### St. Mira's College for Girls, Pune (Autonomous - Affiliated to Savitribai Phule Pune University) Department of Computer Science Board of Studies -Minutes of Meeting

Revised syllabus for TY B.Sc(Comp. Sci.) (2022-25)

A meeting of the Board of Studies of the Department of Computer Science, St. Mira's College for Girls, Pune was held on 14th August 2021.

| Agenda of the Meeting   |
|---|
| 1. To discuss new TYBSc computer science syllabus.                  |
| 2. To discuss reference books required.                             |
| 3. To discuss number of lectures required for respective units.     |
| 4. To discuss assignments for laboratory curse in computer science. |
| 5. To approve the syllabus of TYBSC Computer Science.               |

**Handouts/Documents shared:** 

Reference books PDFs

unit 4
CS Paper-III (BS52203)

Proposed syllabus soft copies for discussed subjects

| Website references  |                               |
|---|-------------------------------|
|   |                               |
| Discussed Items   | Conclusion                    |
| 1. <b>Subject:</b> System programming from previous syllabus        | The changes are discussed and |
| replaced by   | accepted by the committee.    |
| Operating Systems – I   |                               |
| (CS-Paper-I) ( <b>BS52201</b> )                                     |                               |
| • 100% update   |                               |
| <ul> <li>Dr Bharambe suggested to add Pre-emptive and</li> </ul>    |                               |
| non-preemptive scheduling algorithms in Unit 3.                     |                               |
| <ul> <li>Under the Unit 4 -memory management, Dr</li> </ul>         |                               |
| Bharambe suggested to add MFU and Second                            |                               |
| Chance algorithm.   |                               |
| 2. Subject:   | The changes are discussed and |
| Computer Networks – II  | accepted by the committee.    |
| CS Paper-II (BS52202)   |                               |
| • 36% change  |                               |
| <ul> <li>The suggestion given by Alumni member was</li> </ul>       |                               |
| discussed to add HTTP under Application Layer.                      |                               |
| <ul> <li>As HTTP is already included in Web Technologies</li> </ul> |                               |
| subject this change suggested was not                               |                               |
| considered.   |                               |
| 3. Subject:   | The changes are discussed and |
| Web Technologies – I  | accepted by the committee.    |
| • 22% change  |                               |
| • As per Dr Bharambe's suggestion, in Unit 1                        |                               |
| concepts of HTML and CSS added.                                     |                               |
| • date and time functions are added in unit 2                       |                               |
| <ul> <li>database connectivity using mysql is added in</li> </ul>   |                               |



| 4 Cultinate   | The above and the second and  |
|---|-------------------------------|
| 4. Subject:   | The changes are discussed and |
| Foundations of Data Science   | accepted by the committee.    |
| CS Paper-IV (BS52204)   |                               |
| New Subject added by SPPU.  |                               |
| 100% change.  |                               |
| In Unit 4 the types of data visualisation, univariate               |                               |
| Analysis techniques added.  |                               |
| 5. Subject:   | The changes are discussed and |
| Object Oriented Programming using Java - I                          | accepted by the committee.    |
| CS Paper-V (BS52205)  |                               |
| 32% change  |                               |
| In Unit 2, cloneable interfaces with deep and shallow               |                               |
| copy added.   |                               |
| Under Unit 4, Applets removed as it is not supported by             |                               |
| JDK.  |                               |
| 6. Subject:   | The changes are discussed and |
| Theoretical Computer Science  | accepted by the committee.    |
| CS Paper-VI (BS52206)   |                               |
| 5 % change.   |                               |
| <ul> <li>In Unit 1 Chowmsky Heirarchy moved from unit 3.</li> </ul> |                               |
| <ul> <li>No of lectures per unit changed.</li> </ul>                |                               |
| <ul> <li>Conversion of Regular Grammar to FA and vice</li> </ul>    |                               |
| versa moved to unit 2.  |                               |
| 7. Subject:   | The changes are discussed and |
| System programming assignments from previous syllabus               | accepted by the committee.    |
| replaced by <b>Operating system assignments</b>                     |                               |
| Practical Course Based on BS52201                                   |                               |
| CS Paper-VII(BS52207)   |                               |
| 100 change  |                               |
| <ul> <li>In assignment 4 FIFO, LRU, OPT AND MFU added.</li> </ul>   |                               |
| <ul> <li>Second chance algorithm assignment is removed.</li> </ul>  |                               |
| Dr Bharambe asked to keep all commands in                           |                               |
| assignment 2 and add few new commands in                            |                               |
| assignment 1.   |                               |
| 8. Subject:   | The changes are discussed and |
| Practical Course Based on BS52203 and BS52204                       | accepted by the committee.    |
| CS Paper-VIII (BS52208)   | accepted by the committee.    |
| According to previous syllabus, changes made in this                |                               |
| paper <b>60</b> %   |                               |
| This paper divided into 2 section                                   |                               |
| In section A, added new assignment based on HTML and                |                               |
| CSS   |                               |
| In Section B, added assignments based on data science               |                               |
| using python.   |                               |
| It was suggested to use various libraries.                          |                               |
| it was suggested to use various libraries.                          |                               |



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|---|---|
| 9. Subject:   | The changes are discussed and           |
| Practical Course Based on BS52205                                   | accepted by the committee.              |
| CS Paper-IX (BS52209)   |   |
| 30% change.   |   |
| <ul> <li>Assignments shuffled in two parts viz. Ass1 and</li> </ul> |   |
| Ass2.   |   |
| <ul> <li>Applets Assignment removed.</li> </ul>                     |   |
| 10. Subject:  | The changes are discussed and           |
| Python Programming  | accepted by the committee.              |
| CS Paper-X (BS52210)  | , |
| New subject 100 % change.   |   |
| Number of changes suggested by BOS committee.                       |   |
| <ul> <li>Unit1- Keep simple don't have to explain in</li> </ul>     |   |
| details as they have studied it in SY class.                        |   |
| <ul> <li>Unit 4- add Introduction to GUI.</li> </ul>                |   |
| <ul> <li>Unit 4- remove regular expression and exception</li> </ul> |   |
| handling as it is repeating.  |   |
| Under assignments use tinker library. Add demo                      |   |
| to GUI under assignments.   |   |
| 11. Subject:  | The changes are discussed and           |
| Blockchain Technology   | accepted by the committee.              |
| CS Paper-XI (BS52211)   | accepted by the committee.              |
| New Subject. 100 % change.  |   |
| Under Unit 3 for DApps and DAOs it was suggested to                 |   |
| give option for students to attempt any assignment.                 |   |
| 12. Subject:  | The changes are discussed and           |
| Operating Systems - II  |   |
| CS Paper-I (BS62201)  | accepted by the committee.              |
| 25%   |   |
| 13. Subject:  | The changes are discussed and           |
| Software Testing  | The changes are discussed and           |
| CS Paper-II (BS62202)   | accepted by the committee.              |
|   |   |
| New Subject 100 % change  | <del>-</del>                            |
| 14. Subject:  | The changes are discussed and           |
| Web Technologies – II   | accepted by the committee.              |
| 20% change  |   |
| In Unit 3 JQuery Library added.  In Unit 3 JQuery Library added.    |   |
| • In Unit 4 Added new libraries for codeigniter                     |   |
| framework for designing more dynamic web                            |   |
| pages.  |   |
| CS Paper-III (BS62203)  |   |
| 15. Subject:  | The changes are discussed and           |
| Data Analytics  | accepted by the committee.              |
| CS Paper-IV (BS62204)   |   |
| New Subject 100 % change.   |   |



| Under assignments add any technique like Split and                     |   |
|--|---|
| specify that in the Lab Book   |   |
| 16. Subject:   | The changes are discussed and           |
| Object Oriented Programming using Java – II                            | accepted by the committee.              |
| 34% change.  |   |
| <ul> <li>Unit 1- In this unit Collections added and</li> </ul>         |   |
| Multithreading shuffled up.  |   |
| <ul> <li>Unit 2- Database Programming shuffled down.</li> </ul>        |   |
| <ul> <li>Unit 3- Servlets and JSP shuffled up.</li> </ul>              |   |
| <ul> <li>Unit 4- Newly added Spring Framework.</li> </ul>              |   |
| CS Paper-V (BS62205)   |   |
| 17. Subject:   | The changes are discussed and           |
| Compiler Constructor   | accepted by the committee.              |
| CS Paper-VI (BS62206)  |   |
| 15% change   |   |
| <ul> <li>Unit 4-Under SDD ordering the evaluation of</li> </ul>        |   |
| attributes removed.  |   |
| <ul> <li>Construction of Syntax tree and the structure of a</li> </ul> |   |
| Type removed.  |   |
| <ul> <li>Annotated Parse tree added.</li> </ul>                        |   |
| 18. Subject:   | The changes are discussed and           |
| Practical Course Based on BS62201                                      | accepted by the committee.              |
| CS Paper-VII (BS62207)   | , |
| 20 % change  |   |
| <ul> <li>In assignment 4 detailing added in mobileOS.</li> </ul>       |   |
| 19. Subject:   | The changes are discussed and           |
| Practical Course Based on BS62203 and BS62204                          | accepted by the committee.              |
| CS Paper-VIII(BS62208)   |   |
| According to previous syllabus, changes made in this                   |   |
| paper <b>58</b> %  |   |
| This paper divided into 2 section                                      |   |
| In section A, added new assignment based on Jquery                     |   |
| In Section B, added assignments based on data analytics                |   |
| ,  |   |
|  |   |
| 20. Subject:   | The changes are discussed and           |
| Practical Course Based on BS52205                                      | accepted by the committee.              |
| CS Paper-IX (BS62209)  |   |
| 20% change   |   |
| <ul> <li>Added assignments on collections as separate</li> </ul>       |   |
| assignment.  |   |
| Added Spring framework demonstration as                                |   |
| assignment 6.  |   |
| 21. Subject:   | The changes are discussed and           |
| Software Testing Tools   | accepted by the committee.              |
| CS Paper-X (BS62210)   | decepted by the committee.              |
|  |   |



| New Subject 100 % change As it is Skill subject no extra practical slot must be assigned to do assignments. Need to cover everything in class.   |  |
|--|--|
| 22. Subject: Project CS Paper-XI (BS62211) New Subject 100 % change The platform for doing project was discussed. Under various conditions it was thought of giving liberty to students to use either Windows or Linux platform. | The changes are discussed and accepted by the committee. |



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

DEPARTMENT: Computer Science [BSc(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 T Y B.Sc in the subject Computer Science Paper I, Computer Science Paper II, Computer Science Paper IV, Computer Science Paper V, Computer Scie

| Sr. No. | BoS  | Composition       | Name, Designation, Place of Work  | Signature |
|---------|--|-------------------|---|-----------|
| 1       | Head of the Department                       | Chairperson       | Ashwini Kulkarni,<br>Asst. Professor, St.Mira's College for Girls                                 | OD-       |
| 2       | Faculty                                      | Subject<br>Expert | Mrs. Shubhangi Jagtap<br>Asst. Professor, St.Mira's College for Girls                             | Shubbarge |
| 4       | Faculty                                      | Subject<br>Expert | Mrs. Alka Kalhapure Asst. Professor, St.Mira's College for Girls                                  | Alla      |
| 5       | Faculty from other than<br>Parent University | Subject<br>Expert | Prof. Aniket Nagne<br>Asst.Prof of comp.science ,MIT College Alandi                               | - Charles |
| 6       | Faculty from other than<br>Parent University | Subject<br>Expert | Dr. Manisha Divate Assistant Professor at Department of Computer Science, University of Mumbai.   | The quets |
| 7       | One Expert-Nominated by VC, SPPU             | Expert            | Dr. Manisha Bharambe Vice Principal of comp.sci. ,Dept Mes Garware College asnagane@mitacsc.ac.in | Meharambe |

| 8 | One Industry<br>Representative | Industry<br>Expert | Ms. SnehalBiyala<br>(Senior Project manager Cognizant)   | Que ami  |            |
|---|--------------------------------|--------------------|--|--|------------|
| 9 | One Alumni                     | Member             | Ms. Mamta Choudhary MSc. Computer science from SPPU computer science Department. Working as full stack developer at Agrostar ltd | Mouth.   |            |
|   | Faculty                        | Subject<br>Expert  | Smite Borkar, Asst. Professor, St.Mira's College for Girls   | Mela   |            |
|   | Faculty                        | Subject<br>Expert  | Swati Pulate,<br>Asst. Professor, St.Mira's<br>College for Girls   | a service of the serv |            |
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| Sr. No. | BoS                     | Composition | Name, Designation, Place of Work              | Signature |
|---------|-------------------------|-------------|---|-----------|
| 1       | Head of the Department  | Chairperson | Ashwini Kulkarni,                             | Nim       |
|         |                         |             | Asst. Professor, St.Mira's College for Girls  |           |
| 2       | Faculty                 | Subject     | Mrs. Shubhangi Jagtap                         | Q1 Waven  |
|         |                         | Expert      | Asst. Professor, St.Mira's College for Girls  | Shubbarg  |
| 4       | Faculty                 | Subject     | Mrs. Alka Kalhapure                           |           |
|         |                         | Expert      | Asst. Professor, St.Mira's College for Girls  | Ma        |
| 5       | Faculty from other than | Subject     | Prof. Aniket Nagne                            | 201 -     |
|         | Parent University       | Expert      | Asst.Prof of comp.science ,MIT College Alandi |           |
| 6       | Faculty from other than | Subject     | Dr. Manisha Divate                            | <u> </u>  |
|         | Parent University       | Expert      | Assistant Professor at Department of Computer | - ivet    |
|         |                         |             | Science, University of Mumbai.                | · ND      |
| 7       | One Expert-Nominated by | Expert      | Dr. Manisha Bharambe                          |           |
|         | VC, SPPU                |             | Vice Principal of comp.sci. ,Dept Mes Garware | - mhe     |
|         |                         |             | College                                       | prohambe  |
|         |                         |             | asnagane@mitacsc.ac.in                        | Maharambe |

| 8  | One Industry<br>Representative | Industry<br>Expert | Ms. SnehalBiyala (Senior Project manager Cognizant)  | Bulan     |
|----|--------------------------------|--------------------|--|-----------|
| 9  | One Alumni                     | Member             | Ms. Mamta Choudhary MSc. Computer science from SPPU computer science Department. Working as full stack developer at Agrostar ltd | June 1    |
| 10 | Faculty                        | Subject<br>Expert  | Smita Borkar,<br>Asst. Professor, St.Mira's College for Girls  | Mules     |
| 11 | Faculty                        | Subject<br>Expert  | Swati Pulate,<br>Asst. Professor, St.Mira's College for Girls  | Ba-       |
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|    |                                |                    |  | 00W-4116  |

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| 8  | One Industry Representative | Industry<br>Expert<br>Member | Ms. SnehalBiyala (Senior Project manager Cognizant)  | Bulani                |
|----|-----------------------------|------------------------------|--|-----------------------|
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| 10 | Faculty                     | Subject<br>Expert            | Smita Borkar,<br>Asst. Professor, St.Mira's College for Girls  | Marhar.               |
| 11 | Faculty                     | Subject<br>Expert            | Swati Pulate,<br>Asst. Professor, St, Mira's College for Girls   | 8º                    |
|    |                             | . 1                          |  | St. MIRA              |
|    |                             |                              |  | COLLEGE<br>WA-411001* |