shanbhag from II year B.Sc. 'H' Section request you to grant me the permission for not attending the college from 16th July, 2014 till 30th July, 2014 as I have been selected as Indian Academies Of Sciences Summer Research Fellow and will be doing a research project with Dr Natarajaseemivasan, Bharathidasan University, Thanjavur, Tamilnadu. I have also attached the call letter from IASc also. Therefore I request you to grant me the permission for not attending the college during this period.

Thank You

Yours faithfully,
Karthik.G Shanbhag

[Signature]

HOD - Chemistry

[Signature]

HOD - Biotechnology
Chemistry
Department
Library Register
10-8-2010  G. Venkata

30-9-2010  New college Chemistry

25-3-2010  Principles of Organic Chemistry

18-10-2010  Selected Topics in Inorganic Chemistry

27-11-2010  Physical Chemistry

9-2-2011  NSW College Chemistry

30-8-2009  G. Venkata

25-1-2010  G. Venkata

10-8-2010  G. Venkata

3-9-2010  G. Venkata

28-3-2010  G. Venkata

28-3-2010  G. Venkata

10-8-2010  G. Venkata

27-1-2011  G. Venkata

9-2-2011  G. Venkata

28-2-2011  G. Venkata

28-1-2011  G. Venkata

28-1-2011  G. Venkata
Mr Karthik G. Shrivastav
S/4FG-A, Block-I, Flat-2 Carga Black
5th Phase Yelahanka New Town
Bangalore 560 084

Dear Mr Shrivastav,

This has reference to your application LPS473-K for an IASc-INSAS-SAIF Summer Research Fellowship in 2017. We are happy to inform you that your application has been selected for the fellowship.

You are required to submit your marks in the form of a project report by your advisor and a work plan for the next two months during your summer internship. We will be verifying your marks and will inform you about the outcome of your application. You will be working with Professor K. Nageswaraswami, Indian Institute of Science, Bangalore (e-mail: nageswa@iisc.ernet.in).

We have tried our best to assign you to a guide who works in your area of interest. Where this is not possible, you will work with the assigned guide in a related area that will be determined by the guide, and you will be expected to work with the assigned guide in a related area that will be determined by the guide, and you will be expected to make any changes to the guide as required.

The Fellowship is subject to the following terms:

- The duration of the Fellowship is six weeks (36 days, including Sundays and General Holidays), and it is not to be extended. If you do not complete this requirement, you will not be paid the fellowship and the certificate that is usually issued on completion.
- You will be provided second-class sleeper class return airfare from Bengaluru to comments.
- If you are NOT an INSPIRE/DFP Fellowship holder, you will be paid a fellowship of Rs. 10,000/- per month towards your boarding, lodging, and travel expenses. Those who are in receipt of INSPIRE/DFP Fellowship will be covered by a separate arrangement, the details of which will be communicated later.
- If you are NOT an INSPIRE/DFP Fellowship holder, you will be paid a fellowship of Rs. 10,000/- per month towards your boarding, lodging, and travel expenses. Those who are in receipt of INSPIRE/DFP Fellowship will be covered by a separate arrangement, the details of which will be communicated later.
- As regards accommodation, please contact Professor Nageswaraswami as the Academy is not able to help you in this regard.

Please also go through carefully & comply with all the instructions given in the attached sheet.

You are advised to get in touch with Professor Nageswaraswami immediately to work out the exact period of your visit. In the meantime, please communicate with Mr. C.S. Ravi Kumar, Coordinator, Summer Research Fellowship Programme, for acceptance of this Fellowship. We would need a project outline from you upon your arrival, and a brief report of your work at the end of four weeks so that your Fellowship for the final month can be paid. After the receipt of the final report, we shall release the remaining amount due to you along with your travel expenses.

We urge you to convey your acceptance of this fellowship within 7 days by either online (through the system and password given at the bottom of the email) or by returning the Form of Acceptance signed by you. Even if you are not able to accept the fellowship, it should be communicated to the Academy immediately (both by email and in the Form of Acceptance) so that the fellowship can be awarded to another candidate in the waiting list.

With best wishes,

Yours sincerely,

K.L. Sebastian
Chairman, Joint Syrian Education Panel

[Signature]
Indian Academy of Sciences, Bengaluru
Indian National Academy of Sciences, New Delhi
The National Academy of Sciences India, Allahabad

SUMMER RESEARCH FELLOWSHIPS — 2017

Format for the final Report

Name of the candidate: KARTHIK, S. SHANBHAG
Application Regn no.: LF08754
Date of joining: 27-05-2017
Date of completion: 22-07-2017
Total no. of days worked: 97 days
Name of the guide: Dr. K. NATARAJASENIVASAN
Guide’s institution: BHARATHIDASAN UNIVERSITY
Project title: PREPARATION OF VACCINE AGAINST LEPTOSPIROSIS USING OUTER MEMBRANE PROTEINS OF LEPTOSPIRA

Address with post code to which the certificate could be sent:
SRM-A, BLOCK-1, FLAT-5, GANDA BLOCK, 5TH PHASE
VILAHAMMA NEW TOWN, BANGALORE - 560094
Email ID: kartiksrangar@gmail.com
Phone No: +91 - 8882110641

TA Form attached with final report
1. N.O. Please specify reason
2. YES

KVPY CONTINGENCY GRANT

Signature of the candidate: KARTHIK
Date: 27-07-2017

Signature of the guide: Dr. K. NATARAJASENIVASAN
Designation: Professor
Department: Microbiology

Address with post code to which the certificate could be sent:
SRM-A, BLOCK-1, FLAT-5, GANDA BLOCK, 5TH PHASE
VILAHAMMA NEW TOWN, BANGALORE - 560094
Email ID: kartiksrangar@gmail.com
Phone No: +91 - 8882110641

Note: Only one copy of the report should be submitted in the online page of the website by making sure one of the enclosed prints is pasted here.

Important Notes:
1. Only one copy of the report should be submitted in the online page of the website by making sure one of the enclosed prints is pasted here.

M.E.S. COLLEGE
MALLESWARAM
Bangalore
560 003
SUMMER RESEARCH FELLOWSHIP PROGRAMME
CERTIFICATE

This is to certify that Mr. Karthik S. Shankar worked on a
project entitled “Preparation of vaccine against leptospirosis using
outer membrane proteins of leptospira” during May-July 2017 as a
Summer Research Fellow under the supervision of
Professor K. Natrajaseenivasan, Bharathidasan University,
Tiruchirappalli. The Summer Research Fellowship Programme is
jointly sponsored by I.A.C. (Bengaluru), INSA (New Delhi) and
NASI (Allahabad).

Place: Bengaluru
Date: 20-06-2017

Chairman, Science Education Panel

K. J. Sebastian

M. E. S. COLLEGE
Bangalore
560 003
DEPARTMENT OF BIOTECHNOLOGY
PES University
100 Feet Ring Road, BSR III Stage, Bangalore-560085

Workshop on
"Recent advances in Drug development and Clinical research"

CERTIFICATE OF PARTICIPATION

THIS IS TO CERTIFY THAT MR./MS. ________ Venkanna S. P. ________ FROM
MES Degree College HAS PARTICIPATED IN THE WORKSHOP ON "RECENT
ADVANCES IN DRUG DEVELOPMENT AND CLINICAL RESEARCH" ORGANIZED BY
DEPARTMENT OF BIOTECHNOLOGY, PES UNIVERSITY IN ASSOCIATION WITH
SAMAHITHA RESEARCH SOLUTIONS, BANGALORE DURING AUGUST 08-10,2019.

Mr. Srivatsa
Managing Director, S R S

Dr. Seema Tharannum
BiSEP Coordinator, PESU

Dr. K N Shanti
Chairperson-BT, PESU

Dr. V Krishnamurthy
Registrar, PESU
MES DEGREE COLLEGE OF ARTS, COMMERCE AND SCIENCE
15th Cross, Malleswaram, Bangalore - 560003
Re-accredited with ‘A’ Grade by NAAC

DIAMOND JUBILEE YEAR

Certificate

This is to certify that Kavya Shanmyam
of I / II / III B.Sc., has participated in the One day Lecture Workshop titled
“Agricultural Biotechnology in India”, organized by the Life Science
departments (Botany, Zoology, Biotechnology), in association with Foundation
for Biotechnology Awareness and Education, Bangalore on 28th January 2017.

Principal
The Institute of Bioinformatics and Applied Biotechnology is pleased to certify that

Ms. Mythri S. V.
has participated in
'Hands-on Workshop on Basics of Next Generation Sequencing'
held from 24th to 28th September 2018 at IBAB

Prof. H. S. Subramanya
Director, IBAB
Permission to visit IISc.

Raghavendran Mahadevan <kmr1161@gmail.com>

PRO <pro@iisc.ac.in>

To: Raghavendran Mahadevan <kmr1161@gmail.com>

Cc: Naraiah R N <naraiahrn@iisc.ac.in>, "CHAIR, CENSE" <chair.cense@iisc.ac.in>, "OFFICE, CENSE" <office.cense@iisc.ac.in>, PRO <pro@iisc.ac.in>, Shivavari <shivar161@iisc.ac.in>

Mon, Feb 12, 2018 at 2:50 PM

Dear Sir,

You are welcome to visit Nanoscience Engineering Centre at IISc on 12/02/2018 at 11:00 am.

On arrival please collect the visitor's pass from Public Relations Office before proceeding to the Dept/centre.

With Regards

Shivarvai
Office Supervisor
Office of the Public Relations
Indian Institute of Science
Bangalore-12. mail id: pro@iisc.ac.in
Phone: 22932228 / 22932270

Raghavendran Mahadevan <kmr1161@gmail.com>

To: PRO <pro@iisc.ac.in>

Mon, Feb 12, 2018 at 3:12 PM

Dear Sir,

Thank you very much for the prompt response. What is the number of students and staff that can come? Kindly revert back.

Regards

[Quoted text redacted]
From
K.M. Raghavendran
Associate Professor in Physics
Department of Physics
M.E.S. Degree College of Arts, Commerce and Science
Malleswaram, Bangalore-560 003

To
The Public Relation Officer
Indian Institute Of Science
Bangalore-560 012

Respected Sir,

Subject: Visit of Students and Faculty to the Centre for Nano Science (CENS)

Namaste and Seasons greetings,

Thank you for your mail inviting our students to visit the Nanoscience Engineering Centre at IISc on Thursday the 15th February 2018 at 11 AM. I am herewith sending the list of students and faculty accompanying them. Kindly do the needful.

I would like to request you to kindly give us another slot to bring another batch of students to visit the centre.

Thanking you

yours truly

K.M. RAGHAVENDRAN
Associate Professor
Head of the Dept. of Physics
M.E.S. Degree College of Arts,
Commerce and Science
Malleswaram, Bangalore-560 003
To
The Principal
M.E.S. Degree College of Arts, Commerce and Science
Malleswaram, Bangalore-560 003
Respected Madam,

Sub: Visit to Nano Science Engineering Centre at I.I.Sc. Bangalore

The department of Physics has organised a visit to the nano Science Engineering centre at I.I.Sc. For III B.Sc A and D sections on 15th February 2018. The visit will last the whole day from 11 AM.

The list of the students (64) and the Faculty accompanying the students are enclosed for your reference.

I have also enclosed the letter from the PRO IISc inviting us for the visit.

I wish to inform you that a second batch of students of III B.Sc E and F sections will be taken at a later date when we receive communication from IISc.

1. Prof. S. Rajeshwari
2. Prof. D. Usharani.
3. Prof. H.S. Prakash
4. Ms. N. Kamalaiah
5. Dr. Manu S.
6. Mr. C. Raghuratha.

The List of Students (64) is also enclosed for your reference.

Yours sincerely

K.M. RAGHAVENDRAN
Associate Professor
Head of the Dept. of Physics
M.E.S. Degree College of Arts,
Commerce and Science
Malleswaram, Bangalore-140093
<table>
<thead>
<tr>
<th>Name</th>
<th>Roll No.</th>
<th>Class</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. R. U. J. V.</td>
<td>1360585001</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585402</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585404</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585405</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585406</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585407</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585408</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585409</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585410</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585411</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585412</td>
<td>R. K.</td>
<td>A</td>
</tr>
<tr>
<td>K. S.</td>
<td>1360585413</td>
<td>R. K.</td>
<td>A</td>
</tr>
</tbody>
</table>

**III BSc A Section**
Department of Biotechnology Industrial visit: 17/03/2016
Mandya Milk union
Department of Biotechnology Industrial visit: 21/3/2017
Wellison's neutraceuticals (spirulina)
Department of Biotechnology - Industrial visit: 27/12/2018
Green Dairy farm (cheese industry)
Department of Biotechnology  Industrial visit: 27/12/2018
Dhanavantri vana (medicinal plants)
Department of Kannada

Twelve weeks - weekend programme, Halagannada Odu, Vyakarana, Chandassu - Works Shop from 16.7.2016 to 01.10.2016 Students Attnded – 22 Dr. K.R Ganesh M.A., Ph.D, Rtd Professor was resource person
Department of Kannada

One day seminar on Nagesh Hegde Science literature by B.A, B.Sc, B.Com students. Paper presented by the students On 22.9.2016. Students Attended 150
Department of Kannada
Pu.Ti.Na - Kavi Mane darshana On 02.03.2017, Students - 65
`Nelada Belaku` Edited by Dr. Lokeshwarappa KB released on 25.09.2017 by Chiranjeevi Singh
Halegannada kavya vachana sparde on 28.08.2017 and Inchara programme on 30.08.2017. Inchara Chief Guest was Bavana, Cini artist. Participants – 150
Kavya Kammata on 12.09.2017, Resource person – Dr. Yallappa T. Poet., and Associate Professor at Govt First Grade College, K.R.Pura
One day Students Seminar on 10.07.2018, Students – 150
Webinar organised by the department on 01.02.2021 to 05.02.2021
Research and Project works by the students.
‘The Contribution of Science to the downfall of man is immense’. - 1st BSc E&F Students – year 2019
Photos of Seminars, group discussions by students - Psychology
Photos of field visit-Psychology
MES COLLEGE OF ARTS, COMMERCE AND SCIENCE
(NAAC Accredited 'A' Grade)
‘Vidyasagara’ M.P.L Sastry Road, 15th cross Malleswaram, Bengaluru- 560 003

DEPARTMENT OF PSYCHOLOGY

22/01/2020

To,
The Principal,
MES College of Arts, Commerce & Science,
Malleswaram,
Bangalore-560003.

Respected Madam,

Sub: Permission for educational field visit to Pondicherry

With reference to the above said subject, we wish to take the final year students of B.A & B.Sc Psychology to Pondicherry on 7th and 8th February 2020. We intend to visit Pondicherry University for an orientation towards Masters Course in the University, visit the Aurobindo Ashram and Auroville. The field visit will provide students with an insight into Masters Courses at Central University level; and a visit to the Ashram and Auroville will help them in understanding the benefits of Positive psychological experiences through Yoga, Mindfulness and Meditation.

In this regard, we seek your permission and remuneration assistance. Please find enclosed, the permission from the Head of the Department of Applied Psychology, Pondicherry University.

Thanking You.

Yours truly,

Aneetha Srikumar

Principal
M.E.S. College of Arts, Commerce & Science
Malleswaram, Bengaluru-560 003.
The Department of Psychology is organizing a field visit to Pondicherry for the final year students of B.A. Psychology on the 7th and 8th of February 2020. The following students are attending the field visit on the said dates. Kindly oblige.

1) Abhay Vedantham
2) Abhilash, R.G
3) Ashul Raj A
4) Annapurna, M.S
5) Baliga Sauryna Chetan
6) Deekshitha, R
7) Likitha, N
8) Parnika Hebbar
9) Pooja Pradeep
10) Sameeksha, K.P
11) Vathsala Iyer
12) Vaishnavi, S.B
13) Vishwas Yadav, D

List of Teachers Accompanying:
Mrs. Anceetha Srikanth
Ms. Charumathi Sridharan
Ms. Sreekrupa, M.P

[Signatures]
The Department of Psychology is organizing a field visit to Pondicherry for the final year students of B.Sc-Psychology on the 7th and 8th of February 2020. The following students are attending the field visit on the said dates. Kindly oblige.

1) Abhidha.H.P
2) Alisha Elizabeth Jacob
3) Amrutha.S
4) Ananya.N
5) B.R.Harshitha Bhoomika
6) Harini.N
7) Harshitha Vasudevan
8) Lavanya
9) Meghana.S
10) Radhika.B.A
11) Shivaranjani
12) Srinidhi.M.P
13) Surabhi.S
14) Sushma.S
15) Sumaya Bhanu
16) Syeda Rahmathunnissa
17) Triveni
18) Vignesh Sundaresan

List of Teachers Accompanying:
Ms. Manasa.P
Ms. Megha.S.Rao
Mrs. Prerana Huli
Certificates of student projects year-wise

M.E.S DEGREE COLLEGE OF ARTS, COMMERCE AND SCIENCE
15TH CROSS, MALLESHWARAM, BANGALORE – 560003

CERTIFICATE

This is to certify that Ms. Padma Sri Lekha of II semester B.Sc of M.E.S College of Arts, Commerce and Science has satisfactorily completed the project report entitled “SOCIAL MOTIVES AMONG SCHOOL TEACHERS” in partial fulfillment for the award of Bachelor of Science in Psychology during the year 2016.

MARKS AWARDED: VALUED

Signature of the guide: (Ms. Charumathi Sridharan)

Signature of Head of Department: (Mrs. Anitha Srikumar)

Signature of the Principal: M.E.S. Degree College of Arts, Commerce & Science
CERTIFICATE

This is to certify that Ms P.PADMA SRI LEKHA of IV semester B.Sc of M.E.S College of Arts, Commerce and Science has satisfactorily completed the project report entitled “PERCEIVING STRESS, RESILIENCE AND SUICIDAL IDEATION AMONG PRE UNIVERSITY STUDENTS ” in partial fulfillment for the award of bachelor of science in Psychology during the year 2017.

MARKS AWARDED

Signature of the guide:  
(Ms. CHARUMATHI SRIDHARAN)

Signature of Head of Department:  
(MRS. ANEETHA SRIKUMAR)

Signature of Principal:  
(Dr. D. LEELAVATHI)
M.E.S DEGREE COLLEGE OF ARTS, COMMERCE AND SCIENCE
15TH CROSS, MALLESHWARAM, BANGALORE – 560003

CERTIFICATE

This is to certify that Ms. P. PADMA SRI LEKHA of VI semester B.Sc (Paper-VII) of M.E.S College of Arts, Commerce and Science has satisfactorily completed the project report entitled “COMMUNICATION AND DIADIC ADJUSTMENT AMONG MARRIED COUPLES” in partial fulfillment for the award of Bachelor of Science in Psychology during the year 2018.

Signature of the guide:
(Ms. CHARUMATHI SKIDHARAN)

Signature of Head of Department:
(Mrs. ANEETHA SRIKUMAR)

Signature of Principal:
(Dr. D. LEELAVATHI)
M.E.S DEGREE COLLEGE OF ARTS, COMMERCE AND SCIENCE
15TH CROSS, MALLESHWARAM, BANGALORE – 560003

CERTIFICATE

This is to certify that Ms P.PADMA SRI LEKHA of VI semester (Paper VIII) B.Sc of M.E.S College of Arts, Commerce and Science has satisfactorily completed the project report entitled “RELATIONSHIP EFFICACY AND DIADIC ADJUSTMENT AMONG MARRIED COUPLES” in partial fulfillment for the award of Bachelor of Science in Psychology during the year 2018.

Signature of the guide:
(Ms. MANASA RAMAN)

Signature of Head of Department:
(Mrs. ANEETHA SRIKUMAR)

Signature of the Principal:
(Dr. D. LEELAVATHI)
The Department of English, in keeping with its objective of facilitating experiential learning, has the practice of screening movies based on the prescribed texts for optional English students. The screening of movies is followed by a discussion session, where students and teachers share their opinions, perspectives, and such interactions help the students to understand the texts better. They also shape their analytical and critical skills.

The films screened are as follows:
1. The Mother 1984 for III OE
2. Emma
3. Dance Like a Man for III OE
4. The Glass Menagerie for II OE.

R. V. Sheela
Visit to Sir Visvesvaraya Industrial and Technological Museum, Kasturba Road, Bengaluru by First year B.Sc. (PME) 2nd semester students 2016 – 2017.

Special mention of visit “BEL Hall of Electronics”.
Visit to Sir Visvesvaraya Industrial and Technological Museum, Kasturba Road, Bengaluru by First year B.Sc. (PME) 2nd semester students 2019.

**Special mention of visit**

“BEL Hall of Electronics”.
Visit to Sir Visvesvaraya Industrial and Technological Museum, Kasturba Road, Bengaluru by_____ year B.Sc. (PME) ___ semester students 2019.

Special mention of visit “Semiconductors, Fibre Optic Communication BEL Hall of Electronics”.
Participative Learning
This is to certify that Ramya S. Thanushree and Sathish Kumar has satisfactorily completed the 6th Semester Bachelor of Science Project titled “Karnataka State Tourism Management”, as a partial fulfillment of the requirements for the award of the Degree in Bachelor of Science (Computer Science), awarded by Bangalore University, during the academic year 2016 – 2017.

Mrs. Durgakala Sridhar (HOD) Mrs. Shilpi dham(Project Guide)

Valued By: Team Members:

Date Of Examination

CERTIFICATE

This is to certify that project titled “NSAP PENSION SCHEME” is Record of work done by CHANDANA M.N.,SHALINI V.,KINDRANI GHOSH (3rd year, VI semester B.Sc)” in fulfillment of the award of Degree of Bachelor of Science (Computer Science) of Bangalore University, during the academic year 2016-17.

Prof.Dr. LEEAVATHI
(Principal)

Mr. DURGAKALA SRIDHAR
(Head of the Department)

M.E.S. Degree College of Arts, Commerce & Science
Malleshwaram, Bengaluru - 560 011

TEAM MEMBERS
1) CHANDANA M.N(14BS85217)
2) KINDRANI GHOSH (14BS85218)
3) SHALINI VR (14BS85227)
This is to certify that Sri. Bhavya N S has satisfactorily completed the project entitled "Super Market Management System" in partial fulfillment for the award of Degree of VI semester BSc as per curriculum of M.E.S College of Arts, Commerce & Science during the year 2016-17.

Internal Guide: Mrs. Sai sudha
Department of Computer Science

Head of the Department: Prof. Durgakala Sridhar
Department of Computer Science

Dr. D. Leelavathi
Principal, M.E.S Degree College

Examiner:

M.E.S COLLEGE
BANGALORE-560003

VALUED

Date: [Date]

ONLINE SHOPPING CART

DEPARTMENT OF COMPUTER SCIENCE
M.E.S DEGREE COLLEGE OF ARTS, COMMERCE AND SCIENCE
MALLESHWARAM, BENGALURU-560003

This is to certify that project titled "ONLINE SHOPPING CART" is a record of work done by HARSITHA R, HITESH P, KAMALESH PATEL. St" year, VI semester B.Sc. in fulfilment the award of Degree of Bachelor of Science (Computer Science) of Bangalore University, during the academic year 2016-17.

Prof. D. LEELAVATHI
Principal

Ms. DURGAKALA SRIDHAR
(HEAD OF THE DEPARTMENT)
(COMPUTER SCIENCE)

TEAM MEMBERS

Ms. SAI SUDHA C
(PROJECT GUIDE)

1. HARSITHA R (14BGS85078)
2. HITESH P (14BGS85079)

1. KAMALESH PATEL (14BGS85080)

DATE OF EXAMINATION:

MES COLLEGE

BANGALORE-560003

VALUED

1)
2)

Date: [Date]
BANGALORE UNIVERSITY
M.E.S COLLEGE OF ARTS, COMMERCE AND SCIENCE
MALLESHWARAM, BANGALORE 56003
DEPARTMENT OF COMPUTER SCIENCE

CERTIFICATE

THIS IS TO CERTIFY THAT PROJECT TITLED "TRAVEL MANAGEMENT" IS
A RECORD OF WORK DONE BY

ASHWINI K(15BG0885069)
LATHIASREE N(15BG0885080)
SWARNAGOURI K(15BG0885076)

IN PARTIAL FULFILLMENT OF THE AWARD OF DEGREE OF BACHELOR
OF SCIENCE (COMPUTER SCIENCE) OF BANGALORE UNIVERSITY, DURING
ACADEMIC YEAR 2018.

Mrs. DURGAKALA SRIDHAR
(HEAD OF THE DEPARTMENT)

DATE OF EXAMINATION

VALUED BY

Mrs. SHILPI DHAM
(PROJECT GUIDE)

MES DEGREE COLLEGE OF ARTS COMMERCE
AND SCIENCE
MALLESHWARAM BANGALORE-56003

DEPARTMENT OF COMPUTER SCIENCE
A PROJECT ON "SANTULAM GROVES"

CERTIFICATE

This is to certify that the mini-project work entitled "SANTULAM GROVES" using
"HTML" has been successfully carried out by

APURVA VASIST,K.P(15BG0885966)
ASHWINI.N(15BG0885070)

(6th semester, BSc) in the fulfilment of requirement of the award of degree of BSc during the
academic semester April 2018.

Dr. D. BEELAVATHI
(Principal)

Mrs.Durgakala Sridhar
(Head of department,cs)

Mrs.Shilpi Dharm
(Project guide)

Valued by:
1. 
2. 

Date of examination:
MES/VI SEM/2018
DEPARTMENT OF COMPUTER SCIENCE
MES Degree College Of Arts, Commerce & Science, 15th Cross, Malleshwaram, Bangalore-560003

CERTIFICATE

This is to certify that the mini-project work entitled "ONLINE WEDDING PLANNER" has been successfully carried out by

1. SAI RAM V 15BG85096
2. PAVANA PUJARI 15BG85088
3. SUBRAMANYA KASHYAP G M 15BG85100

(6th semester, Bsc) in partial fulfillment for the award of VI B.Sc as per curriculum of M.E.S Degree College of Arts, Commerce & Science during the year 2017-2018.

Dr. D. Leeavathi
(Principal)

Mrs. Durgakala Sridhar
(HOD, Computer Science Dept.)

Mrs. Sai Sudha
(Project guide)

Valued by:
1. [Signature]
2. [Signature]
Date of examination 25/4/18

DEPARTMENT OF COMPUTER SCIENCE
MES Degree College Of Arts, Commerce & Science, 15th Cross, Malleshwaram, Bangalore-560003

CERTIFICATE

This is to certify that the mini-project work entitled "FARMERS BUDDY" has been successfully carried out by

1. PRIYANKA S 15BG85091
2. TANUSHA R 15BG85101
3. VENKATA LAVANYA V 15BG85102

(6th semester, Bsc) in partial fulfillment for the award of VI B.Sc as per curriculum of M.E.S Degree College of Arts, Commerce & Science during the year 2017-2018.

Dr. D. Leeavathi
(Principal)

Mrs. Durgakala Sridhar
(HOD, Computer Science Dept.)

Mrs. Sai Sudha
(Project guide)

Valued by:
1. [Signature]
2. [Signature]
Date of examination 25/4/18
DEPARTMENT OF COMPUTER SCIENCE
MES Degree College Of Arts, Commerce & Science,
15th Cross, Malleshwaram, Bangalore-560003

CERTIFICATE

This is to certify that the mini-project work entitled "VOTING SYSTEM" has been successfully carried out by

1. Samskruthi S. Patil (15BG085097)
2. Himanth V (15BG085295)
3. Yeshwanth G (15BG085104)

(6th semester, BSc) in partial fulfillment for the award of VI BSc as per curriculum of M.E.S Degree College of Arts, Commerce & Science during the year 2017-2018.

Dr. D. Leelavathi
(Principal)

Mrs. Durgakala Sridhar
(HOD, Computer Science Dept.)

Mrs. S. Sudha
(Project Guide)

Date of examination 25/04/18
This is to certify that the Project Work entitled “HOSPITAL MANAGEMENT SYSTEM” has been successfully carried out by DIKSHITHA V D (16BG585266), KARISHMA J (16BG585272) in partial fulfillment for the award of BSc Degree in Computer Science during the academic year 2018-2019.

Signature of the Guide:
(Mrs. Shilpi Dhami)
(Mrs. Swamadha C.)

Signature of the HOD:
Prof. Ramgode Shruti

Signature of the Principal:
Dr. L. R. K. Pavan

EXAMINERS:
1. 
2.
This is to certify that the project entitled “REAL ESTATE MANAGEMENT SYSTEM” has been successfully carried out by Suvarna S, Shruthi S and Sомалеха T B in partial fulfillment for the award of VI SEM BSc during the academic year 2018-2019.

Signature of HOD:
Dept. of Computer Science
M.E.S Degree College of Arts, Commerce & Science
Malleshwaram, Bangalore 560 003

Signature of Guide:

Signature of principal:

Valued By:

EXAMINERS:
CERTIFICATE

This is to certify that the mini-project work entitled “BLOOD BANK MANAGEMENT SYSTEM” using “VISUAL BASIC 6.0” has been successfully carried out by

PAVITHRA SD (16BG85282)
T PAVITHRA (16BG85287)
K KALAVATHI (16BG85273)

(6th semester, BSc) in the fulfillment of requirement of the award of degree of BSc during the academic semester April-2019

Dr. D. LEELAVATHI
(Principal)

Mrs. Durgabala Sridhar
(Hod of the department, c/o)

Dept. of Computer Science,
M.E.S. Degree College of Arts,
Commerce & Science
Malleshwaram, Bangalore-560 001

Valued by:
1.
2.

Date of examination:

EXAMINERS:
1.
2.

Mrs. Shilpi Dham
(Project guide)
MES COLLEGE OF ARTS, COMMERCE AND SCIENCE
MALLESHWARAM, BANGALORE-560093

DEPARTMENT OF COMPUTER SCIENCE
CERTIFICATE

This is to certify that the project entitled "BAY BRIDGE" using "VISUAL BASIC 6.0" has been successfully carried out by

RAMYA C R (17BGS853226)
SUMA H (17BGS85329)
VIDYASHREE G S (17BGS85332)

(6th semester BSc) in the fulfillment of requirement of the award of degree of BSc during academic semester April-2020.

Dr. T Janardhan TG
(Principal)

Mrs. Durgakala Sridhar
(Head of the department, CS)

Mrs. Shilpi Dham
(Project guide)

Mrs. Sai Sutha

This is to certify that the project entitled "VEHICLE MANAGEMENT SYSTEM" has been successfully carried out by

KUSHALA S(17BGS85082)

(6th semester, BSc) in the partial fulfillment of requirement of the award of degree of BSc during academic semester April-2020.

Dr. Janardhan TG
Principal

Mrs. Durgkala Sridhar
(Head of the department, CS)

Mrs. Sai Sutha
(Project guide)

EXAMINERS:

1. [Signature]
   Date of examination:

2. [Signature]

Valued by:
1.
2.

Date of examination:
MES COLLEGE OF ARTS COMMERCE AND SCIENCE
Malleshwaram, Bengaluru -560003

CERTIFICATE

This is to certify that the project entitled “ONLINE JOB PORTAL” has been successfully carried out by Kumaran Elumalai (17BGS85081), M Rohith (17BGS85083), Pavan Kumar V (17BGS85089) of MES college of Arts, Commerce and Science (6th semester, B.Sc.). We have successfully completed the project on the above mentioned topic. The project has been approved as it satisfies the academic requirement in respect of project work prescribed for the partial fulfillment for the award of degree in B.Sc., Computer Science during 2019-2020.

[Signatures and other information]

Dr. Jeevitha TG
Mrs. Durgakala Sridhar
Mrs. Saisudha

Name & Signature of Examiners with date

Date of examination:

EXAMINERS:
1.
2.
Principal’s Message

MES has been a place of innovations. This year also saw many innovative methods unfolding in various departments. The Computer Science Department has come up with this idea of E-Newsletter called “AAKRITE” for the department. This E-newsletter gives them a platform to share their ideas on the recent developments in the continuously changing computing technology field and thus keep them up to date. This in turn will help the students to think beyond curriculum.

This is the first issue. I extend my best wishes and compliments to the department for this innovation. I would like to see more and more participation of the students in future so that this becomes a continuing best practice of the department.

Head of the Department Message

Today we find that information technology has become overwhelmingly pervasive, while its parent, computing science, has become correspondingly hard to find. While many CS educational institutions have shifted focus...
Principal’s Message

‘News’ is often interpreted as information not previously known, noteworthy information about recent events, North, East, West & South and also the plural form of the word new. Letter is a written message from one person to another. This is a news letter from the Department of Computer Science. It is a very appropriate coincidence that this letter comes from the most relevant department in the present situation. The inevitability of the role of computers and internet is unquestionable. It is rightly said that an illiterate person is not he who cannot read and write, but he is a person who does not know computers. Thus, the importance of the news letter. I congratulate and wish the Department of Computer Science great success in this and all other endeavors.

Head of the Department Message

Hope this issue of our newsletter finds you healthy, following the principle of “Stay Home, Stay Safe”. During the unavoidable lockdown due to...
Newsletters released by Department of Zoology
The articles are contributed by the students of CBZ, BZPsy and CZBt programs
Dept of Statistics

The Department of Statistics conducted one day workshop on ‘R’ software for final year students on 15-02-2017.
Dept of Electronics
Certificate

This is to certify that Anitha C. V.

of MES Degree College of Arts, Commerce & Science secured Third place in Drisbya - Mathematical Modelling at Aarohan 2016, the Inter-collegiate PG Mathematics Fest organized by the Department of Mathematics, on November 16, 2016.

Head, Department of Mathematics

Dean of Science
PG dept Mathematics

Certificate

This is to certify that Mr./Ms. Lakshmi B.N. of M.E.S. college/university secured III place in Lecture Contest event during “Ad Infinitum 2017” held on 9th February 2017 at St. Joseph's College (Autonomous).

Co-Ordinator

HOD
Dept. of Math
CERTIFICATE

We are pleased to certify that

Smt / Sushree / Dr./Prof ............... LAKSHMI. B.N.

Participated in the 10th NATIONAL WOMEN’S SCIENCE CONGRESS and presented a paper / chaired a Session / Co-Chaired / Organising Committee Member.

We value the contributions to the success of 10th NATIONAL WOMEN’S SCIENCE CONGRESS.

Title of Paper: PROBABILITY OF THE OUTCOME OF ROLLING THREE SIX FACED IDENTICAL DISTINGUISHABLE DICE

Y.S. Gayathri
Dr. P. Gayathri
Executive Chairperson, Matru Vedike
Vice Chairperson, Matru Vedike, 10th NWSC

Dr. Kavitha B
Vice Chairperson, Matru Vedike
Vice Chairperson, 10th NWSC

Prof.
Jt. Secretary, Matru Vedike
Coordinator, 10th NWSC

Matru Vedike (Women Scientists Forum)
Swadeshi Vijana Andolana-Karnataka, “Swadeshi Sadan”
Bharati Brahma Vidya Niketan, Heggodu, Bangalore 560 070
CERTIFICATE

We are pleased to certify that

Smt / Sushree / Dr./Prof. Lakshmi B N

Participated in the 10th NATIONAL WOMEN'S SCIENCE CONGRESS and presented a paper / chaired a Session / Co-Chaired / Organising Committee Member

We value the contributions to the success of 10th NATIONAL WOMEN'S SCIENCE CONGRESS

Title of Paper: Shapes of triangle and pentagon numbers

Y. S. Gayathri
Executive Chairperson, Matri Vedika
Vice Chairperson, 10th NWSC

Dr. Kavitha B
Vice Chairperson, Matri Vedika
Vice Chairperson, 10th NWSC

Pauline M.N
Jt. Secretary, Matri Vedika
Coordinator, 10th NWSC

Matri Vedika (Women Scientists Forum)
Swadeshi Vijnana Andolan-Karnataka, "Swadeshi Sadan",
Guru Narayana Vidya Vihar, Hombal, Bengaluru-560 024
KARNATAKA SCIENCE AND TECHNOLOGY ACADEMY
Department of Science and Technology,
Govt. of Karnataka
&
ACHARYA INSTITUTE OF GRADUATE STUDIES
(Re-accredited by NAAC 'A' Grade and Affiliated to Bengaluru Central University)
Acharya Dr. Sayyidul Kathriban Road, Acharya P.O., Bengaluru - 560 197

Certificate of Appreciation

This is to certify that

Ms. Mrs. Anusha D

of MES Degree College secured III prize in the

Written Quiz competition held on 12 November 2018 in Special Lecture

Workshop jointly organized by Karnataka Science and Technology
Academy & Post Graduate Dept. of Mathematics, Acharya Institute of
Graduate Studies, Bengaluru. He/She is awarded a cash prize of

Rs. 4000/- by KSTA, Bangalore

Dr. H. Renukadevi
Director (Technical), KSTA

Dr. R. K. Srinivasan
Member Secretary, KSTA

Dr. G. Ramachandra
Vice Past President, KSTA

Bangalore
560 003

M. E. S. COLLEGE
MALLESWARAM
Vijaya College

Karnataka Science and Technology Academy (KSTA)

CERTIFICATE of RECOGNITION presented to

Ch/ Kim Kavya M Dev

M E S College for securing Second prize in Dr. G M Nagesha Memorial Lecture competition, held on February 23, 2014.

Dr. H Ramesh Govda
Principal

Prof. H S Balakrishna

Zaiha Nishanth Bano

Bangalore
560 023

MALLESWARAM
This is to certify that Mr./Ms. POORNIMA G. P. of MES DEGREE COLLEGE secured the SECOND position for the event CHITRANAM (POSTER MAKING) at Aarohan 2019, the Inter-Collegiate PG fest organised by the Department of Mathematics on 20th February, 2019.

[Signature]

DR. T.V JOSEPH
Head
Department of Mathematics

[Signature]

DR. SURENDRRA KULKARNI
Dean of Sciences
AAROHAN 2019
Certificate of Appreciation

This is to certify that Mr./Ms. TEJASHWINI T of
MES DEGREE COLLEGE secured the SECOND
position for the event CITRANAM (POSTER MAKING) at Aarohan 2019,
the Inter-Collegiate PG fest organised by the Department of Mathematics
on 20th February, 2019.

DR. T V JOSEPH
Head
Department of Mathematics

DR. SURENDRAKULKARNI
Dean of Sciences
AAROHAN 2019
Certificate of Appreciation

This is to certify that Mr./Ms. ROSELIN MARY J of MES DEGREE COLLEGE secured the SECOND position for the event CHITRANAM (POSTER MAKING) at Aarohan 2019, the Inter-Collegiate PG fest organised by the Department of Mathematics on 20th February, 2019.

DR. T.V JOSEPH
Head Department of Mathematics

DR. SURENDRA KULKARNI
Dean of Sciences
This is to certify that Ms./Ms. KAVYA M DEV of JES COLLEGE OF ARTS, COMMERCE AND SCIENCE secured the FIRST place for the event LECTURE CONTEST in AAROHAN 2020, the inter-collegiate PG fest organised by the Department of Mathematics on 19 February, 2020.

Dr. S. Pranesh
Co-ordinator

Dr. T. V. Joseph
Head, Department of Mathematics

Dr. George Thomas C
Dean of Sciences
BHS HIGHER EDUCATION SOCIETY
VIJAYA COLLEGE
R.V Road, Basavangudi, Bengaluru -560004

Vijnan
Celebrating National Science Day
Presents
Evolve 2020
INTER COLLEGIATE SCIENCE FEST
Certificate
This is to certify that Mr/Ms. Kanya...M.
of MES DEGREE...college has secured...II
prize in the event...Lecture...competition...conducted on 22/02/2020

Dr. S.B. Subhadra
Chair Person

Dr. R.S. Geetha
Convenor

H.S. Balakrishna
Principal
CERTIFICATE

We certify that the work presented in the report entitled DERIVATION AND SOLUTION OF SOME PARTIAL DIFFERENTIAL EQUATIONS, is the research work performed by Ms. Shashikala R., Ms. Mahinadri Rangan M.K., Ms. Ranjitha B.J. and Ms. Ramya M.N., and submitted for the partial fulfillment of the degree of Master of Science in Mathematics, Bangalore University, Bangalore under the guidance. We further certify that this report or part thereof has not previously formed the basis for any other degree or diploma.

Bangalore
Date: 05/07/2017

(Dr. GANGAMANI H.V.)
Supervisor
P.G. Department of Mathematics & Research Center in Applied Mathematics
M.E.S. College, Malleswaram
Bangalore - 560 003

(P.Pr. Achala L. NARGUND)
Supervisor
Professor and Head
P.G. Department of Mathematics & Research Center in Applied Mathematics
M.E.S. College, Malleswaram
Bangalore - 560 003
CERTIFICATE

We certify that the work presented in the report entitled A BRIEF STUDY OF ANALYTIC FUNCTIONS, SINGULARITIES, RESIDUE AND CONFORMAL MAPPING, embodies the results of bonafide research work carried out by Ms. Annapoorna S., Mr. Navneet Kumar B.V., Ms. Navyashree M.S., Ms. Poonam R. and Mr. Pradeep Kumar Yadav and submitted for the partial fulfillment of the degree of Master of Science in Mathematics, Bangalore University, Bangalore under our guidance. We further certify that this report or part thereof has not previously formed the basis for any other degree or diploma.

Bangalore
Date: 1/7/16

(Ms. PRAMOD S.)
Supervisor
Assistant Professor
P. G. Department of Mathematics & Research Center in Applied Mathematics
MES College, Mallewaram
Bangalore - 560 003

(Prof. ACHALA L. NARGUND)
Supervisor
Professor and Head
P. G. Department of Mathematics & Research Center in Applied Mathematics
MES College, Mallewaram
Bangalore - 560 003

(Dr. M. SATYAKRISHNA)
Principal
MES College, Mallewaram,
Bangalore - 560 003
CERTIFICATE

We certify that the work presented in the report entitled MATHMATICAL MODELING OF CRYPTOGRAPHY, CURVE FITTING, TRAFFIC FLOW AND ELECTRICAL NETWORK, embodies the results of bona fide research work carried out by Mr. Manoj Kumar N. and Mr. Mohan Kumar A. G. and submitted for the partial fulfillment of the degree of Master of Science in Mathematics, Bangalore University, Bangalore under our guidance. We further certify that this report or part thereof has not previously formed the basis for any other degree or diploma.

Bangalore
June 2017

(Mrs. NAGIKA K.J.)
Supervisor
Assistant Professor
P.G. Department of Mathematics &
Research Center in Applied Mathematics
M.S. College, Malleswaram
Bangalore - 560 003

(Mrs. SUGUNA V.S.)
Supervisor
Assistant Professor
P.G. Department of Mathematics &
Research Center in Applied Mathematics
M.S. College, Malleswaram
Bangalore - 560 003

(Prof. SIVA L. NARGEND)
Head & Coordinator
P.G. Department of Mathematics &
Research Center in Applied Mathematics
M.S. College, Malleswaram
Bangalore - 560 003

(Dr. B. HEGDE)
Principal
M.S. College College
Malleswaram
Bangalore - 560 003

M. S. COLLEGE
MALLESWARAM
Bangalore 560 003
CERTIFICATE

We certify that the work presented in the report entitled "NUMERICAL SOLUTION OF LINEAR AND NON-LINEAR SYSTEMS OF EQUATIONS," embodies the results of bonafide research work carried out by Ms. Patil Shankar Shrimant, Ms. Gajendrapriya V., Ms. Sowjanya K., and Ms. Lakshmi R. N. and submitted for the partial fulfillment of the degree of Master of Science in Mathematics, Bangalore University, Bengaluru under our guidance. We further certify that this report or part thereof has not previously formed the basis for any other degree or diploma.

Bengaluru
June 2018

(Dr. ASHA C. S.)
Supervisor
Assistant Professor
P.G. Department of Mathematics &
Research Center in Applied Mathematics
M.E.S. Degree College of
Arts, Commerce & Science
Malleswaram
Bengaluru - 560 003

(Pou. ACHATA L. NARGUND)
Supervisor
Head & Coordinator
P.G. Department of Mathematics &
Research Center in Applied Mathematics
M.E.S. Degree College of
Arts, Commerce & Science
Malleswaram
Bengaluru - 560 003

(Dr. D. LEELAVATHI)
Principal
M.E.S. Degree College of
Arts, Commerce & Science
Malleswaram
Bengaluru - 560 003
CERTIFICATE

We certify that the work presented in the report entitled APPLICATIONS OF MATRICES TO ECONOMICS, DEMOGRAPHY AND SOCIOLOGY embodies the results of honours research work carried out by Mrs. Vidya M. S., Ms. Neetha K. S. and Mr. Mathusudhan H., and submitted for the partial fulfilment of the degree of Master of Science in Mathematics, Bangalore University, Bengaluru under our guidance. We further certify that this report or part thereof has not previously formed the basis for any other degree or diploma.

Bengaluru
June 2018

(Mrs. SUGUNA M. S.)
Supervisor
Assistant Professor
P. G. Department of Mathematics & Research Center in Applied Mathematics
M.E.S. Degree College, Malleswaram
Bengaluru - 560 003

(Prior. ACHALA L. NARGUND)
Head & Coordinator
P. G. Department of Mathematics & Research Center in Applied Mathematics
M.E.S. Degree College of Arts, Commerce & Science, Malleswaram
Bengaluru - 560 003

(Dr. D. LEELAVATHI)
Principal
M.E.S. Degree College of Arts, Commerce & Science, Malleswaram
Bengaluru - 560 003
CERTIFICATE

We certify that the work presented in the report entitled MATHEMATICAL MODELING OF BLOOD FLOW AS NON-NEWTONIAN FLUID embodies the results of bonafide research work carried out by Mr. Mohan S., Ms. Chaithanya C. J. and Ms. Apoorva M. and submitted for the partial fulfillment of the degree of Master of Science in Mathematics, Bangalore University, Bengaluru under our guidance. We further certify that this report or part thereof has not previously formed the basis for any other degree or diploma.

Bengaluru
June 2019

(Psr. Achala L. Nargund)
Supervisor
Head & Coordinator
P. G. Department of Mathematics & Research Center in Applied Mathematics
M. E. S. Degree College, Malleshwaram
Bengaluru - 560 003

(Dr. D. Geeluvaathi)
Principal
M. E. S. Degree College
of Arts, Commerce and Science
Malleshwaram
Bengaluru - 560 003
Objectives of an Event

Parivarthan is an intra- Collegiate event that prepares the team of students. i.e the organizing team of the students are selected and trained in all the aspects to host the mega event CHAKRA VYUH which is an inter-collegiate event, basically the team of organizers in Parivarthan in a particular year will be the organizing team for Chakravyuh in the next year.
Objectives of an Event

To Identification of the topics and research, Preparation of exhibits-design, working models, Extensive writing, Skill development & Multi-disciplinary knowledge.

The main objective behind conducting this exhibition is to enhance and expose the communication presentation & managerial skills of our students and also is a platform to showcase commerce to all others from the non-commerce background, it was not merely an exhibition but also an inter class competition which had an overwhelming participation of around 280 students comprising of 52 exhibits with a team of 40 volunteers and 8 organizers’
This time the theme was CINEMATICS which took place on 9th & 10th of October 2017. It had events like Best manager, Business quiz, Finance, Human Resource, Marketing, and Treasure Hunt, all of which saw good and active participation from 15+ Colleges in Bangalore, amongst them KRISTU JAYANTHI COLLEGE bagged the overall trophy.

**VANIJYA VEDI 2017-2018 -THE COMMERCE EXHIBITION**

Objectives of an Event

Identification of the topics and research, Preparation of exhibits-design, working models, Extensive writing, Skill development & Multi-disciplinary knowledge.
Objectives of an Event

It displays Skills in marketing, Purchase management, stock management, accounting knowledge, Profit management and also finance. It also gives exposure in showcasing, co-ordination, display of items, salesmanship & advertising.

Which was initiated this year on 19th March 2018, where 23 teams consisting of 6 in a team put up the stalls and a Major share of profit earned out of each team, was contributed towards charity.
Hi
Here is a problem set and important questions for Astrophysics for the ensuing University examination. Interested students may collect the solutions for the problem set from me.

Attachments

problems_Astrophysics.pdf