(Autonomous - Affiliated to Savitribai Phule Pune University)

#### **Department of Computer Science**

#### **Board of Studies - Minutes of the Meeting**

Revised Syllabus for F.Y.B.Sc. (2023-2026)

A meeting of the Board of Studies of the Department of **Computer Science**, St. Mira's College for Girls, Pune was held on 25<sup>th</sup> May, 2023.

#### The Agenda of the meeting was to:

- 1. Discuss the new syllabus of Computer Science for the F.Y.B.Sc Introduction to C Programming, Advanced C Programming Techniques, Database Management System, Introduction to Python Programming, Computer Science Practical-C Programming and PostgreSQL, Computer Science Practical- Advanced C and Python Programming.
- 2. Discuss the outcomes of the syllabus.
- 3. Discuss the internal assessments pattern.
- 4. Approve the syllabus.

#### The Minutes of the Meeting are:

- 1. Ms Swati Pulate Started the meeting with the introduction of new BOS members for the academic years 2023-26. The proposed credit structure was shared with everyone for the clarity of credits and courses offered for the syllabus framing.
- 2. Ms Swati read the contents of Computer science paper 1, Introduction to C Programming, Advanced C Programming Techniques.
- 3. Ms Smita Borkar read the contents of Computer science paper 2 DBMS, Introduction to Python Programming
- 4. Ms Swati Pulate read the contents of a practical paper of computer science.
- 5. Suggestions:

#### Following decisions were taken by the BOS Members -

Semester: I Course Type: Major Course Title: Introduction to C Programming,, Database Management System, Computer Science Practical-C Programming and PostgreSQL,

- 1. The syllabus of major subject computer science paper 1 has been approved by all BOS members.
- 2. The syllabus of major subject computer science paper 2 has been approved by all BOS members.



3. The syllabus of the major subject computer science practical paper has been approved by all BOS members.

# **Semester: II Course Type: Major Course Title:** Advanced C Programming Techniques,Introduction to Python Programming, Computer Science Practical- Advanced C and Python Programming.

- 1. The syllabus of major subject computer science paper 1 has been approved by all BOS members.
- 2. The syllabus of major subject computer science paper 2 has been approved by all BOS members.

Board of Studies	Name
Chairperson (HoD)	Mrs. Ashwini Kulkarni
Faculty	Mrs. Swati Pulate
Faculty	Mrs. Smita Borkar
Faculty	Mrs. Shubhangi Jagtap
Faculty	Mrs. Alka Kalhapure
Subject Expert (Outside SPPU)	Dr. Aniket Nagane
Subject Expert (Outside SPPU)	Dr. Manisha Divate
VC Nominee (SPPU)	Dr. Reena Bharathi
Industry Expert	Ms. Anjali Ingole
Alumni	Ms. Pooja Pande



### ST. MIRA'S COLLEGE FOR GIRLS, PUNE (Autonomous - Affiliated to Savitribai Phule Pune University)

#### **DEPARTMENT: Computer Science**

#### LETTER FOR APPROVAL OF SYLLABUS

We, the Member, Board of Studies- Computer Science, St. Mira's College For Girls. (Autonomous) Pune have examined and approved the syllabus framed for the class FYBSc(CS) as the Major subjects with Course Title: Introduction to C Programming, Advanced C Programming Techniques, Database Management System, Introduction to Python Programming, Computer Science Practical-C Programming and PostgreSQL, Computer Science Practical- Advanced C and Python Programming.

For implementing under the autonomy status for the next three academic years 2023-2026 in a meeting held on 25/05/2023. The approved syllabus bears my signature with the date on the original document of 1/2 pages in total.

Sr. No.	BoS	Composition	Name, Designation, Place of Work	Signature
l	Head of the Department	Chairperson	Ms. Ashwini Kulkarni- Assistant Professor St. Mira's College for Girls, Pune	Mus
2	Faculty	Member	Ms Swati Pulate - Assistant Professsor St. Mira's College fo Girls, Pune	8 m 5123
3	Faculty	Member	Ms Smita Borkar - Assistant Professsor St. Mira's College fo Girls, Pune	Melio 15/19/23
4	Faculty	Member	Ms Shubhangi Jagtap - Assistant Professsor St. Mira's College fo Girls, Pune	(2) 1)
5	Faculty	Member	Ms Alka Kalhapure - Assistant Professsor St. Mira's College fo Girls, Pune	Alta 1 ha
6	Faculty from other than Parent University	Subject Expert	Dr. Aniket Nagane Assistant Professor MIT ACSC Alandi Pune	25/1/25
7	Faculty from other than Parent University	Subject Expert	Dr. Manisha Divate Professor	1 ivate 123



8	One Expert-Nominated by VC, SPPU	Expert	Usha Pravin Gandhi College, Mumbai Dr. Reena Bharathi Assistant Professor	A.P.
			N Wadia College Pune	25/5/23
9	One Industry Representative	Industry Expert		Ahllulary.
			Managing principal Consultant	25/5/23
			Oracle Finance Services Software Ltd	212/23
10	One Alumni	Member	Ms. Pooja Pandey	
			Software Developer	CS-23
			Accenture, Pune	are as

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(Autonomous - Affiliated to Savitribai Phule Pune University)

#### **Department of BSC Computer Science**

#### **Board of Studies - Minutes of the Meeting**

Syllabus Revision for F.Y.B.SC. (2023-2026)

A meeting of the Board of Studies of the Department of **BSc Computer Science**, St. Mira's College for Girls, Pune was held on 2/6/2023.

#### The Agenda of the meeting was to:

- Discuss the new syllabus of VSC, SEC, IKS, Minor, OE for the F.Y. B.SC. Number Theory and Matrix Algebra, Discrete Mathematics, Ancient Indian Mathematics, Mathematics Practical using C language, Linear Algebra, Graph Theory, Mathematics Practical using Scilab and Maxima, Mathematics Practical using Maxima
- 2. Discuss the Course Outcomes of the syllabus.
- 3. Discuss the internal assessments pattern.
- 4. Approve the syllabus.

#### The Minutes of the Meeting are:

- 1. The committee discussed the revised syllabus and the titles for Semester I and II.
- 2. The Course content and structuring of the units was discussed.
- 3. Allotment of lectures per unit was discussed.
- 4. Relevant reference books and e-resources were discussed.
- 5. Gitanjali Phadnis thanked all the members for their presence, valuable inputs and cooperation.

#### Following decisions were taken by the BOS Members for each of the courses below-

Semester: I Course Type: VSC Course Title: Number Theory And Matrix Algebra

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.SC. syllabus took place.
- 2. Recurrence relation topic was suggested to add in the syllabus.

#### Semester: I Course Type: OE Course Title:Discrete Mathematics

1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.SC. syllabus took place.



2. Graph Theory introduction and basic types were suggested to add in the syllabus.

#### Semester: I Course Type: IKS Course Title: Ancient Indian Mathematics

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.SC. syllabus took place.
- 2. Topics were suggested to add in the syllabus as square root method, cube root method, Bodhyanasubhasutra, Pell's equation, work done by different Indian mathematicians.

3.

### Semester: I Course Type: SEC Course Title: Mathematics Practical using 'C' Language

1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.SC. syllabus took place.

#### Semester: II Course Type: Minor Course Title: Linear Algebra

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.SC. syllabus took place.
- 2. To add orthogonal vectors.
- 3. To keep Linear Algebra as minor as it is pure Mathematics subject.

#### Semester: II Course Type: OE Course Title: Graph Theory

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.SC. syllabus took place.
- 2. Addition of Planarity and Coloring in Graphs topics were approved.

### Semester: II Course Type: VSC Course Title: Mathematics Practical using Scilab and Maxima

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.SC. syllabus took place.
- 2. To explain Graph Theory concepts in the practical as these students will not study this subject.

#### Semester: II Course Type: SEC Course Title: Mathematics Practical using Maxima

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.SC. syllabus took place.
- 2. To explain Linear Algebra concepts in the practical as these students are not going to learn Linear Algebra subject.



Board of Studies	Name
Chairperson (HoD)	Gitanjali Phadnis
Faculty	Vrushali Paranjpe
Subject Expert (Outside SPPU)	Dr. Prashant Malavadkar
Subject Expert (Outside SPPU)	Dr. MachchhindraGophane
VC Nominee (SPPU)	Dr. Borse Y. M.
Industry Expert	Ms. Jaina Shah
Alumni	Ms. Mamata Choudhary



### ST. MIRA'S COLLEGE FOR GIRLS, PUNE (Autonomous - Affiliated to Savitribai Phule Pune University)

DEPARTMENT: BSC(Comp. Sci.)- Mathematics

#### LETTER FOR APPROVAL OF SYLLABUS

We, the Member, Board of Studies-Mathematics, St. Mira's College For Girls, (Autonomous) Pune have examined and approved the syllabus framed for the class FYBSc(CS) as the with Course Title: VSC-Number Theory and Matrix Algebra, OE-Discrete Mathematics, IKS-Ancient Indian Mathematics, SEC-Mathematics Practical using 'C' Language, Minor-Linear Algebra, OE-Graph Theory, VSC-Mathematics Practical using Scilab and Maxima, SEC-Mathematics Practical using Maxima for implementing under the autonomy status for the next three academic years 2023-2026 in a meeting held on 02/06/2023. The approved syllabus bears my signature with the date on the original document of C pages in total.

Sr. No.	BoS	Composition	Name, Designation, Place of Work	Signature
1	Head of the Department	Chairperson	Gitanjali Phadnis, Coordinator – Assistant Professsor St. Mira's College for Girls, Pune	M. Phadris 02/06/2013 Well 22/06/2023
2	Faculty	Member	Vrushali Paranjpe, Assistant Professsor St. Mira's College for Girls, Pune	VLUM-02/06/2023
3	Faculty from other than Parent University	Subject Expert	Dr.Machchhindra Tolaji Gophane Associate Professor Department of Mathematics, Shivaji University, Kolhapur	2/6/23
4	Faculty from other than Parent University	Subject Expert	Dr. Prashant Malavadkar Associate Professor and Head / Program Director Department of Mathematics and Statistics Dr. VishwnathKarhad MIT World Peace University Pune	02/06/2023



5	One Expert-Nominated by VC, SPPU	Expert	Dr. Borse Y. M. Professor Department of Mathematics, Savitribai Phule Pune University	proces o2/05/2023
6	One Industry Representative	Industry Expert	Ms. Jaina Senior Product Engineer, Randstad Risesmart	Jana &
7	One Alumni	Member	Mrs. Mamata Choudhary Software Development Engineer, Vegrow	02/06/2023



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#### **Department of Computer Science (Electronics)**

#### **Board of Studies - Minutes of the Meeting**

Revised Syllabus for F.Y.B.Sc(CS) (2023-2026)

A meeting of the Board of Studies of the Department of **Computer Science (Electronics)**, St. Mira's College for Girls, Pune was held on 24-05-2023.

#### The Agenda of the meeting was to:

- 1. Discuss the new syllabus of undergraduate course of BSC-CS in subject Electronics Course as per NEP guidelines.
- 2. Discuss the outcomes of the syllabus.
- 3. Discuss the internal assessments pattern.
- 4. Approve the syllabus.

#### The Minutes of the Meeting are:

- 1. The BoS discussed the course to be under either DSC or SSC.
- 2. The changes in Minor subjects and OE is done as per BoS suggestion.
- 3. The practical suggestions by BoS are framed and discussed under SEC.

#### Following decisions were taken by the BOS Members for each of the courses below -

#### Semester: I Course Type: VSC Course Title:Digital Systems

- 1. Discussion pertaining to the basics in digital systems required to understand the logical working of a computer system to be implemented .
- 2. To include different number systems, their interconversions, Logic gates, Boolean Algebra, K-Maps.
- 3. Brief concept of combinational circuits and sequential circuits.

## Semester: I Course Type: OE Course Title:Fundamentals of Computer Systems

- 1. Basic computer hardware to be introduced for better understanding of the components used in computers.
- 2. To include study of different components in the motherboard, network devices.
- 3. Discussions related to fundamentals of computer logic.



#### Semester: I Course Type: SEC Course Title: Electronics Practical in Digital Systems

- 1. Practical to be based on the basic digital circuit using hardware circuits as well as simulation software.
- 2. Paper pen based practicals included to improve problem solving and design skills.
- 3. Encourage to perform small projects.

Semester: II Course Type: MINOR Course Title: Computer Instrumentation

- 1. Computer instrumentation to include all basic electronic components and sensors.
- 2. Introduction to signal conditioner and data converter.

Semester: II Course Type:VSC Course Title: Electronics Practical in

#### **Computer Instrumentation**

- 1. Practical to include the study of different semiconductor devices and their characteristics.
- 2. Working of opamp and data converters.

Semester: I Course Type: OE Course Title:Fundamentals of Computer Organization

- 1. Discussion on the topics related to CPU and I/O organization.
- 2. To introduce different types of microprocessors and study Pentium processor

Semester: II Course Type: SEC Course Title:Skill based practical in Computer Organization

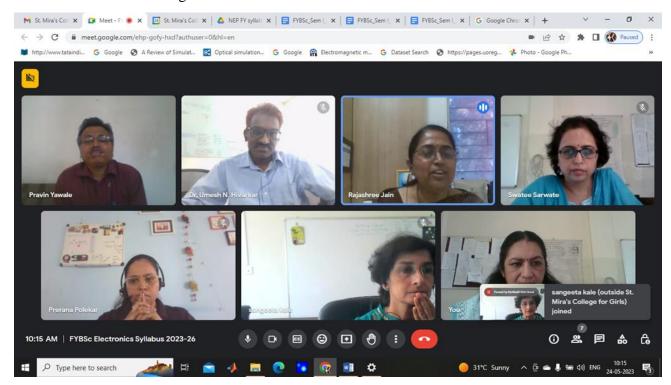
- 1. Discussion on practicals related to hardware components and networking devices.
- 2. Paper pen based practicals included to improve writing skills.
- 3. Simulation practicals and virtual lab introduced.

<b>Board of Studies</b>	Name
Chairperson (HoD)	Swatee Sarwate, Asst. Prof, St.Mira's College for Girls
Faculty	Anitha Menon, Asst. Prof, St.Mira's College for Girls

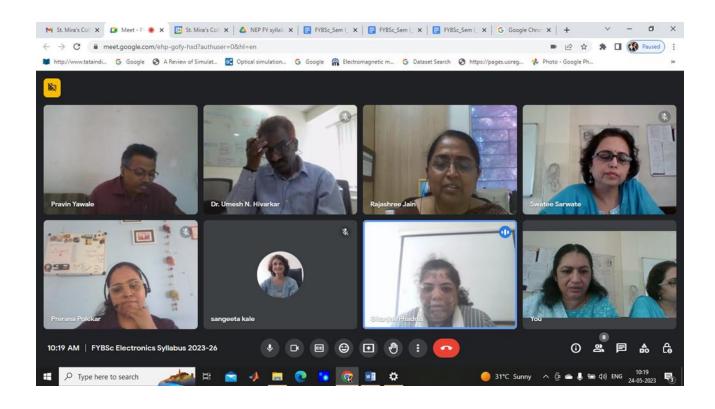


Subject Expert (Outside SPPU)	Dr.Sangeeta Kale, Professor Dean(ACAD),DIAT(DU),Pune	
Subject Expert (Outside SPPU)	Dr. Rajshree jain - Symbiosis Institute of Computer Studies and Research	
VC Nominee (SPPU)	Dr. Pravin Yawale – Baburaoji Gholap College Pune  Dr. Umesh N. Hivarkar Head, Data Science & Engineering Analytics, Intelligent Mobility FEV India Pvt Limited, Pune	
Industry Expert		
Alumni	Ms. Prerna Polekar - Accenture – Application Development associate Manager	

### Screenshots of the meeting conducted on 24-05-2023 in the online mode:









### ST. MIRA'S COLLEGE FOR GIRLS, PUNE (Autonomous - Affiliated to Savitribai Phule Pune University)

**DEPARTMENT: BSC(Comp. Sci.)- Electronics** 

#### LETTER FOR APPROVAL OF SYLLABUS

We, the Member, Board of Studies-Electronics, St. Mira's College For Girls, (Autonomous) Pune have examined and approved the syllabus framed for the class F.Y.B.Sc (CS) as the VSC, OE, SEC,MINOR,OE,VSC,SECwith Course Title - Digital Systems, Fundamental of Computer Systems, Electronics Practical in Digital Systems, Computer Instrumentation, Fundamentals of Computer Organization, Electronics Practical in Computer Instrumentation ,Skill based practical in Computer Organization for implementing under the autonomy status for the next three academic years 2023-2026 in a meeting held on 24/05/2023. The approved syllabus bears my signature with the date on each page of the original document of 20 pages in total.

Sr. No.	BoS	Composition	Name, Designation, Place of Work	Signature
1	Head of the Department	Chairperson	Swatee Sarwate, Asst. Prof, St.Mira's College for Girls	Swaler de 3
2	Faculty	Member	Anitha Menon, Asst. Prof, St.Mira's College for Girls	2431
3	Faculty from other than Parent University	Subject Expert	Dr.Sangeeta Kale, Professor Dean(ACAD),DIAT(DU),Pune	243
4	Faculty from other than Parent University	Subject Expert	Dr. Rajshree Jain - Symbiosis Institute of Computer Studies and Research	De 1/23/3
5	One Expert-Nominated by VC, SPPU	Expert	Dr. Pravin Yawale – Baburaoji Gholap College Pune	Janet 3



6	One Industry Representative	Industry Expert	Dr. Umesh N. Hivarkar Head, Data Science & Engineering Analytics, Intelligent Mobility FEV India Pvt Limited, Pune	1) nd. ndy
7	One Alumni	Member	Ms. Prema Polekar - Accenture - Application Development associate Manager	Tarrows 3



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#### **Department of Computer Science**

#### **Board of Studies - Minutes of the Meeting**

Syllabus Revision for F.Y.B.Sc. (2023-2026)- Statistics

A meeting of the Board of Studies of the Department of Statistics, St. Mira's College for Girls, Pune was held on 3<sup>rd</sup> June, 2023.

#### The Agenda of the meeting was to:

- 1. Discuss the new syllabus of OE VEC for the F.Y.B.A., F.Y.B.Com., F.Y.B.B.A., F.Y.B.Sc. (Computer Science) Course Titles.
- 2. Discuss the Course Outcomes of the syllabus.
- 3. Discuss the internal assessments pattern.
- 4. Approve the syllabus.

#### The Minutes of the Meeting are:

- 1. The committee discussed the revised syllabus and the titles for Semester I and II.
- 2. The Course content and structuring of the units was discussed.
- 3. Allotment of lectures per unit was discussed.
- 4. Relevant reference books and e-resources were discussed.
- 5. Anjali Kale thanked all the members for their presence, valuable inputs and cooperation.

## Following decisions were taken by the BOS Members for each of the courses below – Semester: I Course Type: OE Course Title: Descriptive Statistics

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.A., F.Y.B.Com., F.Y.B.B.A., F.Y.B.Sc. (Computer Science) syllabus took place.
- 2. Discussion pertaining to the internal assessments pattern for the F.Y.B.A., F.Y.B.Com., F.Y.B.B.A., F.Y.B.Sc. (Computer Science) syllabus took place.
- 3. Relevant reference books and e-resources were discussed.
- 4. Anjali Kale thanked all the members for their presence, valuable inputs and cooperation.

Semester: I Course Type: VEC Course Title: Practical on Descriptive statistics

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.**B.A.**, B.Com., BBA, B.Sc. (Computer Science) syllabus took place.
- 2. Discussion pertaining to the internal assessments pattern for the F.Y.B.A., F.Y.B.Com., F.Y.B.B.A., F.Y.B.Sc. (Computer Science) syllabus took place.



- 3. Relevant reference books and e-resources were discussed.
- 4. Anjali Kale thanked all the members for their presence, valuable inputs and cooperation.

### Semester: II Course Type: OE Course Title: Introduction to Probability Theory

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.B.A., F.Y.B.Com., F.Y.B.B.A., F.Y.B.Sc. (Computer Science) syllabus took place.
- 2. Discussion pertaining to the internal assessments pattern for the F.Y.B.A., F.Y.B.Com., F.Y.B.B.A., F.Y.B.Sc. (Computer Science) syllabus took place.
- 3. Relevant reference books and e-resources were discussed.
- 4. Anjali Kale thanked all the members for their presence, valuable inputs and cooperation.

#### Semester: II Course Type: VEC Course Title: Basics of Data Analytics

- 1. Discussion pertaining to the Course Outcomes of the paper to be taught for the F.Y.**B.A.**, B.Com., BBA, B.Sc. (Computer Science) syllabus took place.
- 2. Discussion pertaining to the internal assessments pattern for the F.Y.B.A., F.Y.B.Com., F.Y.B.B.A., F.Y.B.Sc. (Computer Science) syllabus took place.
- 3. Relevant reference books and e-resources were discussed.
- 4. Anjali Kale thanked all the members for their presence, valuable inputs and cooperation.

Board of Studies	Name	
Chairperson (HoD)	Anjali Kale	
Faculty	Amrita Basu	
Subject Expert	Dr. Sharvari Shukla	
(Outside SPPU)		
Subject Expert	Dr. Suresh Pathare	
(Outside SPPU)		
VC Nominee (SPPU)	Dr. Rajendra Gurao	
Industry Expert	Dr. Madhuri kulkarni	
Alumni	Nisha Singh	





3<sup>rd</sup> June 2023.



### ST. MIRA' S COLLEGE FOR GIRLS, PUNE (Autonomous - Affiliated to Savitribai Phule Pune University)

#### **DEPARTMENT: BSC(Comp. Sci.)- Statistics**

#### LETTER FOR APPROVAL OF SYLLABUS

We, the Member, Board of Studies-\_Statistics, St. Mira's College For Girls, (Autonomous) Pune have examined and approved the syllabus framed for the class FYBSc(CS) as the OE,VEC,OE,VEC with Course Titles: Descriptive Statistics, Practical on Descriptive Statistics, Introduction to Probability Theory, Basics of Data Analytics for implementing under the autonomy status for the next three academic years 2023-2026 in a meeting held on 03/06/2023. The approved syllabus bears my signature with the date on the original document of 10 pages in total.

Board of Studies	Name	Name, Designation, Place of Work	Signature
Chairperson (HoD)	Anjali Kale	Assistant Professor, St. Mira's College for Girls, Pune	MM 16/23
Faculty	Amrita Basu	Assistant Professor, St. Mira's College for Girls, Pune	Baser. 3/6/1/3
Subject Expert (Outside SPPU)	Dr. Sharvari Shukla	Director and Professor, Symbiosis Statistical Institute (SSI), Symbiosis International (Deemed University), A 106, ICC Trade Tower 403A, International Convention Centre, Senapati Bapat Road, Pune-411016	21alaci:



Subject Expert (Outside SPPU)	Dr. Suresh Pathare	Associate Professor (Statistics), School of Mathematics, Applied Statistics & Analytics, SVKM'S NMIMS (Deemed to be University), Plot No. 2, Sec -33. Kharghar, Navi Mumbai, Maharashtra - 410210	Jane.
VC Nominee (SPPU)	Dr. Rajendra Gurao	Principal, H.V. Desai College, Pune	Mm2. 3/6/23
Industry Expert	Dr. Madhuri Kulkarni	Principal Research Statistician Developer, SAS Research & Development (India) Pvt. Ltd.	MRK - 3/6/23
Alumni	Nisha Singh	Software Engineer (Java Developer), CODITAS Technologies.	Fright 3/6/23

