

**St. Mira's College for Girls, Pune**  
(Autonomous-Affiliated to Savitribai Phule Pune University)

**1.1.3 - List of Activities for Courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years**

Sr. No.	Name of the Course	Course Code
	<b>MSC</b>	
1	Cloud computing	MSE21905
2	Practical paper based on Software Architecture and Design Pattern, Machine Learning & Web Frameworks	MS32004
	<b>MCOM</b>	
3	Introduction to Behavioural Finance	MCM32004
4	Capital Markets and Financial Services	MCM42001
5	Project Work (Business Administration)	MCM42004
6	Project Work (Accountancy)	MCM42006
	<b>MA ECONOMICS</b>	
7	Research Project	MEC42003
	<b>FYBCOM</b>	
8	Compulsory English	AC#12001
9	Compulsory English	AC#22001
10	Business Mathematics and Statistics	AC12001
11	Business Mathematics and Statistics	AC22001
12	Consumer Protection & Business Ethics	C12006
13	Consumer Protection & Business Ethics	C22006
14	Business Administration	AC12008
15	Business Administration	AC22008
	<b>SYBCOM</b>	
16	Business Administration - I	C31608
17	Business Administration - I	C41608
	<b>TYBCOM</b>	
18	Business Administration - II	C51708
19	Business Administration - II	C61708
20	Marketing - III	C51713
21	Marketing - III	C61713
	<b>FYBA</b>	
22	Comp. English EM	A12001
23	Optional English	A12005
24	Optional English	A22005
	<b>SYBA</b>	
25	Comp English-EM	A31601
26	Comp English-EM	A41602
27	Comp English-MM	A31602
28	Comp English-MM	A41602
29	English-1	A31614
30	English-2	<b>A41614</b>
	<b>TYBA</b>	
31	Comp English EM	A51701
32	Comp English EM	A61701
33	Comp English MM	A51702
34	Comp English MM	A61702
35	Sociology Special-3	A51712
36	English-3	A51715
37	English-4	A61715
38	English -4	A51716
39	English -5	A61716
40	Psychology Special -3	A51718



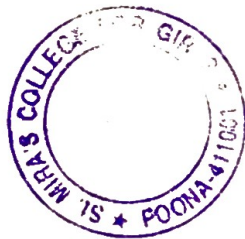
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Sr. No.	Name of the Course	Course Code
<b>FYBSC</b>		
41	Discrete Mathematics	BS12003
42	Principles of Digital Electronics	BS12008
43	Electronics Practical	BSP12012
44	Graph Theory	BS22003
<b>SYBSC</b>		
45	Mathematics - Numerical Analysis	BS31604
46	Mathematics - Operations Research	BS41604
47	Digital System Design	BS31605
48	PIC Microcontroller Architecture, Interfacing & Programming	BS41605
<b>TYBSC</b>		
49	Operating Systems	BS61701
50	Object oriented analysis and design	BS51706
51	Advanced database management system	BS61706
52	Lab Course III	BSP61709
<b>FYBBA</b>		
53	Principles of Management	BB22001
<b>TYBBA</b>		
54	Entrepreneurship Development	BB51702
55	Specialisation - Finance	BB61706A
56	Specialisation - HR	BB61706B
57	Specialisation - Marketing	BB61706C
<b>FYBBA(CA)</b>		
58	Business Communication Skills	BC12001
59	Principles of Management	BC12002
60	C Language	BC12003
<b>SYBBA(CA)</b>		
61	Software Engineering	BC31605
62	Operating System	BC31603
<b>TYBBA(CA)</b>		
63	Web technology	BC51702
64	Project	BC51706
65	Advanced Web Technology	BC61701
66	Project	BC61706

*Jayab*

**IQAC Co-Ordinator**  
**St. Mira's College for Girls, Pune**



*G. H. Gidwani*

**Principal**  
**St. Mira's College for Girls**

**St. Mira's College for Girls, Pune**  
**(Autonomous-Affiliated to Savitribai Phule Pune University)**  
**Subject: BS61701-Operating systems (BSc computer science)**  
**SEMESTER: VI**  
**Year (Example: 2020-2021)**

1. Unit No.: 1,2,3,4
2. Employability/Entrepreneurship/Skill development - Skill development .  
**Internal assessment based on bankers algorithm problem solving**

**Answer the following questions using Banker's Algorithm**

i) What is the content of need Matrix.  
ii) Is the system in safe state? If yes, give the safe sequence.

**[12] SOLVE USING BANKERS ALGORITHM -5MARKS**

Process	Max			Allocation			Available		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
P1	7	5	3	0	1	0	3	3	4
P2	3	2	2	2	0	0			
P3	9	0	2	3	0	2			
P4	2	2	2	2	1	1			

1) Calculate the need matrix  
2) Give the safe sequence  
3) If the request from p1 arrives for (2,2,4) can be it granted immediately

Anjali Sharma  
Roll No: 5621

1. Allocation

	A	B	C
P <sub>0</sub>	2	8	5
P <sub>1</sub>	2	2	3
P <sub>2</sub>	3	2	2
P <sub>3</sub>	1	1	3
P <sub>4</sub>	3	3	4

Max

	A	B	C
P <sub>0</sub>	3	10	6
P <sub>1</sub>	3	4	3
P <sub>2</sub>	3	7	8
P <sub>3</sub>	1	2	3
P <sub>4</sub>	3	8	7

Available

	A	B	C
	0	2	1

ii) initialize finish = {f.f.f.f.f}^T  
work = Available = {0, 2, 1}^T  
check(P<sub>1</sub>) = {1, 2, 1} < work

**Ashwini Kulkarni**

**Name and Signature of the Subject Teacher:**