

HINDI MAHAVIDYALAYA

(AUTONOMOUS & NAAC RE-ACCREDITED)

(Affiliated to Osmania University)

Nallakunta, Hyderabad-44



B.Sc. I YEAR SEMESTER I / II

DEPARTMENT OF COMPUTER SCIENCE

2017-2018

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
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BOARD OF STUDIES
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Head – Department of Computer Science
Hindi Mahavidyalaya
Nallakunta, Hyderabad.

University Nominee

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Ex-Officio Member – BOS
Department of Computer Science
Osmania University, Hyderabad

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2. Mrs. B. Ramani
Subject Expert
Andhra Mahila Sabha Arts and Science College
Osmania University, Hyderabad
3. Shri N. Srikanth
Industry Expert
Tech Mahindra, Hyderabad

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Department of Computer Science
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HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD

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BOARD OF STUDIES

DEPARTMENT OF COMPUTER SCIENCE

COMPOSITION OF THE BOARD OF STUDIES IN AN AUTONOMOUS COLLEGE

I. Composition : Department of Computer Science

1. Head of the department concerned (Chairperson)

Shri Subash Chandra Badola-Department of Computer Science

2. The entire faculty of each specialization

Shri Subash Chandra Badola

3. One expert to be nominated by the vice-chancellor from a panel if six recommended by the College Principal


1. Dr. C. Goverdhan Ex-Officio Member-BOS. Department of Computer Science

4. Three Experts in the subject from outside the college to be nominated by the Academic Council

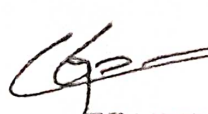
1. Prof. M. V. Ramana Murthy, Chairperson, Dept of Maths


2. Mrs. B. Ramani, Subject Expert – Department of Computer Science.

3. Shri N.Srikanth, Industry Expert


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Department of Computer Science
Hindi Mahavidyalaya
Nallakunta & AAC (REACCREDITED)

**HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)**

Department of Computer Science

Academic Year – 2017-18




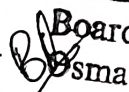
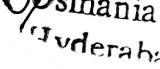
Board of Studies Meeting on 29.7.2017 at 11.00 AM

Agenda

- 2.1 The chairperson can update the activities since last meeting including a review of semester examination results.
- 2.2 Preparation of Scheme of instruction and Evaluation
- 2.3 Revision of existing courses/syllabus.
- 2.4 Panel of Paper Setters and valuers for the existing Year 2017-2018
- 2.5 Any other Matter

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DEPARTMENT OF COMPUTER SCIENCE
BOARD OF STUDIES
Academic Year – 2017-18
Minutes of BOS Meeting

BOS meeting of the Department of Computer Science was held on, 29th July 2017 at 10:30 A.M
The following members were present

Dr. C. Goverdhan	-	Ex-officio Member	 CHAIRMAN
Shri Subhash Chandra Badola	-	Chairman	 Board of Studies in Computer Science Dept. of Mathematics Osmania University,
Prof. Shri M.V. Ramana Murty	-	Member	 CHAIRMAN,
Mrs. B. Ramani	-	Member	 Board of Studies in Mathematics Osmania University,
Shri N. Srikanth	-	Member	 Hyderabad, 500007

2.1 Welcome address by the chair

The chair welcomed the University Nominee, Ex-officio Member BOS, O.U Department of Computer Science and Members of B.O.S.


2.2 Details of choice based credit system.

Members were informed that TSCHE has referred that from the academic year 2016-17 autonomous institutions have to follow CBCS i.e. From the Academic Year 2016-17 Osmania University has instructed all the Degree colleges including Autonomous Degree colleges to follow CBCS under which after passing the exam student will get the Grade in the Final Result. 4 Credits are given for theory paper and 1 credit is given for practical in each semester.

2.3 Discussion and Distribution of Common Core Syllabus.

- i. Members were informed by the chair that Department of Computer Science, Hindi Mahavidyalaya is following common core syllabus prescribed by Osmania University for B.Sc I Year for Semester I and II.
- ii. We are adopting Osmania University same syllabus of each Semester as it is with minor changes in theory papers of Semester I and II.

Syllabus copy for both the semesters is enclosed.
Syllabus was approved by the Members of BOS.


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2.4 Marks allotted for Internal and End Semester exams.

1. Internal assessment is of 20 marks. (15M for Internal + 5 M for assignment).In each Semester two internal assessment of 15 Marks will be conducted and an average of both the internal assessments will be added in the marks of Theory exam.
2. Theory Question paper is of 80 marks.
3. Total allotted marks are 100.

The distribution of marks was approved by the Members of BOS.

2.5 Discussion on Pattern and Model Paper of Semester exam and Model Paper of Internal Exam

1. It was informed by the department that in each Semester Two Internal exams will be conducted for 15 marks. The internal assessment will have three sections.
Section – A 10 Multiple choice questions each carries $\frac{1}{2}$ marks ($10 \times \frac{1}{2} = 5M$),
Section – B 10 Fill in the blanks each carries $\frac{1}{2}$ marks ($10 \times \frac{1}{2} = 5M$) and
Section – C 5 short notes each 1mark ($5 \times 1 = 5$)
Average of marks of these two internal exams will be taken. 5 marks will be allotted for assignment.
 2. Semester exam will be conducted as per the Almanac which will be provided by the exam branch. Internal exam duration will be 30Mts and Semester exam duration will be of 3 hrs.
 3. Model Question paper for Semester III and Semester IV was discussed. Theory paper for each Semester will have 2 sections.
 - i) Section A contains 8 short Questions. The student has to answer four questions. Each question carries 5 Marks ($4 \times 5 = 20$ Marks)
 - ii) Section B contains 4 Essay type Questions with internal choice. Each question carries 15 Marks ($4 \times 15 = 60$ Marks)
- Pattern of Model Theory Question Papers for DSC Paper I and Paper II are enclosed.
 - Pattern of Model Theory Question Papers for DSC was approved by Member of BOS.

2.6 Discussion on Practical Exam Model paper.

It was decided in BOS meeting that 25 Marks Practical Exam of 2 hrs will be held in each Semester and 1 credit will be given for Practical in each Semester.

- Pattern of Model Practical Question Papers for Paper I and Paper II are enclosed.
- Pattern of Model Practical Question Papers was approved by Members of BOS

2.7 Panel of Examiners

The panel of examiners was approved by the members.

- List is enclosed

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Dept. of Mathematics
Osmania University

2.8 Any other matter.

2.9 Vote of Thanks

Meeting concluded with the Vote of Thanks by Shri Subhash Chandra Badola



Chairperson

University Nominee

CHAIRMAN

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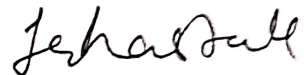
Members

1.

2.

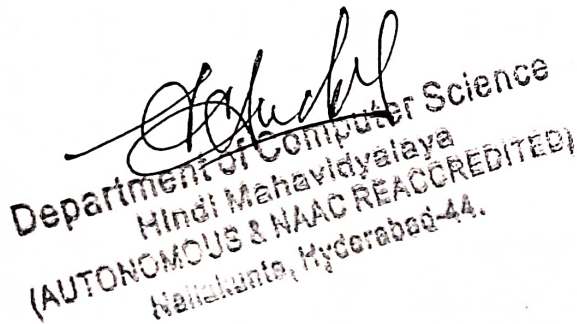
3.

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Principal

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Gurgaon, Haryana

2017-18 CBCS STRUCTURE SCHEME OF INSTRUCTIONS & EVALUATION

B.Sc. MPCS / MSCS

FIRST YEAR SEMESTER-I

Code	Course Title	Course Type	HPW	Credits	Semester End exam		Continuous Internal Evaluation		Total	Practical 2 HRS
					Duration in HRS	Marks	Exam Duration	Marks		
BS101	Environmental Studies	ATCC-1	2	2	2	40	30 min	10	50	-
BS102	English	CC-1A	5	5	3	80	30 min	20	100	-
BS103	Second Language (H/S/T)	CC-2A	5	5	3	80	30 min	20	100	-
BS104	MATHS	DSC-1A	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	25
BS105	PHYSICS / STATISTICS	DSC-2A	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	25
BS106	COMPUTER SCIENCE	DSC-3A	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	25
TOTAL NO. OF CREDITS				27		440		110	625	

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HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
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B. Sc. I Year Semester I
Computer Science
Paper – I
Programming in C

Objective: To develop programming skills to meet given requirements including testing or debugging of the programs developed by self or others. Students to learn the course includes the syntax and semantics of C, the C standard library and regular programming sessions; Block Structuring, Pseudocoding of sample procedures.

Subject Code: BS106

Instruction

4 Hrs/ Week

Duration of the Semester Examination

3 Hrs

Duration of the Internal Examination

30 Minutes

Semester Examination

80 Marks

Internal Examination

20 Marks

Number of Credits

4 Credits

Unit-I:

Computer Fundamentals: Introduction of Computers, Classification of Computers, Anatomy of a computer, Memory Hierarchy, Introduction to OS, Operational Overview of a CPU.

Program fundamentals: Generation and Classification of Programming Languages, Compiling, Interpreting, Loading, Linking of a Program, Developing Program, Software Development.

Algorithms: Definitions, Different Ways of Stating Algorithms (Step-form, Pseudo-code, Flowchart), Strategy for Designing Algorithms, Structured Programming Concept

Basics of C: Overview of C, Developing Programs in C Parts of Simple C Program, Structure of a C Program, Comments, Program Statements, C Tokens, Keywords, Identifiers, Data Types, Variables, Constants, Operators and Expressions, Expression Evaluation-precedence and associativity, Type Conversions.

Unit-II

Input-Output: Non-formatted and Formatted Input and Output Functions, Escape Sequences, **Control Statements:** Selection Statements-if, if-else, nestedif, nestedif-else, comma operator, conditional operator, switch; Iterative Statements-while, for, do-while, Special Control Statement-break, continue, return, exit. **Arrays and Strings:** One-dimensional Arrays, Character arrays, Functions from ctype.h, string.h, Multi dimensional Arrays.

Unit-III

Functions: Concept of Function, Using Functions, Call-by-Value Vs Call-by-reference, Passing Arrays to Functions, Scope of Variables, Storage Classes, Inline Functions, and Recursion.

Pointers in C: Introduction, Address of Operator (&), Arrays and Pointers, Pointers and Strings, Pointers to Pointers, Array of Pointers to Array, Dynamic Memory Allocation

Jehangir Ali
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Unit-IV

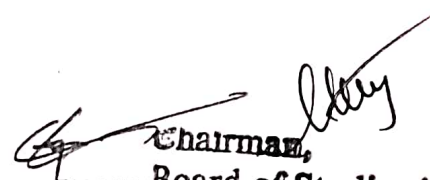
User- defined DataTypes: Declaring a Structure (Union) and its members, Initialization Structure Union), Accessing members of a Structure(Union), Array of Structures(Union), Structures Vs Unions, Enumeration Types.
Files in C: Introduction, Using Files in C, Working with Text Files, Working with Binary Files, Files of Records, Random Access to Files of Records, Other File Management Functions.

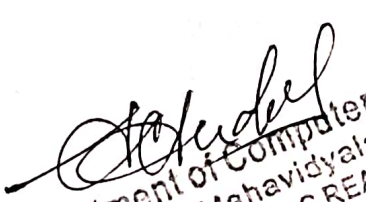
Text


Pradip Dey, Manas Ghosh, Computer Fundamentals and Programming C (2e)

Reference

1. Herbert Schildt, The Complete Reference C
2. Byron S. Gottfried, Theory and Problems of Programming with C
3. Paul Deitel, Harvey Deitel, C How To Program
4. Ivor Horton, Beginning C
5. Brian W. Kernighan, Dennis M. Ritchie, The C Programming Language


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B.Sc I Year Semester I
Computer Science
Paper – I (Practical /laboratory)

Programming in C

Subject Code : BS106P

Instruction

Duration of the semester Examination

Marks for semester Examination

No of Credits

: 2Hrs/Week

: 3 Hrs

: 25

: 1 Credit

1. Write a program to find the largest two(three) numbers using if and conditional operator.
2. Write a program to print the reverse of a given number.
3. Write a program to print the prime number from 2 to n where n is given by user.
4. Write a program to find the roots of a quadratic equation using switch statement.
5. WAP to print a triangle of stars as follows(take number of lines from user):

```
*  
***  
*****  
*****
```

6. Write a program to find largest and smallest elements in a given list of numbers.
7. Write a program to find the product of two matrices..
8. Write a program to find the GCD of two numbers using iteration and recursion.
9. Write a program to illustrate use of storage classes.
10. Write a program to demonstrate the call by value and the call by reference concepts.
11. Write a program that prints a table indicating the number of occurrences of each alphabet in the text entered as command line arguments.
12. Write a program to illustrate use of data type enum.
13. Write a program to demonstrate use of string functions string.h header file.
14. Write a program that opens a file and counts the number of characters in a file.
15. Write a program to create a structure Student containing fields for Roll No., Name, Class, Year and TotalMarks. Create 10 students and store them in a file.
16. Write a program that opens an existing text file and copies it to a new text file with all lowercase letters changed to capital letters and all other characters unchanged.

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Department of Computer Science

B.Sc I Year- Semester-I

Paper-I

Internal Exam (Theory)

Time: 30 Minutes


Maximum marks: 20

Two internal exams (one at the middle of the semester and the other at the end) of half an hour duration are to be conducted carrying 15 marks each.


Average of the scores of two exams should be taken into account.


Following is the examination pattern.

- 10 MCQs (multiple choice questions) of half mark each,
- 10 FIBs (Fill in the Blanks) of half mark each
- 5 SAQs (short answered questions) of one mark each
- **Totaling 15 marks.**
- 5 marks meant for assignment.


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Department of Computer Science

B.Sc I Year- Semester-I

Paper-I

Theory Model Paper

Code : BS106

Time: 3 Hrs.

Maximum marks: 80

Section - A

I. Answer any four of the following of eight questions. Each carries four marks. (4 x 5M = 20 Marks)

- Q1. From Unit 1
- Q2. From Unit 1
- Q3. From Unit 2
- Q4. From Unit 2
- Q5. From Unit 3
- Q6. From Unit 3
- Q7. From Unit 4
- Q8. From Unit 4

Section - B

II. Answer all the following four questions. Each carries FIFTEEN marks.

(4 x 15M = 60 Marks)

- Q09. (a) or (b) from Unit 1
- Q10. (a) or (b) from Unit 2
- Q11. (a) or (b) from Unit 3
- Q12. (a) or (b) from Unit 4

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B.Sc I Year Semester I
Computer Science
Paper – I

Practical Model Question Paper

Time: 2 Hrs

Total Marks: 25

I Answer any one question

Program Execution

15 Marks

II Record

5 Marks

III Viva

5 Marks

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