

St. Joseph's Degree & PG College

**Department of Computer Science
Academic Report
(2011 - '12)**

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A. FACULTY DEVELOPMENT PROGRAMMES

i. Workshops Attended

ii. In-House Faculty Development Programme

i) Workshops Attended

1. WORKSHOP ON ICT (MOODLE Tool)

Date: 08/03/2012

Venue: Computer Training Lab, Academic Staff College, Hyderabad Central University.

Resource Person: Dr. Srinivas – IT Operations, New Delhi.

Organized by: Academic Staff College, Hyderabad Central University.

Participants: Mr. Ramesh, Mr. Joseph Rajakumar, Mr. M L Narsimha Rao, Mrs. Kiran Jyothi, Mrs. Chandana, Mr. Satyanarayana, Mr. Anil Moora.

MOODLE – Modular Object Oriented Dynamic Learning Environment is open source software used for effective information dissemination. A hand on experience was given on this tool.

- This tool is used to facilitate teaching and learning process.
- Used for better administration and communication.

2. Workshop on Ripple - “Every idea creates ripples”

Date: 21/10/2011 & 22/10/2011

Venue: DLF building, Gachibowli, Hyderabad.

Faculty Attended: Mr.A. Inna Reddy, Mrs. M.Kiran Jyothi and Mr.Joseph Vidyasagar

Resource person: 1. Rohit Eustachius, Sr.Executive, HR

2. Rahul Patti, AVP & Head outreach Council, Hyd.

Organized by: Cognizant, Gachibowli, Hyderabad.

Topics covered:

Industry Awareness

- To enhance employability, a student should be aware of Industry needs and the skills required for satisfying those needs.
- The faculties need to adapt to the teaching-learning process that caters to the needs of today’s student.

- The faculty should make student realize the importance of virtues like dynamism and adaptability.
- Emphasized on SEEK(Skills, Education, Experience and Knowledge)

Soft Skills

- Soft skills are essential skills that need to be possessed by the student/employee to be successful at his workplace.
- Good communication skills, Business etiquettes, Inter-personal skills etc are essential.
- The importance of Group discussion, Time Management & Assertiveness is emphasized.
- Do's and Don'ts in the interview.

Project Management Aspects

- Functional requirements
- Tools
- Project implementation
- Testing

Key IT Challenges

- Complex Business Process
- Good Communication Skills
- Interview Etiquettes
- Interpersonal Skills

3. Workshop on FOSS (Free / Open Source software)

Date: 18-06-2011

Venue: Quality Inn, Nampally, Hyderabad.

Faculty Attended: Mrs. T.Esther Ratna

Organized by: CDAC (Centre for development of Advanced Computing) and CSI (Computer Society of India)

Topics Covered:

1) FOSS (Free / Open Source software) trends and Advantages

FOSS are programs whose license gives the freedom to run the programs for any purpose ie to study, modify the programs and to redistribute copies of either the original or modified program without having to pay royalties to previous developers

2) Indian Operating System

BOSS (Bharat Operating System Solutions) GNU/Linux distribution developed by C-DAC (Centre for Development of Advanced Computing) derived from Debian for enhancing the use of Free/ Open Source Software throughout India. The Beta Release of BOSS GNU/Linux Version 4.0 is coupled with GNOME Desktop Environment with wide Indian language support & packages, relevant for use in the Government domain

3) Overview and Features of Cloud Computing

Cloud computing provides the facility to access shared resources and common infrastructure, offering services on demand over the network to perform operations that meet changing business needs. The location of physical resources and devices being accessed are typically not known to the end user. It also provides facilities for users to develop, deploy and manage their applications 'on the cloud', which entails virtualization of resources that maintains and manages itself.

ii. In-House Faculty Development Programme

WORKSHOP ON SPSS

Date: 09/01/2012 and 10/01/2012

Venue: MCA Lab

Resource Person: Mr. P. Bhaskar Reddy, Lecturer, Dept. of Statistics.

Organized by: Department of Computer Science

Participants: Faculty of St.Joseph's Degree & PG College

Day-1:

SPSS is a computer program used for Data mining, text analytics and statistical analysis.

Discussed Data Editor, Syntax Editor, Output Editor and Script Window by which the following operations can be performed

- For Opening existing SPSS data file or to Import other files like Excel, Access, SAS, etc., and also for exporting SPSS data files into other files.
- For editing the SPSS files
- For Sorting, merging, splitting data present in SPSS files.
- For transformation of data value represented into one unit into another unit.

Day-2:

Discussed the following topics

- How to enter Questionnaire into SPSS software.
- Analysis of Questionnaire
- Presenting the data in Frequency Tables and graphs.
- Analysis of data present in frequency tables.
- Demonstrated the above using a Case Study.

B. STUDENT SUPPORT SERVICES

i) Orientation Programme

STUDENT ORIENTATION PROGRAMME FOR I YEAR MCA STUDENTS

A formal orientation for MCA and MBA students was conducted on 15th November 2011. Rev. Fr. Dr. V. K. Swamy, Principal presented about the college, its rules, campus culture, professionalism and spoke on the life skills, which a student has to develop in due course of their study for a successful career. Prof. K. Malla Reddy, Director, spoke on soft skills and emphasized its need. The resource person for the day was **Dr. B. V. Pattabhiram**, renowned Psychologist and HRD trainer. He emphasized on the significance of soft skills to sustain oneself and achieve growth in this competitive world.

ii) Guest lecturers / Seminars organized

1. Guest lecture on 'Design and Analysis of Algorithms'

Resource Person : **Mr. M. Varaprasad Rao**,
Assistant Professor, Dept. of Computer Science.
Matrusri Institute of PG Studies,
Saidabad, Hyderabad.

Participants : II MCA Students

Date : 14.1.12, 17.1.12 – 19.1.12

Time : 4.30 – 7.00 PM

Coordinator : Mrs.A.Bakiya Lakshmi

Topics Covered :

- **Optimal Binary Search Trees (14.1.12)**

Given a set of identifiers, binary search tree organization has to be created. For the same identifier we will have different binary search trees with different performance characteristics. An example problem is taken and solved.

- **Dynamic Programming - 0/1 Knapsack, Travelling Sales Person (17.1.12)**

Dynamic programming is an algorithm design method that can be used when the solution to a problem can be viewed as the result of a sequence of decisions. 0/1 Knapsack and Travelling Sales Person example problems are taken and solved by Dynamic Programming method.

- **Backtracking - 0/1 Knapsack , Sum of subsets (18.1.12)**

Many problems which deal with searching for a set of solutions or which ask for an optimal solution satisfying some constraints can be solved by using the backtracking formulation. Example problems of 0/1 Knapsack & Sum of subsets are taken and solved using the method of Backtracking.

- **Branch and Bound - 0/1 Knapsack, Travelling Sales Person(19.1.12)**

The term Branch and bound refers to all state space search methods in which all children of the E node are generated before any other live node can become the E node. Example problem of 0/1 Knapsack, Travelling Sales Person are taken and solved using Branch and Bound Techniques.

2. Seminar on Projects

Organized By : IBM
Participants : MCA Students
Date : 20/12/2011

A seminar was conducted by IBM professionals on Annual Nation Wide software development competition held for MCA students. About 60 students registered to participate in the competitions.

3. Guest Lecture on 'JAVA'

Resource Person : Mr. Kameshwara Rao,Orbit,Hyd
Participants : B.Sc II year Students
Date : 20/12/2011

Topics Covered:

Advanced Java Programming Concepts

1. Threads

1. Java Thread Model
2. Creating and Running Threads
3. Manipulating Thread State
4. Thread Synchronization
5. Volatile Fields vs. Synchronized Methods
6. wait and notify
7. join and sleep

2. Reflection

1. Uses for Meta-Data
2. The Reflection API
3. The Class<T> Class
4. The java.lang.reflect Package
5. Reading Type Information
6. Navigating Inheritance Trees

4. Guest Lecture on “Data Mining & Clustering”

Resource Person :Dr.Suverchala,HoD , Dept. of Computer Science,
Badruka College, Hyderabad.
Participants : MCA III year Students
Date : 23rd June 2011

Topics Covered

Data Mining

- Data mining is a process of analyzing data from different perspectives and summarizing it into useful information.It is a process that allows users to understand the substance of relationships between data.
- It reveals patterns and trends that are hidden among the data.
- Data mining systems can be classified according to the kinds of databases mined, the kinds of knowledge mined, the techniques used or the applications.
- Three important components of data mining systems are

- Databases,
- Data mining Engine,
- Pattern Evaluation Modules.

Cluster Analysis

- Clustering is a method in which we make cluster of objects that are somehow similar in characteristics.
- In database management, data clustering is a technique in which, the information that is logically similar is physically stored together.
- In order to increase the efficiency of search and the retrieval in database management, the number of disk accesses is to be minimized.
- In clustering, since the objects of similar properties are placed in one class of objects, a single access to the disk can retrieve the entire class.
- Clustering is ultimately a process of reducing a mountain of data to manageable piles.

iii) Workshops conducted

1. Hardware, Networking & Career Guidance

Date: 16th Jul 2011

Resource person: Team from JetKing, Ameerpet, Hyderabad.

Participants: BSc III Year students

Topics:

- Basics of hardware components of computer
- Networking courses
- Cisco CCNA certification
- Red hat Linux training
- Career opportunities in the field of Networking

2. A workshop on "Business Etiquettes"

Date: 10th Jun 2011

Organized by: Deloitte, Hyderabad.

Participants: MCA I Year students

Topics covered:

- The employees of Deloitte organized a workshop which covered the topics like
 - Business Etiquette
 - Do's & Don'ts of an Employee in an organization.
- The issues were demonstrated using Role-plays.
- The students were encouraged and appreciated for their participation in the role-plays.

3. Workshop on "Interpersonal Skills & Brand U"

Date: 10th Jun 2011

Organized by: Deloitte, Hyderabad.

Participants: MCA II Year students

Topics covered:

- Interpersonal skills
- Resume writing
- Time management
- Brand U
- How to face HR Interviews

iv) Certificate Courses**Basic Hardware Technology**

Objective: This course will give students who aspire for innovation and self-employability through a broad overview of computer hardware, information about System Boards and trouble shooting of basic hardware components.

Commencement of Course: 15th Feb 2012 @ 1:30 pm

Duration: 2hrs per day (1hr theory + 1hr practical's)

No. of hours: 45 Hours

Coordinator: M. Joseph Rajakumar

Resource persons: Mr. Pavan, Sys admin

Mr. Bernard, Electrician

The student will acquire knowledge in the following concepts:

- Concepts of Hardware
- Basic functions of Hardware
- Hardware Trouble shooting
- Building your own PC
- An everyday confidence skill set

At the end of the course, students will be equipped with to handle the following tasks

- Trouble shooting of mobile phone
- Preparing Electronic Calling Bell
- Creating Spike buster adapter
- Voltage Tester
- Trouble Shooting of domestic appliances

v). Computer Club Activities

To enhance & hone the skills of the student, the department conducts the following activities through Computer Clubs, Power bytes For UG & Techno Consortium for PG.

Following are the events conducted by the computer club

- Paper presentation
 - Quiz
 - Brain teasers
 - Web harvest
 - Group Discussion
 - Technology Identifiers
- A **Computer Quiz** based on all current technologies & trends conducted as a part of “Computer Club Activities” to make the students updated with all the technological knowledge.

- A **Group Discussion (GD)** is conducted on the topic “The Influence of Western Culture in India” dated on 05/05/2012.
- An interactive demo session is conducted on “**making online projects using Web Programming and development of a small web application (group-wise)**” within the classroom environment as a part of the computer club activities, in order to make the students develop a lively, online and real-world working application.

vi) Pre - Placement Activities

- A team from Delloitte celebrated the impact day in the campus with MCA II & I Year students on 30 April, 2012. And as part of the celebrations, a workshop was organized to give inputs on
 - a) Resume Writing
 - b) Time Management Skills
 - c) Interpersonal Skills
 - d) Team Building Skills
- A guest lecturer on ‘Industry awareness & Soft skills’ by Mrs.M.Kiran Jyothi, Associate Professor, CS,St.Joseph’s Degree & Pg College for BSC III Year students on 5th Nov 2011 which highlighted the importance of Industry awareness ,Soft skills ,Time Management, etc.
- A Seminar on “Testing Concepts” by J.Srinivas Reddy, Reliance Global Services for MCA I Year students on 4th June, 2011 which highlighted the Career Opportunities in the field of Testing and prerequisite for placement.
- Through Computer Clubs the following pre-placement activities are conducted
 - a) Mock Interviews
 - b) Group Discussions
 - c) Aptitude and reasoning test
 - d) Seminars
 - e) Mini projects
 - f) Soft skills training
 - g) Debugging & Programming test

vii) Students Achievement

S.No	Name of the Students	Class	Name of the Organizing Institution	Description
1	1)P. Ashok 2)Sumit Karketta	MCA III Year	IBM Projects	Participated in TGMC (The Great Mind Challenge)
2	P. Ashok	MCA III Year	St. Joseph's Degree & PG College	Developed a web based application for Online registration for Josephiesta and Saggraha '11.

viii) Joseph's Software Development Cell (JSDC)

Joseph's Software Development Cell fosters employability among the students, giving them an opportune moment to transform knowledge to skills. To design and develop software products and render Information and Communication Technology (ICT) services to the clients. Development cell is aimed at providing hands-on experience of the software development and networking to the students. Every project that comes in works under two constraints namely Time and Quality, therefore we have experienced staff members playing the role of **team lead** in guiding the **team of students** in designing and developing the solution. The doors of JSDC are open to all the students of Computer Science but then JSDC welcomes students with aptitude and attitude for the work in profession.

The JSDC has rendered the following services

- 1.Feedback System** was developed and administered by Mr. Inna Reddy, Associate Professor. This system was used for performance analysis of the faculty for ensuring the quality.
- 2. Online Registration Application** for events **Saggraha-11** and **Josephiesta** was developed by Mr. Ashok of MCA III Year. This software helped the students of different colleges to register and participate in various events.

ix) IT & Management Meet -Saggraha -11

*Re-live your dreams, Re-live your hopes,
Prepare for life cause there is only one thing that will take you to the heights 'TALENT'
That's SAGGRAHA, the CELEBRATION of talents!*

Saggraha in Sanskrit means to gather or collect. Saggraha – 2011 was indeed a gathering of intellectuals with loads of talent waiting to be unleashed. This IT & Management meet was organized to bring an amalgamation of future managers and software professionals under one roof.

The event was inaugurated by Dr. Jaya Prakash Narayana, MLA (IAS), who spoke about the use of technology in today's world and its applications in all walks of life. On the other hand he also emphasized on the importance of commitment. Rev. Fr. Dr. V. K. Swamy, Principal of the college gave the opening remarks.

Since the day was dedicated to celebrate the talents, various IT & Management events were organized in an open forum irrespective of the student platform, and there was an applaud able participation. The students were given a choice of registering online or on the spot. Over 700+ students from about 60 colleges got registered for the event. Over 150 students participated in IT events.

The events organized by the department of Computer science are

- Paper Presentation
- Picture Perfect
- What do you C??
- JAM
- Mantle the Keyboard

x) Josephiesta

Josephiesta 2011, the two day (12th -13th Dec.) fest at college broke new grounds with an overwhelming participation of over 3000 students from 80 colleges in 37 events of every

kind. The fest struck a high-note of infotainment (information & entertainment) that was best described by the Hindu Newspaper, which states, "Josephiesta 2011 - the fest of St. Joseph's Degree & PG College was a felicitous mix of fun and entertainment and it showcased the students' managerial skills too". The continuous encouragement of the Principal Rev. Fr. Dr. V. K. Swamy, Rev. Fr. Sunder Reddy, Vice Principal and the teamwork of the faculty helped the students to realize their dream.

The events organized by the department of Computer science are

- Cast "UR" Web
- Surf Ur Knowledge
- Click "N" Create

xi) SASMITHA - Social Service Activities

Date: 14/11/2011

Venue: Care and Love Orphanage, Jagadhgiri Gutta

Participants: MCA III Year Students of St. Joseph's Degree & PG College

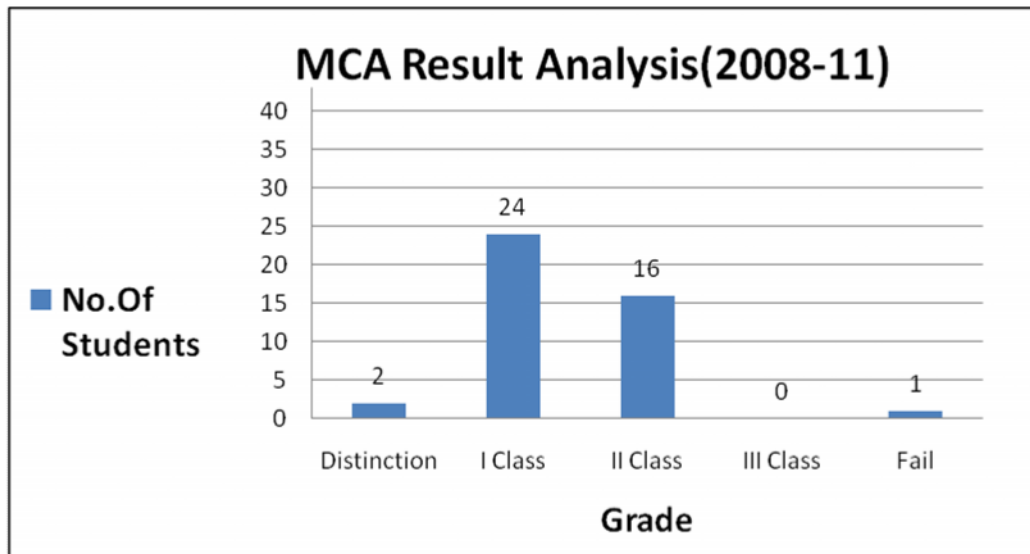
With an intension to invoke social concern among the students the Department of Computer Science organized one day programme on 14th Nov, 2011 at "Care and Love" an orphanage in Jagadhgiri Gutta on the occasion of Children's day. The students engaged the children with games and fun activities. Many competitions were organized and the winners were rewarded. They donated rice bags and other eatable.

C. RESULT ANALYSIS

Pass Percentage: 97.67%

Result Analysis of MCA 2008-11 batch

Result	Distinction	I Class	II Class	III Class	Fail	Total
No. of Students	2	24	16	0	1	43
Percentage	4.65%	55.81%	37.21%	0	2.33%	100%



D. DEPARTMENT CONTRIBUTION TO THE INSTITUTION

- Website maintenance by Mrs. T. Esther Ratna, Mrs.Kiran Jyothi & Madhuri Paul
- Student Feedback System by Mrs.Kiran Jyothi , Mr.A. Inna Reddy & Mrs. Bakiya Lakshmi
- College Automation Ssystem by Mr. Joseph Rajakumar & Mrs. Chandana