



Shri Sairaj Shikshan Pratishthan's

Reg. No. ID No. PU/NS/CS/139/2009

# Vishwalata Arts, Commerce & Science College

(College Code : 892)

BHATGAON, Tal. Yeola - 423 401 Dist. Nashik ■ Hello : (02559) 225102, Fax : 225103

Ref. No.

Date :

## Clarification- 1.2.1.

1.2.1. Percentage of programmes in which Choice Based Credit System (CBCS) /Elective course system has been implemented.

1.2.1.1. Number of programmes in which CBCS /Elective course system implemented.

This is declare that Vishwalata Arts, Commerce & Science College Bhatgaon, Tal- Yeola, Dist- Nashik .

Our college has already submitted the SSR .In the data template of criteria number 1 ,  
Metric No-1.2.1. in that 1.2.1.1. following data was shown

HEI Input : 16

We wrongly enter the above data .

There are only 08 programmes in which CBCS/ Elective course system implemented.

So please kindly consider this following record.

Change HEI Input : 08



ज्ञानदेव  
Principal  
Vishwalata Arts Commerce  
& Science College Bhatgao.  
Tal.Yeola Dist-Nashik



# Vishwalata Arts, Commerce & Science College

(College Code : 892)

BHATGAON, Tal. Yeola - 423 401 Dist. Nashik ■ Hello : (02559) 225102, Fax : 225103

Ref. No.

Date :

## Clarifications No. 1.2.1

Percentage of programs in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1. Number of Programs in which CBCS/ Elective course system implemented.

Query :- Number of programs in which CBCS /Elective course system implemented could not be more than total no of approved number of programs from affiliating university. Please update the data template ,HEI input and supporting documents accordingly

Clarification:- Updating Data template

Program Code	Programme name	Year of Introduction	Status of implementation of CBCS / elective course system (Yes/No)	Year of implementation of CBCS / elective course system
12019	Bachelor of Commerce (B.Com)	2009-10	Yes	2019-20
11019	Bachelor of Computer Science B.Sc.(Comp. Science)	2009-10	Yes	2019-20
10219	Bachelor of Business Administration - Computer Application (BBA- CA)	2009-10	Yes	2019-20
10319	Bachelor of Business Administration- International Business (BBA- IB)	2010-11	Yes	2019-20
10119	Bachelor of Business Administration(BBA)	2010-11	Yes	2019-20
11719	Bachelor of Science (B.Sc.)	2016-17	Yes	2019-20
25019	Master of Commerce (M.Com)	2016-17	Yes	2019-20
21619	Master of Science (Computer Science)	2016-17	Yes	2019-20



*[Signature]*  
Principal  
Vishwalata Arts Commerce  
& Science College Bhatgaon  
Tal.Yeola Dist-Nashik



# Vishwalata Arts, Commerce & Science College

(College Code : 892)

BHATGAON, Tal. Yeola - 423 401 Dist. Nashik ■ Hello : (02559) 225102, Fax : 225103

Ref. No.

Clarifications No. 1.2.1

Date :

Percentage of programs in which Choice Based Credit System (CBCS)/ elective course system has been implemented.

1.2.1.1. Number of Programs in which CBCS/ Elective course system implemented.

Query No 1:- Please provide list of programs in which CBCS /Elective course system is implemented in the last completed academic year certified by the register of the affiliating university.

Clarification:- We are presenting a document that the CBCS / Elective Curriculum System is implemented in the last full academic year certified by the Registrar of the affiliated University.

Program Code	Programme name	Year of Introduction	Status of implementation of CBCS / elective course system (Yes/No)	Year of implementation of CBCS / elective course system
12019	Bachelor of Commerce (B.Com)	2009-10	Yes	2019-20
11019	Bachelor of Computer Science B.Sc.(Comp. Science)	2009-10	Yes	2019-20
10219	Bachelor of Business Administration - Computer Application (BBA- CA)	2009-10	Yes	2019-20
10319	Bachelor of Business Administration- International Business (BBA- IB)	2010-11	Yes	2019-20
10119	Bachelor of Business Administration(BBA)	2010-11	Yes	2019-20
11719	Bachelor of Science (B.Sc.)	2016-17	Yes	2019-20
25019	Master of Commerce (M.Com)	2016-17	Yes	2019-20
21619	Master of Science (Computer Science)	2016-17	Yes	2019-20



*[Signature]*  
Principal  
Vishwalata Arts Commerce  
& Science College Bhatgaon  
Tal. Yeola Dist-Nashik



# Vishwalata Arts, Commerce & Science College

(College Code : 892)

BHATGAON, Tal. Yeola - 423 401 Dist. Nashik ■ Hello : (02559) 225102, Fax : 225103

Ref. No.

Date :

## Clarifications No. 1.2.1

Percentage of programs in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1. Number of Programs in which CBCS/ Elective course system implemented.


Query No 2:- Please provide affiliating university letter stating implementation of CBCS.

Query No 3:- Please provide minutes of relevant academic council /BOS meeting highlighting the relevant document to this metric of the affiliating university.

Clarification 2:- We are presenting the document stating that we provide the relevant university letter informing about the implementation of CBCS.

Clarification 3:- We are presenting the document stating that the minutes of relevant academic council /BOS meeting highlighting the relevant document to this metric of the affiliating university.



  
Principal  
Vishwalata Arts Commerce  
& Science College Bhatgaon  
Tal. Yeola Dist-Nashik



शैक्षणिक विभाग,  
गणेशखिंड, पुणे-४११ ००७  
दूरध्वनी क्र.: ०२०-२५६०१२५७/५८  
ई-मेल : [boards@pun.unipune.ac.in](mailto:boards@pun.unipune.ac.in)  
संकेतस्थळ : [www.unipune.ac.in](http://www.unipune.ac.in)

सावित्रीबाई फुले पुणे विद्यापीठ  
(पूर्वीचे पुणे विद्यापीठ)  
**Savitribai Phule Pune University**  
(Formerly University of Pune)

Academic Section  
Ganeshkhind, Pune-411 007  
Phone: 020-25601257/58  
E-mail: [boards@pun.unipune.ac.in](mailto:boards@pun.unipune.ac.in)  
Website: [www.unipune.ac.in](http://www.unipune.ac.in)

संदर्भ क्र.: CBS/787

दिनांक: 26/07/2018

**परिपत्रक क्र. १२८/२०१८**

विषय:— सावित्रीबाई फुले पुणे विद्यापीठातील विभागांकरिता पसंतीनुसार श्रेयांक पध्दतीनुसार [(Choice Based Credit System (CBCS)] शिकवण्यात येणा-या सुधारीत पदव्युत्तर पदवी अभ्यासक्रमांचा आराखडा व अभ्यासक्रमाबाबत...

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार सर्व संबंधितांस या परिपत्रकाद्वारे कळविण्यात येते की, सावित्रीबाई फुले पुणे विद्यापीठातील विभागांकरिता पसंतीनुसार श्रेयांक पध्दतीनुसार [(Choice Based Credit System (CBCS)] शिकवण्यात येणा-या खालील सुधारीत पदव्युत्तर पदवी व पदविका अभ्यासक्रमांच्या आराखड्यास व अभ्यासक्रमांस शैक्षणिक वर्ष २०१८-१९ पासून मान्यता देण्यात येत आहे.

सुधारीत अभ्यासक्रम आराखडा यादी (Revised Syllabus Structure)

अ) विज्ञान व तंत्रज्ञान विद्याशाखा: (विज्ञान विषय: ८० श्रेयांक)

1. Department of Health Science (ISHS):
  - i. M.Sc. Health Science
  - ii. Master of Public Health
2. M.Tech. (Energy)
3. M.Sc. (Scientific Computing) (IDSC)
4. Integrated M.Sc. Biotechnology (IBB) (200 Credits)
5. Department of Atmospheric and Space Science:
  - i. M.Sc. (Atmospheric Science)
  - ii. M. Tech. (Atmospheric Science)
6. M.Sc. (Bioinformatics)
7. M.Sc. (Zoology)
8. M.Sc. (Botany)
9. M.Sc. (Physics)
10. M.Sc. (Chemistry) (5-Specializations)
  - i. M.Sc. Physical Chemistry

1 | 7



- ii. M.Sc. Analytical Chemistry
- iii. M.Sc. Biochemistry
- iv. M.Sc. Inorganic Chemistry
- v. M.Sc. Organic Chemistry
- vi. M.Sc. Medicinal Chemistry
- 11. M.A./M.Sc. (Media and Communication)
- 12. Department of Computer Science:
  - i. Master of Computer Application (MCA)
  - ii. M.Sc. (Computer Science)
- 13. M.Sc. (Electronics)
- 14. M.Sc. (Environmental Science)
- 15. Department of Geography:
  - i. M.A./M.Sc. (Geography)
  - ii. M.Sc. (Geoinformatics)
  - iii. P.G.B.Sc. (Applied) GIS Remote Sensing
- 16. M.Sc. (Geology)
- 17. M.Sc. (Instrumentation)
- 18. Department of Mathematics:
  - i. M.A./M.Sc. (Mathematics)
  - ii. M.Sc. (Industrial Mathematics with Computer Application)
- 19. M.Sc. (Microbiology)
- 20. M.A./M.Sc. (Statistics)
- 21. M.Sc. Virology
- 22. M.Tech. (Modeling & Simulation) (100 Credits)
- 23. M.Tech. (Technology Department) :
  - 1. Ph.D. Electronics and Electrical Technology (120 C & 3 years)
  - 2. Ph.D. (CI) (120 C & 3 years)
  - 3. Integrated M. Tech. Ph.D. Chemical and Biotechnology (200 C) (4 Years)
  - 4. Integrated M. Tech. Ph.D. Civil & Environmental Technology (200 C) (4 Years)
  - 5. Integrated M.Tech-Ph. D. (CI) (200C & 4 Years)
  - 6. Integrated M.Tech- Ph.D. Electronics and Electrical Technology (200 C & 4 years)
  - 7. Integrated M. Tech-Ph.D. Mechanical & Material Technology (200 C & 4 years)
  - 8. Ph.D. Mechanical & Material Technology (120 C & 3 Years)
  - 9. Ph.D. Chemical and Biotechnology (120 C & 3 Years)
  - 10. Ph.D. Civil & Environmental Technology (120 C & 3 Years)
  - 11. M. Tech. Computer & Information Technology (100 C & 2 Years)
  - 12. M. Tech. Electronics & Electrical Technology (100 C & 2 Years)
  - 13. M. Tech. Chemical and Biotechnology (100 C & 2 Years)
  - 14. M. Tech. Civil & Environmental Technology (100 C & 2 Years)
  - 15. M. Tech. Mechanical & Material Technology (100 C & 2 Years)



**ब) मानवविज्ञान विद्याशाखा: (६४ श्रेयांक)**

1. M.A./M.Sc. Anthropology
2. M.A. Economics
3. M.A. History
4. M.A. Philosophy
5. M.A. Politics
6. M.A. Psychology
7. M.A. Sociology
8. M.A./M.Sc. Defence & Strategic Studies
9. M.A. Gender, Culture and Development Studies
10. Sanskrit & Prakrit Language Department:
  - i. M.A. Sanskrit
  - ii. M.A. Prakrit
11. Centre for Advance Studies in Sanskrit:
  - i. M.A. in Sanskrit Linguistics
  - ii. M.A. in Indian Logic and Epistemology
  - iii. M.A. in Translation Theory and Application
12. Department of Foreign Languages:
  - i. M.A. (French)
  - ii. M.A. (German)
  - iii. M.A. (Russian)
  - iv. M.A. (Spanish)
13. M.A. English
14. Department of Hindi:
  - i. M.A. (Sahitya)
  - ii. M.A. (Prayojanmulak Hindi)
15. M.A. Marathi
16. Department of Pali:
  - i. M.A. (Pali)
  - ii. M.A. (Buddhist Literature)

**क) वाणिज्य व व्यवस्थापन विद्याशाखा:**

1. Department of Commerce:
  - i. M.Com. (Regular) (96 Credits)
  - ii. M.Com. (E-Commerce) (112 Credits)
2. Department of Management:
  - i. MBA General (100 Credits)
  - ii. MBA Executive (100 Credits)
  - iii. MBA Pharma-Biotech (100 Credits)

**ड) आंतरविद्याशाखीय अभ्यास विद्याशाखा: (६४ श्रेयांक)**

1. Physical Education- M.P.Ed. (80 Credits)
2. Master of Journalism and Mass Communication (MJMC)
3. Library and Information Science MLISc.
4. Department of Education:



- i. M.Ed. ( 80 Credits)
  - ii. M.A. Education
  - iii. B.Sc. B.Ed. (4 Years Integrated) (196 Credits)
5. Centre for Performing Arts:
- i. M.A. (Music)
  - ii. B.A. (Music)

**सुधारीत अभ्यासक्रम यादी (Revised Detailed Syllabus)**

**अ) विज्ञान व तंत्रज्ञान विद्याशाखा: (विज्ञान विषय: ८० श्रेयांक)**

1. M.Sc. Scientific Computing
2. Department of Atmospheric and Space Science:
  - i. M.Sc. (Atmospheric Science)
  - ii. M. Tech. (Atmospheric Science)
3. Integrated M.Sc. Biotechnology (IBB) (200 Credits)
4. M.Sc. Biotechnology (96 Credits)
5. M.Sc. Bioinformatics
6. M.Sc. Zoology
7. M.Sc. Botany
8. M.Sc. Electronic Science
9. Department of Geography:
  - i. M.A./M.Sc. Geography
  - ii. M.Sc. Geoinformatics
  - iii. P.G.B.Sc. (Applied) in GIS and Remote Sensing.
10. M.Sc. Instrumentation Science
11. Department of Mathematics:
  - i. M.Sc. Mathematics
  - ii. Industrial Mathematics Computer Application (IMCA)
12. M.Tech. (Modeling & Simulation) (100 Credits)
13. M.A./M.Sc. Statistics
14. M.Sc. (Chemistry) (5-Specializations)
  - i. M.Sc. Physical Chemistry
  - ii. M.Sc. Analytical Chemistry
  - iii. M.Sc. Biochemistry
  - iv. M.Sc. Inorganic Chemistry
  - v. M.Sc. Organic Chemistry
  - vi. M.Sc. Medicinal Chemistry
15. M.Sc. in Media and Communication Studies
16. Department of Health Science:
  - i. M.Sc. Health Science
  - ii. Master of Public Health (ISHS)
17. M.Tech. (Energy)
18. Department of Environmental Science:
  - i. M.Sc. (Environmental Science),
  - ii. M.Sc. (Urban Water & Sanitation)
  - iii. B.Sc. (Blended Mode)
19. M.Sc. Microbiology





20. Department of Computer Science:
  - i. Master of Computer Application (MCA)
  - ii. M.Sc. (Computer Science)
21. M.Sc. (Physics)
22. Department of Technology:
  - i. M. Tech. Computer & Information Technology (100 C & 2 Years)
  - ii. M. Tech. Electronics & Electrical Technology (100 C & 2 Years)
  - iii. M. Tech. Chemical and Biotechnology (100 C & 2 Years)
  - iv. M. Tech. Civil & Environmental Technology (100 C & 2 Years)
  - v. M. Tech. Mechanical & Material Technology (100 C & 2 Years)

**ब) मानवविज्ञान विद्याशाखा: (६४ श्रेयांक)**

1. M.A. History
2. M.A. Politics
3. M.A. Psychology
4. L.L.M. (One Year) (24 Credits)
5. Department of Pali:
  - i. M.A. Pali,
  - ii. M.A. Buddhist Literature
  - iii. P.G. Diploma in Socially Engaged Buddhism
  - iv. P.G. Certificate Course in Mahayana Buddhist Psychology & Ethics
  - v. P.G. Diploma in Buddhist Psychology & Psychotherapy
  - vi. P.G. Diploma Course in Pali
  - vii. P.G. Diploma Course in Buddhist Studies
  - viii. Diploma in Professional Skills in Clinical & Counseling Psychology
6. M.A. Marathi
7. Department of Hindi:
  - i. M.A (Sahitya),
  - ii. M.A. (Prayojanmulak Hindi)
8. M.A. Gender, Culture and Development Studies
9. Centre for Performing Arts:
  - i. M.A. (Music)
  - ii. B.A. (Music)
10. M.A. Philosophy
11. M.A. Sociology
12. Department of Foreign Languages:
  - i. M.A. (French)
  - ii. M.A. (German)
  - iii. M.A. (Russian)
  - iv. M.A. (Spanish)
13. M.A. Economics
14. Department of Sanskrit & Prakrit Language:
  - i. M.A. Sanskrit
  - ii. M.A. Prakrit
15. M.A. English
16. M.A./M.Sc. Anthropology



**क) वाणिज्य व व्यवस्थापन विद्याशाखा:**

1. Department of Commerce:
  - i. M.Com. (Regular) (96 Credits)
  - ii. M.Com. (E-Commerce) (112 Credits)
2. Department of Management:
  - i. MBA General (100 Credits)
  - ii. MBA Pharma-Biotech (100 Credits)
  - iii. MBA Executive (100 Credits)


**ड) आंतरविद्याशाखीय अभ्यास विद्याशाखा : (६४ श्रेयांक)**

1. Department of Education:
  - i. M.Ed. ( 80 Credits)
  - ii. M.A. Education
  - iii. B.Sc. B.Ed. (4 Years Integrated) (196 Credits)
2. Centre for Performing Arts:
  - i. M.A. (Music)
  - ii. B.A. (Music)
3. Library and Information Science
4. Department of Communication and Journalism
  - i. Master of Journalism and Mass Communication
  - ii. Diploma in Mass Media,
  - iii. Vruttapatravidya Padvika
  - iv. Certificate Course in Photo Journalism

विज्ञान विषयाची पदवी प्राप्त करण्यासाठी एकूण ८० श्रेयांक (80 Credits) व सामाजिक शास्त्राची (मानव विज्ञान विद्याशाखा व आंतरविद्याशाखीय अभ्यास विद्याशाखा) पदवी प्राप्त करण्यासाठी पूर्वीप्रमाणेच एकूण ६४ श्रेयांक (64 Credits) असतील.

मा. विभागप्रमुख, विद्यापीठातील सर्व विभाग यांना विनंती की, सदर परिपत्रकाचा आशय सर्व संबंधित प्राध्यापक व विद्यार्थ्यांच्या निदर्शनास आणून द्यावा.



  
उपकुलसचिव  
(शैक्षणिक विभाग)

# सावित्रीबाई फुले पुणे विद्यापीठ

(पूर्वीचे पुणे विद्यापीठ)

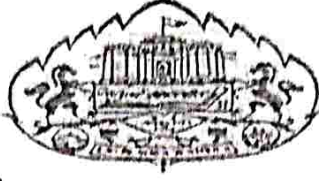
दूरधनी क्र.:

०२०-२५६९१२३३.

०२०-२५६०१२५७/५८/५९.

फॅक्स :- ०२०-२५६९१२३३

संदर्भ क्र. : सी.बी.सी./८९४



शैक्षणिक विभाग,  
गणेशगिरी, पुणे ४११ ००७.

टेलिग्राफ :- युनिपुणे

वेबसाईट :- www.unipune.ac.in

ई-मेल :- boards@pun.unipune.ac.in

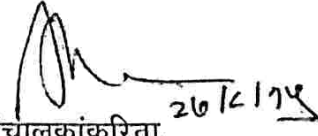
दिनांक :- २७ ऑगस्ट, २०१५

## परिपत्रक क्रमांक ११२ /२०१५

विषय :- वाणिज्य विद्याशाखेअंतर्गत असलेल्या बी.बी.एम. (आय.बी.) पदवीच्या नावामध्ये [Nomenclature] बदल करण्याबाबत...

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार सर्व संबंधितांस या परिपत्रकाद्वारे कळविण्यात येत आहे की, वाणिज्य विद्याशाखेअंतर्गत असलेल्या बी.बी.एम. (आय.बी.) या पदवीच्या नावामध्ये [Nomenclature] बी.बी.ए. (आय.बी.) [Bachelor of Business Administration (International Business)] असा बदल शैक्षणिक वर्ष २०१५-१६ पासून करण्यास मान्यता देण्यात येत आहे.

मा.विभागप्रमुख, वाणिज्य विभाग, सावित्रीबाई फुले पुणे विद्यापीठ, पुणे ७ व मा.प्राचार्य, विद्यापीठाशी संलग्न सर्व वाणिज्य महाविद्यालये यांना विनंती की, सदर परिपत्रकाचा आशय सर्व संबंधितांच्या, प्राध्यापक व विद्यार्थी यांच्या निदर्शनास आणून द्यावा.

  
संचालकांकरिता,  
(म.वि.वि.मं.)

प्रत माहिती व पुढील योग्य त्या कार्यवाहीसाठी :-

१. मा.अधिष्ठाता, वाणिज्य विद्याशाखा
२. मा.संचालक, म.वि.वि.मं.
३. मा.विभागप्रमुख, वाणिज्य विभाग.
४. मा.प्राचार्य, सर्व संलग्न महाविद्यालये.



कृ.मा.प.



सावित्रीबाई फुले पुणे विद्यापीठ  
(पूर्वीचे पुणे विद्यापीठ)

शैक्षणिक विभाग

गणेशखिंड, पुणे-४११ ००७

दूरध्यानी क्र. : ०२०-२५६०१२५७/५८/५९

ई-मेल : boards@pun.unipune.ac.in

संकेतस्थळ : [www.unipune.ac.in](http://www.unipune.ac.in)

संदर्भ क्र. : सीबीसीएम/२४८

Savitribai Phule Pune University  
(Formerly University of Pune)

Academic Section

Ganeshkhind, Pune - 411 007

Phone : 020-25601257/58/59

E-mail : boards@pun.unipune.ac.in

Website : [www.unipune.ac.in](http://www.unipune.ac.in)

दिनांक : २८ मार्च, २०१९.

परिपत्रक क्र. ६५ /२०१९

विषय : वाणिज्य व व्यवस्थापन विद्याशाखेतील तृतीय वर्ष वाणिज्य (२०१३ पॅटर्न) (T.Y.B.Com., 2013 pattern) पदवीच्या (नियमित व बहिःस्थ) अभ्यासक्रमातील "अॅडव्हान्स्ड अकौंटिंग" या विषयाच्या अभ्यासक्रमातील बदल शैक्षणिक वर्ष २०१९-२० पासून लागू करण्याबाबत.....

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार सर्व संबंधितांस या परिपत्रकाद्वारे कळविण्यात येत आहे की, वाणिज्य व व्यवस्थापन विद्याशाखेतील तृतीय वर्ष वाणिज्य (२०१३ पॅटर्न) (T.Y.B.Com. 2013 pattern) पदवीच्या (नियमित व बहिःस्थ) अभ्यासक्रमातील "अॅडव्हान्स्ड अकौंटिंग" या विषयाच्या टर्म २ मधील प्रकरण ५ मधील अभ्यासक्रमात बदल करण्यात येत असून सदर बदल शैक्षणिक वर्ष २०१९-२० पासून लागू करण्यात येत आहे.

सदर अभ्यासक्रम विद्यापीठाच्या [www.unipune.ac.in](http://www.unipune.ac.in) या संकेतस्थळावर syllabi > Revised syllabus from the Academic Year 2019 > Faculty - Commerce & Management या शीर्षकाखाली उपलब्ध करण्यात आला आहे.

मा. प्राचार्य, विद्यापीठाशी संलग्न सर्व महाविद्यालये यांना विनंती की, सदर परिपत्रकाचा आशय सर्व संबंधितांच्या निदर्शनास आणून द्यावा.



  
उपकुलसचिव  
(शैक्षणिक विभाग)



सावित्रीबाई फुले पुणे विद्यापीठ  
(पूर्वीचे पुणे विद्यापीठ)

शैक्षणिक विभाग

गणेशखिंड, पुणे-४११ ००७

दूरध्वनी क्र. : ०२०-२५६०१२५७/५८/५९

ई-मेल : boards@pun.unipune.ac.in

संकेतस्थळ : [www.unipune.ac.in](http://www.unipune.ac.in)

संदर्भ क्र. : सीबीसी एम/६२७

Savitribai Phule Pune University  
(Formerly University of Pune)

Academic Section

Ganeshkhind, Pune - 411 007

Phone : 020-25601257/58/59

E-mail : boards@pun.unipune.ac.in

Website : [www.unipune.ac.in](http://www.unipune.ac.in)

दिनांक : ३ जुलै, २०१९.

परिपत्रक क्र. १३८ / २०१९

विषय : वाणिज्य व व्यवस्थापन विद्याशाखेंतर्गत बी.कॉम., बी.कॉम.  
(Restructuring Pattern) व बी.कॉम. (Vocational Pattern) या पदवीच्या  
सुधारित आराखड्यास (Semester & Choice Based Credit System) व  
प्रथम वर्षाच्या सुधारित अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२०  
पासून मान्यता देण्याबाबत...

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार सर्व संबंधितांस या  
परिपत्रकाद्वारे कळविण्यात येत आहे की, वाणिज्य व व्यवस्थापन विद्याशाखेतील  
बी.कॉम., बी.कॉम. (Restructuring Pattern) व बी.कॉम. (Vocational Pattern) या  
पदवीच्या सुधारित आराखड्यास (Semester & Choice Based Credit System) व प्रथम  
वर्षाच्या सुधारित अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२० पासून मान्यता  
देण्यात येत आहे.

सदर अभ्यासक्रम विद्यापीठाच्या [www.unipune.ac.in](http://www.unipune.ac.in) या संकेतस्थळावर syllabi >  
Revised syllabus from the Academic Year 2019 > Faculty - Commerce & Management  
- 1) Commerce या शीर्षकाखाली उपलब्ध करण्यात आला आहे.

मा. प्राचार्य, विद्यापीठाशी संलग्न सर्व महाविद्यालय यांना विनंती की, सदर  
परिपत्रकाचा आशय सर्व संबंधितांच्या निदर्शनास आणून द्यावा.



  
उपकुलसचिव  
(शैक्षणिक विभाग)



सावित्रीबाई फुले पुणे विद्यापीठ  
(पूर्वीचे पुणे विद्यापीठ)

Academic Section

Ganeshkhind, Pune - 411 007

Phone : 020-25601257/58/59

E-mail : boards@pun.unipune.ac.in

Website : [www.unipune.ac.in](http://www.unipune.ac.in)

शैक्षणिक विभाग

गणेशखिंड, पुणे-४११ ००७

दूरध्वनी क्र. : ०२०-२५६०१२५७/५८/५९

ई-मेल : boards@pun.unipune.ac.in

संकेतस्थळ : [www.unipune.ac.in](http://www.unipune.ac.in)

संदर्भ क्र. : सी/सीएम/६२४

Savitribai Phule Pune University  
(Formerly University of Pune)

दिनांक : ३ जुलै, २०१९

**परिपत्रक क्र. १४१ / २०१९**


**विषय : वाणिज्य व व्यवस्थापन विद्याशाखेतर्गत बी.बी.ए. (आय.बी.) या पदवीच्या (Semester & Choice Based Credit System) सुधारित आराखडयास व प्रथम वर्षाच्या सुधारित अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२० पासून मान्यता देणेबाबत.**

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार सर्व संबंधितांस या परिपत्रकाद्वारे कळविण्यात येत आहे की, वाणिज्य व व्यवस्थापन विद्याशाखेतील वाणिज्य व व्यवस्थापन विद्याशाखेतर्गत बी.बी.ए. (आय.बी.) या पदवीच्या (Semester & Choice Based Credit System) सुधारित आराखडयास व प्रथम वर्षाच्या सुधारित अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२० पासून मान्यता देण्यात येत आहे.

सदर अभ्यासक्रम विद्यापीठाच्या [www.unipune.ac.in](http://www.unipune.ac.in) या संकेतस्थळावर syllabi > Revised syllabus from the Academic Year 2019 > Faculty - Commerce & Management - I) Commerce या शीर्षकाखाली उपलब्ध करण्यात आला आहे.

मा. प्राचार्य, विद्यापीठाशी संलग्न सर्व महाविद्यालय यांना विनंती की, सदर परिपत्रकाचा आशय सर्व संबंधितांच्या निदर्शनास आणून द्यावा.



  
उपकुलसचिव  
(शैक्षणिक विभाग)



सावित्रीबाई फुले पुणे विद्यापीठ  
(पूर्वीचे पुणे विद्यापीठ)

शैक्षणिक विभाग

गणेशखिंड, पुणे-४११ ००७

दूरध्वनी क्र. : ०२०-२५६०१२५७/५८/५९

ई-मेल : boards@pun.unipune.ac.in

संकेतस्थळ : [www.unipune.ac.in](http://www.unipune.ac.in)

संदर्भ क्र : सीबीसीएम / E23

Savitribai Phule Pune University  
(Formerly University of Pune)

Academic Section

Ganeshkhind, Pune - 411 007

Phone : 020-25601257/58/59

E-mail : boards@pun.unipune.ac.in

Website : [www.unipune.ac.in](http://www.unipune.ac.in)

दिनांक : ३ जुलै, २०१९.

परिपत्रक क्र. १४० / २०१९

**विषय : वाणिज्य व व्यवस्थापन विद्याशाखेंतर्गत बी.बी.ए. (कॉम्प्युटर  
ॲप्लिकेशन) या पदवीच्या (Semester & Choice Based Credit System)  
सुधारित आराखडयास व प्रथम वर्षाच्या सुधारित अभ्यासक्रमास  
शैक्षणिक वर्ष २०१९-२० पासून मान्यता देणेबाबत.**

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार सर्व संबंधितांस या परिपत्रकाद्वारे कळविण्यात येत आहे की, वाणिज्य व व्यवस्थापन विद्याशाखेतील वाणिज्य व व्यवस्थापन विद्याशाखेंतर्गत बी.बी.ए. (कॉम्प्युटर ॲप्लिकेशन) या पदवीच्या (Semester & Choice Based Credit System) सुधारित आराखडयास व प्रथम वर्षाच्या सुधारित अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२० पासून मान्यता देण्यात येत आहे.

सदर अभ्यासक्रम विद्यापीठाच्या [www.unipune.ac.in](http://www.unipune.ac.in) या संकेतस्थळावर syllabi > Revised syllabus from the Academic Year 2019 > Faculty - Commerce & Management - I) Commerce या शीर्षकाखाली उपलब्ध करण्यात आला आहे.

मा. प्राचार्य, विद्यापीठाशी संलग्न सर्व महाविद्यालय यांना विनंती की, सदर परिपत्रकाचा आशय सर्व संबंधितांच्या निदर्शनास आणून द्यावा.



*Dato!*  
उपकुलसचिव  
(शैक्षणिक विभाग)



शैक्षणिक विभाग

गणेशखिंड, पुणे-४११ ००७

दूरध्वनी क्र. : ०२०-२५६०१२५७/५८/५९

ई-मेल : boards@pun.unipune.ac.in

संकेतस्थळ : www.unipune.ac.in

संदर्भ क्र : CBS/628

सावित्रीबाई फुले पुणे विद्यापीठ  
(पूर्वीचे पुणे विद्यापीठ)

Savitribai Phule Pune University  
(Formerly University of Pune)

Academic Section

Ganeshkhind, Pune - 411 007

Phone : 020-25601257/58/59

E-mail : boards@pun.unipune.ac.in

Website : www.unipune.ac.in

दिनांक : 4/7/2019

परिपत्रक क्र. १६३/२०१९

विषय: विज्ञान व तंत्रज्ञान विद्याशाखेतर्गत बी.एस्सी. (B.Sc.) व एम.एस्सी. (M.Sc.) या पदवी आणि पदव्युत्तर पदवीचा पसंतीनुसार श्रेयांक पध्दतीनुसार (CBCS) सुधारित आराखडा व सुधारित प्रथम वर्ष अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२० पासून मान्यता देणेबाबत

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार सर्व संबंधितांस या परिपत्रकाद्वारे कळविण्यात येते की, विज्ञान व तंत्रज्ञान विद्याशाखेतर्गत पसंतीनुसार श्रेयांक पध्दतीनुसार (Choice Based Credit System) खालील बी.एस्सी. (B.Sc.) व एम.एस्सी. (M.Sc.) या पदवी आणि पदव्युत्तर पदवीचा सुधारित आराखडा व सुधारित प्रथम वर्षाच्या अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२० पासून मान्यता देण्यात येत आहे.

Sr. No.	Name of Revised UG Programme
1	F.Y.B.Sc. (Botany)
2	F.Y.B.Sc. (Mathematics)
3	F.Y.B.A. (Geography)
4	F.Y.B.Sc. (Geography)
5	F.Y.B.Com. (Geography)
6	F.Y.B.Sc. (Electronics)
7	F.Y. B. Sc. Electronics of B. Sc.(Computer Science)
8	F.Y.B.Sc. (Microbiology)
9	F.Y.B.Sc. (Wine Technology)
10	F.Y.B.Sc. (Zoology)
11	F.Y.B.Sc. (Physics)
12	F.Y.B.Sc. (Chemistry)
13	F.Y.B.Sc. (Computer Science)
14	F. Y. B. A. Applied Statistics
15	F. Y. B. A. Mathematical Statistics
16	F. Y. B. A. Statistical Pre-Requisites
17	F. Y. B. A. Statistics
18	F.Y.B.Sc. Statistics / Statistical Techniques
19	F.Y. B. Sc. Statistics of B. Sc. (Computer Science)





20	F.Y.B.Sc. (Biotechnology)
21	F.Y., S.Y., T.Y. B.Sc. (Hospitality Studies)
22	F.Y.B.Sc. (Aviation)
23	F.Y.B.Sc. (Home Science)
24	F.Y. (Bachelor of Computer Applications)
25	F.Y.B.Sc. (Environmental Science)
26	F.Y.,S.Y.,T.Y.B.Sc.(Blended Mode) Earth and Atmospheric Science

Sr. No.	Name of Revised PG Programme
1	M.Sc.-I (Botany) (for Colleges & Centers)
2	M.Sc.-I (Mathematics) (for Colleges & Centers)
3	M.Sc.-I (Geography) (for Colleges & Centers)
4	M.Sc. (Applied) Petroleum Technology (for Colleges & Centers)
5	M.A./M.Sc.-I (Statistics) (for Colleges & Centers)
6	M.Sc.-I (Electronics) (for Colleges & Centers)
7	M.Sc.-I (Electronics) for Department of Electronic Science
8	M.Sc.-I (Microbiology) (for Colleges & Centers)
9	M.Sc.-II (Microbiology) (for Department of Microbiology)
10	M.Sc. (PPPR) Microbiology (for Colleges & Centers)
11	M.Sc.-I (Zoology) (for Colleges & Centers)
12	M.Sc.-I (Physics) (for Colleges & Centers)
13	M.Sc.-I (Chemistry) (for Colleges & Centers)
14	M.Sc.-II (Computer Science) (for Colleges & Centers)
15	Master in Computer Application (M.C.A.) (for Colleges & Centers)
16	M.Sc.-I (Biotechnology) (for Colleges & Centers)
17	M.Sc.-I (Biodiversity) (for Colleges & Centers)
18	M.Sc.-I (Environmental Science) (for Colleges & Centers)
19	M.Sc. Mathematics (Part-I & II) (for Department)
20	M.Sc. Industrial Mathematic with Computer Application (for Department)

सदरचा अभ्यासक्रम सावित्रीबाई फुले पुणे विद्यापीठाच्या [www.unipune.ac.in](http://www.unipune.ac.in) या संकेत स्थळावर Syllabi या शीर्षकाखाली उपलब्ध आहे.

मा. प्राचार्य, सर्व संलग्नित विज्ञान महाविद्यालये व मा. विभागप्रमुख, सावित्रीबाई फुले पुणे विद्यापीठ यांना विनंती की, सदर परिपत्रकाचा आशय सर्व संबंधितांच्या निदर्शनास आणून द्यावा.

  
उपकुलसचिव  
(शैक्षणिक विभाग)



# Savitribai Phule Pune University

## RULES AND REGULATIONS

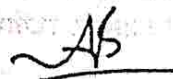
for

### UG Choice Based Credit System Programme Under Faculty of Science

Effective from June 2019



**Prof. S. D. Dhole**  
Chairman  
UG/PG Rule & Regulation committee,  
SPPU, Pune



**Prof. A. D. Shaligram**  
Dean,  
Faculty of Science & Technology  
SPPU, Pune



## 1. Background/Preamble:

Education plays enormously significant role in building of a nation. There are quite a large number of educational institutions, engaged in imparting education in our country. Majority of them have entered recently into semester system to match with international educational pattern. However, our present education system is churning out youth who have to compete locally, regionally, nationally as well as globally. The present alarming situation necessitates transformation and/or redesigning of system, not only by introducing innovations but developing learner-centric approach.

Majority of Indian higher education institutions have been following the system which obstructs the flexibility for the students to study the subjects/courses of their choice and their mobility to different institutions. There is need to allow the flexibility in education system, so that students depending upon their interests can choose inter-disciplinary, intra-disciplinary and skill-based courses. This can only be possible when choice based credit system (CBCS), an internationally acknowledged system, is adopted. The choice based credit system not only offers opportunities and avenues to learn core subjects but also explore additional avenues of learning beyond the core subjects for holistic development of an individual. The CBCS will undoubtedly facilitate benchmarking of our courses with best international academic practices.

### 1.1 Preface

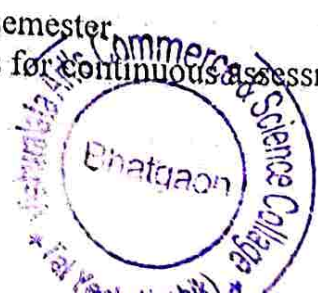
In a bid to fine tune our scientific education system to the global standards & practices, the Credit-Grade based performance and assessment system will be implemented with effect from June 2019 onwards for all the Under Graduate Programmes (UG) under the Faculty of Science, Savitribai Phule Pune University, Pune, starting with First Year.

With the advent of frontier science, technology and ever-changing expectations from the Industry and Society, it has become imperative to relook at the structure and subject contents of various UG courses to make it contemporary and relevant.

As per the decision by the authorities of Savitribai Phule Pune University, the faculty of Science has prepared the choice based credit system and its structure. The revised course is of 132 credits and 1 credit is equivalent to 15 hours. Assessments in credit system consist of A) In-semester continuous assessment and B) End-semester assessment for the Theory head and Term Work/ Practical / Oral / Presentation at the end of the semester for Practical, Oral, Seminar and Project Head.

The faculty of Science has shouldered the idea of incorporating latest advances in Science and technology and equip the subject/syllabus contents with latest and relevant topics and know-hows. Accordingly the new structure and syllabi are being introduced, to be implemented from the academic year 2019-20 from First Year and it will continue for subsequent years.

1. All UG programmes, under Faculty of Science shall be offered with credit system.
2. All the B.Sc. programmes running under the Faculty of Science will be of three years duration.
3. The total no. of credits required for the completion of the programme is 132 credits.
4. One credit is equivalent to 15 hours.
5. A student is required to earn 132 credits in a minimum period of six semesters.
6. There are eight mandatory credits to be earned by the students for the award of degree.
7. Final CGPA will be calculated on the basis of 132 credits.
8. There is 15 weeks of teacher-student interaction during the semester.
9. The 15 week is divided into 12 weeks teaching and 3 weeks for continuous assessment including preparation time to students during the semester.



10. The workload will be calculated on the basis of 12 weeks teaching only.

### 1.2 Advantages of the choice based credit system:

1. Shift in focus from the teacher-centric to student-centric education.
2. Student may undertake as many credits as they can cope with (without repeating all courses in a given semester if they fail in one/more courses).
3. CBCS allows students to choose inter-disciplinary, intra-disciplinary courses, skill oriented papers (even from other disciplines according to their learning needs, interests and aptitude) and more flexibility for students.
4. CBCS makes education broad-based and at par with global standards. One can take credits by combining unique combinations. For example, Physics with Economics, Microbiology with Chemistry or Environment Science etc.
5. CBCS offers flexibility for students to study at different times and at different institutions to complete one course (ease mobility of students). Credits earned at one institution can be transferred to another institution.

### 1.3 Implementation of UG course structure:

1. For First year: Student has to select 4 different subject among the subjects offered by the College /Institute.
2. For Second year: Student has to select 3 different subject among 4 subject chosen in first year
3. For Third year: Student has to select only 1 subject among the 3 subject opted in second year
4. CGPA will be calculated on the basis of core 132 credits only
5. Each theory credit is equivalent to 15 clock hours of teaching and each practical credit is equivalent to 30 clock hours of teaching in a semester.
6. There is 15 weeks of teacher-student interaction during the semester.
7. The 15 week is divided into 12 weeks teaching and 3 weeks for continuous assessment including preparation time to students during the semester.
8. The workload will be calculated on the basis of 12 weeks teaching only.
9. For the purpose of computation of work-load the following mechanism may be adopted as per UGC guidelines:
  - i) 1 Credit = 1 Theory period of one hour fifteen minute duration per week
  - ii) 1 Credit = 1 Tutorial period of one hour fifteen minute duration per week
  - iii) 1 Credit = 1 Practical period of two hour ten minute duration per week
10. Each theory Lecture time for FY,SY,TY is of 50 min. (3 Lectures per week for 2 credit course)
11. Each practical session time for FY is of 3 hour 15 minutes = 195 min
12. Each practical session time for SY & TY is of 4 hour 20 minutes = 260 min
13. Exam pattern: University assessment 70 % and continuous internal assessment 30 %.
14. For Internal examination minimum two tests per paper of which one has to be written test of 10 marks.
15. Methods of assessment for Internal exams: Seminars, Viva-voce, Projects, Surveys, Field visits, Tutorials, Assignment, Group Discussion.



## 2. UG Programme Structure:

2.1 Each B.Sc. programme is of 3 years duration. The minimum total no. of credits requirement for each programme is 132. In the structure, the credits are distributed over 6 semesters. The open elective included, gives the student a wide choice of subjects from other programmes. The Credit structure for B.Sc. programme is given below in Table 1.



**Table 1**  
**Savitribai Phule Pune University**  
**Faculty of Science and Technology**  
**Structure of Choice Based Credit System for Undergraduate Science Programme**

Semester	Discipline Specific Core Courses (CC)		Ability Enhancement Compulsory Courses (AECC)		Discipline specific Elective Courses (DSEC)		Skill Enhancement Courses (SEC)		Total Credit
	Course	Theory 1 + Theory 2 + Practical Credit	Course	Theory + Practical Credit	Course	Theory 1 + Theory 2 + Practical Credit	Course	Theory + Practical Credit	
I	CC - I	2 + 2 + 1.5 = 5.5							22
	CC - II	2 + 2 + 1.5 = 5.5							
	CC - III	2 + 2 + 1.5 = 5.5							
	CC - IV	2 + 2 + 1.5 = 5.5							
II	CC - V	2 + 2 + 1.5 = 5.5							22
	CC - VI	2 + 2 + 1.5 = 5.5							
	CC - VII	2 + 2 + 1.5 = 5.5							
	CC - VIII	2 + 2 + 1.5 = 5.5							
III	CC - IX	2 + 2 + 2 = 6	AECC - I (Environment)	2 + 0 = 2					22
	CC - X	2 + 2 + 2 = 6	AECC - II (Language communication)	2 + 0 = 2					
	CC - XI	2 + 2 + 2 = 6							



IV	CC - XII	2 + 2 + 2 = 6	AECC - III (Environment)	2 + 0 = 2					
	CC - XIII	2 + 2 + 2 = 6	AECC - IV (Language communication)	2 + 0 = 2	-	-	-	-	
	CC - XIV	2 + 2 + 2 = 6							
V	-	-	-	-	DSEC - I	2 + 2 + 2 = 6	SEC - I	2 + 0 = 2	
	-	-	-	-	DSEC - II	2 + 2 + 2 = 6	SEC - II	2 + 0 = 2	
	-	-	-	-	DSEC - III	2 + 2 + 2 = 6	-	-	22
VI	-	-	-	-	DSEC - IV	2 + 2 + 2 = 6	SEC - III	2 + 0 = 2	
	-	-	-	-	DSEC - V	2 + 2 + 2 = 6	SEC - IV	2 + 0 = 2	
	-	-	-	-	DSEC - VI	2 + 2 + 2 = 6	-	-	22
<b>Total Credit</b>									<b>132</b>

*[Handwritten signature]*



## 2.2 Mandatory Credit courses for award of B.Sc. Degree:

In addition to the compulsory credits of 132, the student has to earn additional 8 credits from following groups by taking/participating/conducting respective activities.

Courses in Group I are compulsory.

The student can earn maximum 04 credits from an individual group from Group 2 to Group -9.

These extra credits will not be considered for GPA calculation, however these are mandatory for the completion and award of B. Sc. Degree.

- Group 1:** Physical Education (at F. Y. B. Sc. Sem. I) -01 credit  
Physical Education (at F. Y. B. Sc. Sem. II) - 01 credit

(Note: Group I is compulsory for all the students as stated above.)

- Group 2:** Sport representation at College level - 01 credit  
Sport representation at University/Statelevel - 02 credits

- Group 3:** National Social Service Scheme (participation in Camp): 01 credits  
N.C.C.(with participation in annual camp) -01 credit  
N. C. C. (with B certificate/C certificate award)- 02 credits  
N.S.S./N.C.C. Republic day parade participation - 04 credits

- Group 4:** Avishkar participation; Extension activity participation, Cultural activity participation -01 credit  
Avishkar selection at University level - 02 credits  
Avishkar winner at state level - 04 credits

- Group 5:** Research paper presentation at State/National level - 01 credits  
Research paper presentation at International level - 02 credits

- Group 6:** Participation in Summer school/programme; Short term course (not less than 1-week duration) - 03 credit.

- Group 7:** Scientific Survey, Societal survey, - 02 credits.

- Group 8:** Field Visits; Study Tours; Industrial Visits; Participation in curricular/ cocurricular competitions- 01 Credit.

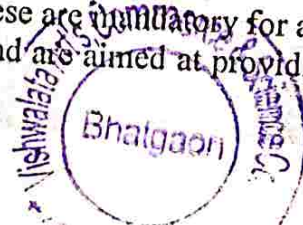
- Group 9:** Online certificate Courses /MOOC Courses/ Career Advancement Course up to 04 credits (Minimum,10 Hrs. / credit)





### 2.3 Outlines of Choice Based Credit System [Detailed description of the courses]:

- a) **Core Course**(14 for honours courses; 4 discipline specific papers each for regular courses and 2 papers each for English and Hindi/MIL in B.A./B.Com): The papers under this category are going to be taught uniformly across all universities with 30% deviation proposed in the draft. The purpose of fixing core papers is to ensure that all the institutions follow a minimum common curriculum so that each institution/university adheres to common minimum standard. Also the course designed for papers under this category aim to cover the basics that a student is expected to imbibe in that particular discipline. A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
- b) **Elective Course**: Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.
- i. **Discipline Specific Elective (DSE) Course**(4 for honours courses and 2 each for regular courses): Elective courses offered under the main discipline/subject of study is referred to as Discipline Specific Elective. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).
  - ii. **Dissertation/Project\***: An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.
  - iii. **Generic Elective (GE) Course**(4 for honours courses and 2 each for B.A./B.Com. regular courses): An elective course chosen from an unrelated discipline/subject, with an intention to seek exposure beyond discipline/s of choice is called a Generic Elective. The purpose of this category of papers is to offer the students the option to explore disciplines of interest beyond the choices they make in Core and Discipline Specific Elective papers. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need.
- P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective.
- c) **Ability Enhancement Courses (AEC)**: The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement Courses (SEC). "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; i. Environmental Science and ii. English/MIL(Marathi/Hindi) Communication. These are compulsory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.



- i. **Ability Enhancement Compulsory Courses (AECC):** Environmental Science, English Communication/Hindi Communication/MIL Communication.
  - ii. **Skill Enhancement Courses (SEC)**(minimum 2 for honours courses and 4 for regular courses): These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge and should contain both theory and lab/hands-on/training/field work. The main purpose of these courses is to provide students life-skills in hands-on mode so as to increase their employability. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need.
- d) **Practical/tutorials** (One each with every core and discipline/generic specific elective paper): The list of practical provided is suggestive in nature and each university has the freedom to add/subtract/edit practical from the list depending on their faculty and infrastructure available. Addition will however be of similar nature.

e) **Introducing Research Component in Under-Graduate Courses**

**Project work/Dissertation** is considered as a special course involving application of knowledge in solving / analyzing /exploring a real life situation / difficult problem. A Project/Dissertation work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline specific elective paper.

### 3. Eligibility for Admission:

#### 3.1 First Year B.Sc.:

- A. Higher Secondary School Certificate (10+2) or its equivalent Examination with English and three science subjects such as Physics, Chemistry, Mathematics, Biology, Geography, Geology, etc. OR
- B. Three Years Diploma in Pharmacy Course of Board of Technical Education conducted by Government of Maharashtra or its equivalent. OR
- C. Higher Secondary School Certificate (10+2) Examination with English and vocational subject of + 2 level (MCVC) - Medical Lab. Technician (Subject Code = P1/P2/P3)

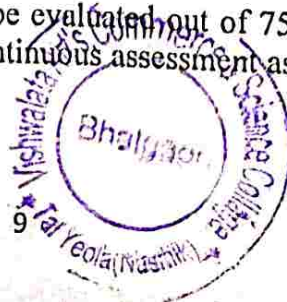
Admissions will be given as per the selection procedure / policies adopted by the respective college keeping in accordance with conditions laid down by the University of Pune.

Reservation and relaxation will be as per the Government rules.

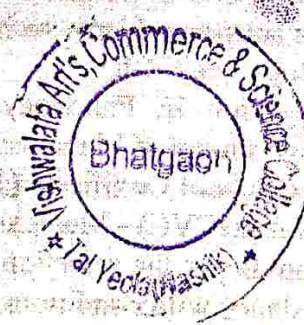
#### 3.2 Medium of Instruction: English

#### 3.3 Award of Credits:

- Each course having 4 credits shall be evaluated out of 100 marks and student should secure at least 40 marks (40%) in continuous assessment as well as term end exam to earn full credits of that course.
- Each course having 3 credits shall be evaluated out of 75 marks as students should secure at least 30 marks (40%) in continuous assessment as well as term end exam to earn full credits of that course.



- Each course having 2 or 1.5 credits shall be evaluated out of 50 marks and student should secure at least 20 marks (40%) in continuous assessment as well as term end exam to earn full credits of that course.
- Each course having 1 credits shall be evaluated out of 25 marks as student shall secure 10 marks (40%) in continuous assessment as well as term end exam to earn full credits of that course.
- GPA shall be calculated based on the marks obtained in the respective subject provided that student should have obtained credits for that course. Structure of marks scheme for choice based credit system program is given in Table 2.



A handwritten signature in black ink, appearing to be "A. S. S.", written in a cursive style.

**Table 2**  
**Structure of Examination Mark Scheme of Choice Based Credit System for Undergraduate Science Programme**

Sem	Course opted	Course Name	Credit	Internal Max Marks	External Max Marks	Total Max Marks
I	CC-1	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-1 Practical	Practical	1.5	15	35	50
	CC-2	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-2 Practical	Practical	1.5	15	35	50
	CC-3	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-3 Practical	Practical	1.5	15	35	50
	CC-4	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-4 Practical	Practical	1.5	15	35	50
			<b>22</b>	<b>180</b>	<b>420</b>	<b>600</b>
II	CC-5	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-5 Practical	Practical	1.5	15	35	50
	CC-6	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-6 Practical	Practical	1.5	15	35	50
	CC-7	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-7 Practical	Practical	1.5	15	35	50
	CC-8	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-8 Practical	Practical	1.5	15	35	50
			<b>22</b>	<b>180</b>	<b>420</b>	<b>600</b>
<b>First Year Total</b>			<b>44</b>	<b>360</b>	<b>840</b>	<b>1200</b>



III	CC-9	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-9 Practical	Practical	2	15	35	50
	CC-10	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-10 Practical	Practical	2	15	35	50
	CC-11	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-11 Practical	Practical	2	15	35	50
	AECC-1A	Environmental Science -1	2	15	35	50
AECC-2A	English MIL(Marathi/Hindi) Communication -1	2	15	35	50	
			<b>22</b>	<b>165</b>	<b>385</b>	<b>550</b>
IV	CC-12	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-12 Practical	Practical	2	15	35	50
	CC-13	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-13 Practical	Practical	2	15	35	50
	CC-14	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-14 Practical	Practical	2	15	35	50
	AECC-1B	Environmental Science -2	2	15	35	50
AECC-2B	English MIL(Marathi/Hindi) Communication -2	2	15	35	50	
			<b>22</b>	<b>165</b>	<b>385</b>	<b>550</b>
<b>Second Year Total</b>			<b>44</b>	<b>330</b>	<b>770</b>	<b>1100</b>

V	DSE-1A	Paper 1:	2	15	35	50	
	DSE-1B	Paper 2:	2	15	35	50	
	DSE-2A	Paper 3:	2	15	35	50	
	DSE-2B	Paper 4:	2	15	35	50	
	DSE-3A	Paper 5:	2	15	35	50	
	DSE-3B	Paper 6:	2	15	35	50	
	DSE-1	Practical Lab 1	2	15	35	50	
	DSE-2	Practical Lab 2	2	15	35	50	
	DSE-3	Practical Lab 3	2	15	35	50	
	SEC-1	Skill Based Course 1:	2	15	35	50	
	SEC-2	Skill Based Course 2:	2	15	35	50	
				<b>22</b>	<b>165</b>	<b>385</b>	<b>550</b>



VI	DSE - 4A	Paper 1:	2	15	35	50
	DSE - 4B	Paper 2:	2	15	35	50
	DSE - 5A	Paper 3:	2	15	35	50
	DSE - 5B	Paper 4:	2	15	35	50
	DSE - 6A	Paper 5:	2	15	35	50
	DSE - 6B	Paper 6:	2	15	35	50
	DSE-4	Practical Lab 1	2	15	35	50
	DSE-5	Practical Lab 2	2	15	35	50
	DSE-6	Project	2	15	35	50
	SEC-2	Skill Based Course 2	2	15	35	50
SEC-2	Skill Based Course 2	2	15	35	50	
<b>Third Year Total</b>			<b>22</b>	<b>165</b>	<b>385</b>	<b>550</b>
			<b>44</b>	<b>330</b>	<b>770</b>	<b>1100</b>
<b>Total</b>			<b>132</b>			<b>3400</b>



#### 4. Evaluation Pattern:

- 4.1 The course carrying 100 marks shall be evaluated with Continuous Assessment (CA) and University Evaluation (UE) mechanism.
- 4.2 Continuous assessment shall be of 30 marks while University Evaluation shall be of 70 marks. To pass in a course of 4 credit, a student has to secure minimum 40 marks provided that he should secure minimum 28 marks in University Evaluation (UE) and 12 marks (40%) in continuous assessment.
- 4.3 The course carrying 50 marks shall be evaluated with Continuous Assessment (CA) and University Evaluation (UE) mechanism. Continuous assessment shall be of 15 marks while University Evaluation shall be of 35 marks.
- 4.4 To pass in a course of 2 or 1.5 credit, a student has to secure minimum 20 marks provided that he/she should secure minimum 14 marks in University Evaluation (UE) and 6 marks (40%) in continuous assessment..
- 4.5 For Internal examination minimum two tests per paper of which one has to be a written test 10 Marks
- 4.6 Methods of assessment for Internal exams: Seminars, Viva-voce, Projects, Surveys, Field visits, Tutorials, Assignment, Group Discussion, etc (on approval of the head of the centre)
- 4.7 There shall be revaluation of the answer scripts of semester-end examination of theory papers only but not of internal assessment papers as per Ordinance no 134 A and B.

#### 5. ATKT Rules:

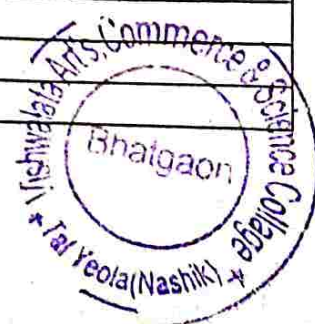
- 5.1 Minimum number of credits required to take admission to Second Year of B. Sc.: 31 [70%]
- 5.2 Minimum number of credits required to take admission to Third Year of B.Sc.: 44 credits [100%] to be completed from F.Y. B.Sc. and at least 22 credits from S.Y. B.Sc.

#### 6. Completion of Degree Course:

- 6.1 A student who earns 140 credits, shall be considered to have completed the requirements of the B. Sc. degree program and CGPA will be calculated for such student. On the basis of only 132 credits. The following percentage to grade and grade point is given in Table-3 and respective example of CGPA calculation is given in Table-4.

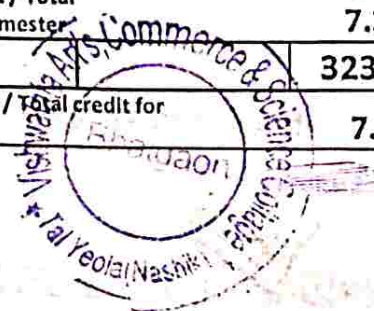
**Table 3**  
**Percentage to Grades and Grade Points**

Sr. No.	Grade Letter	Grade Point	Marks
1	O (Outstanding)	10	$90 \leq \text{Marks} \leq 100$
2	A+ (Excellent)	9	$80 \leq \text{Marks} \leq 89$
3	A (Very Good)	8	$70 \leq \text{Marks} \leq 79$
4	B+ (Good)	7	$55 \leq \text{Marks} \leq 69$
5	B (Above Average)	6	$50 \leq \text{Marks} \leq 54$
6	C (Average)	5	$45 \leq \text{Marks} \leq 49$
7	D (Pass)	4	$40 \leq \text{Marks} \leq 44$
8	F (Fail)	0	Marks < 40
9	Ab (Absent)	0	



**Table 4**  
**Structure of CGPA and Mark Scheme of Choice Based Credit**  
**System for Undergraduate Science Programme to be**  
**implemented from Academic year 2019-20**

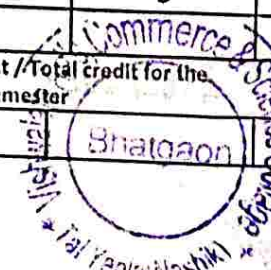
Se m	Course opted	Course Name	Cre dit	Interna l Max Marks	Extern al Max Marks	Total Max Marks	Grade Letter (F-O)	Grade point (0 - 10)	Credit Point = (Credit x Grade point)
I	CC-1	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-1 Practical	Practical	1.5	15	35	50	A	8	12.00
	CC-2	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-2 Practical	Practical	1.5	15	35	50	C	5	7.50
	CC-3	Paper 1:	2	15	35	50	D	4	8.00
		Paper 2:	2	15	35	50	A	8	16.00
	CC-3 Practical	Practical	1.5	15	35	50	D	4	6.00
	CC-4	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-4 Practical	Practical	1.5	15	35	50	A	8	12.00
			<b>22</b>	<b>180</b>	<b>420</b>	<b>600</b>			<b>163.50</b>
<b>SGPA</b>						Total Credit point / Total credit for the semester		<b>7.43</b>	
II	CC-5	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-5 Practical	Practical	1.5	15	35	50	A	8	12.00
	CC-6	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-6 Practical	Practical	1.5	15	35	50	C	5	7.50
	CC-7	Paper 1:	2	15	35	50	D	4	8.00
		Paper 2:	2	15	35	50	C	5	10.00
	CC-7 Practical	Practical	1.5	15	35	50	B	6	9.00
	CC-8	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-8 Practical	Practical	1.5	15	35	50	A	8	12.00
			<b>22</b>	<b>180</b>	<b>420</b>	<b>600</b>	<b>O</b>		<b>160.50</b>
<b>SGPA</b>						Total Credit point / Total credit for the semester		<b>7.30</b>	
<b>First Year Total</b>			<b>44</b>	<b>360</b>	<b>840</b>	<b>1200</b>			<b>323.50</b>
<b>SGPA</b>						Total Credit point / Total credit for the year		<b>7.35</b>	





III	CC-9	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-9	Practical	2	15	35	50	A	8	16.00
	CC-10	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-10	Practical	2	15	35	50	C	5	10.00
	CC-11	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-11	Practical	2	15	35	50	C	5	10.00
	AECC-1A	Environmental Science - 1	2	15	35	50	B	6	12.00
AECC-2A	English MIL(Marathi/Hindi) Communication -1	2	15	35	50	A	8	16.00	
			<b>22</b>	<b>165</b>	<b>385</b>	<b>550</b>			<b>154.00</b>
<b>SGPA</b>						Total Credit point / Total credit for the semester			<b>7.00</b>

IV	CC-12	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-12	Practical	2	15	35	50	A	8	16.00
	CC-13	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-13	Practical	2	15	35	50	C	5	10.00
	CC-14	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-14	Practical	2	15	35	50	C	5	10.00
	AECC-1B	Environmental Science - 2	2	15	35	50	D	4	8.00
AECC-2B	English/ MIL(Marathi/Hindi) Communication -2	2	15	35	50	C	5	10.00	
			<b>22</b>	<b>165</b>	<b>385</b>	<b>550</b>			<b>144.00</b>
<b>SGPA</b>						Total Credit point / Total credit for the semester			<b>6.55</b>
<b>Second Year Total</b>			<b>44</b>	<b>330</b>	<b>770</b>	<b>1100</b>			<b>298.00</b>



		SGPA			Total Credit point / Total credit for the year			6.77	
V	DSE - 1A	Paper 1:	2	15	35	50	D	4	8.00
	DSE - 1B	Paper 2:	2	15	35	50	C	5	10.00
	DSE - 2A	Paper 3:	2	15	35	50	D	4	8.00
	DSE - 2B	Paper 4:	2	15	35	50	C	5	10.00
	DSE - 3A	Paper 5:	2	15	35	50	D	4	8.00
	DSE - 3B	Paper 6:	2	15	35	50	C	5	10.00
	DSE-1	Practical Lab 1	2	15	35	50	O	10	20.00
	DSE-2	Practical Lab 2	2	15	35	50	A+	9	18.00
	DSE-3	Practical Lab 3	2	15	35	50	A	8	16.00
	SEC-1	Skill Based Course 1:	2	15	35	50	D	4	8.00
	SEC-2	Skill Based Course 2:	2	15	35	50	C	5	10.00
				<b>22</b>	<b>165</b>	<b>385</b>	<b>550</b>		
		SGPA			Total Credit point / Total credit for the semester			5.73	
VI	DSE - 4A	Paper 1:	2	15	35	50	D	4	8.00
	DSE - 4B	Paper 2:	2	15	35	50	C	5	10.00
	DSE - 5A	Paper 3:	2	15	35	50	D	4	8.00
	DSE - 5B	Paper 4:	2	15	35	50	C	5	10.00
	DSE - 6A	Paper 5:	2	15	35	50	D	4	8.00
	DSE - 6B	Paper 6:	2	15	35	50	C	5	10.00
	DSE-4	Practical Lab 1	2	15	35	50	O	10	20.00
	DSE-5	Practical Lab 2	2	15	35	50	A+	9	18.00
	DSE-6	Project	2	15	35	50	A	8	16.00
	SEC-2	Skill Based Course 2	2	15	35	50	D	4	8.00
	SEC-2	Skill Based Course 2	2	15	35	50	C	5	10.00
				<b>22</b>	<b>165</b>	<b>385</b>	<b>550</b>		
		SGPA			Total Credit point / Total credit for the semester			5.73	
<b>Third Year Total</b>			<b>44</b>	<b>330</b>	<b>770</b>	<b>1100</b>			<b>252.00</b>
		SGPA			Total Credit point / Total credit for the year			5.73	
<b>Total</b>			<b>132</b>			<b>3400</b>			<b>873.50</b>
		CGPA			Total Credit point / Total credit for the course			6.62	



## 7. PERFORMANCE INDICES:

The semester end grade sheet will contain grades for the courses along with titles and SGPA. Final grade sheet and transcript shall contain CGPA.

7.1 Semester Grade Point Average (SGPA) -The performance of a student in a semester is indicated by a number called the Semester Grade Point Average (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses, seminars and projects registered by the student during the semester.

$$SGPA = \frac{\sum_{i=1}^p C_i G_i}{\sum_{i=1}^p C_i}$$

$$SGPA = \frac{\sum \text{Grade Points Earned} \times \text{Credits for each course}}{\text{Total Credits}}$$

For Example: suppose in a given semester a student has registered for five courses having credits C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub>, C<sub>5</sub> and his / her grade points in those courses are G<sub>1</sub>, G<sub>2</sub>, G<sub>3</sub>, G<sub>4</sub>, G<sub>5</sub> respectively.

Then students

$$SGPA = \frac{C_1 G_1 + C_2 G_2 + C_3 G_3 + C_4 G_4 + C_5 G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

SGPA is calculated up to two decimal places by rounding off.

7.2 Course Grade Point Average (CGPA)- The CGPA is the weighted average of the grade points obtained in all the courses (Theory/term work/practical/oral/presentation) of first semester to sixth semester for the students admitted in the First year and third to sixth semester for the students directly admitted at Second year. It is calculated in the same manner as the SGPA.

In case of a student passing a failed course or in case of improvement, the earlier grade would be replaced by the new grade in calculation of the SGPA and CGPA.

## 8. RESULT:

Based on the performance of the student in the semester examinations, the Savitribai Phule Pune University will declare the results and issue the Semester Grade sheets.

The class shall be awarded to a student on the CGPA calculated as mentioned in Rule no. 6.1. The award of the class shall be as per Table 5. and corresponding percentage calculation for the CGPA is given in Table 6. along with all details and examples.



**Table 5**  
CGPA distribution and corresponding class of the degree awarded

Sr. No	CGPA	Class of the Degree awarded
1	9.50 or More than 9.50	Outstanding (O)
2	8.50 or more but less than 9.50	Excellent (A+)
3	7.50 or more but less than 8.50	Very Good (A)
4	6.25 or more but less than 7.50	Good (B+)
5	5.25 or more but less than 6.25	Above Average (B)
6	4.75 or more but less than 5.25	Average (C)
7	4.00 or more but less than 4.75	Pass (D)

**Table 6**

**Percentage calculation of a corresponding CGPA**

For the calculation of Percentage from CGPA following equation can be used.

$$\% \text{ of Marks} = \begin{cases} \text{if O grade then } 20 \times \text{CGPA} - 100 \\ \text{if A+ grade then } 10 \times \text{CGPA} - 5 \\ \text{if A grade then } 10 \times \text{CGPA} - 5 \\ \text{if B+ grade then } 12 \times \text{CGPA} - 20 \\ \text{if B grade then } 5 \times \text{CGPA} + 23.75 \\ \text{if C grade then } 10 \times \text{CGPA} - 2.50 \\ \text{if D grade then } 6.6 \times \text{CGPA} + 13.6 \end{cases}$$

The factor considered in the above equations are evaluated from the grade point and marks distribution given in Table 3. The examples of the calculation of percentage are given in the Table 7.

**Table 7**

**Some examples of CGPA to percentage calculations**

Obtained CGPA	Equation	Percentage (%)	Grade
10	$20 \times 10 - 100 = 100$	100	O
9.75	$20 \times 9.75 - 100 = 95$	95	O
9.5	$20 \times 9.5 - 100 = 90$	90	O
9.0	$10 \times 9 - 5 = 85$	85	A+
8.0	$10 \times 8.0 - 5 = 75$	75	A
7.0	$12 \times 7.0 - 20 = 64$	64	B+
6.67	$12 \times 6.67 - 20 = 60.04$	60.04	B+
6.25	$12 \times 6.25 - 20 = 55$	55	B+
5.25	$5 \times 5.25 + 23.75 = 50$	50	B
4.75	$10 \times 4.75 - 2.50 = 45$	45	C
4.0	$6.6 \times 4.0 + 13.6 = 40$	40	D

While declaring the result, the existing relevant ordinances are applicable. There is also a provision for verification and revaluation. In case of verification, the existing rules will be applicable. The revaluation result will be adopted if there is a change of at least 10% marks and in the grade of the course.




For grade improvement a student will have to take minimum 30% of the requisite number of credits for the concerned degree. These courses will be theory courses from the parent department. Grade improvement programme will be implemented at the end of the academic year. A student can opt for the grade improvement programme only after the declaration of the result for his/her final semester exam, i.e., at the end of the next academic year after passing the final examination and within two years of completion of the degree and only once.

Sl. No.	Name of the Candidate	Roll No.	Grade
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Sl. No.	Name of the Candidate	Roll No.	Grade
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

The above list is for the purpose of grade improvement. The student has to appear for the examination in the next academic year. The student has to pass the examination with a minimum of 30% marks in the concerned subject.

Sl. No.	Name of the Candidate	Roll No.	Grade
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			



*[Handwritten signature]*



2015-2016

College Name : Vishwalata Arts, Science and Commerce college

Challan No:15360003048

Challan Date :19 Oct 2015

Challan Total Amount: 66668.00

Bank Name:STATE BANK OF HYDERABAD

Academic Year: 2015-2016

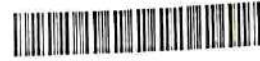
Admission Section

Course Name	Prof /Non-Prof	Course Level	Total Student	Devlopment Fund	Computer Fees	Registration Fees	Total
B.B.A.	Professio nal Course	Graduate	9	450.00	180.00	0.00	630.00
B.B.A.	Professio nal Course	Graduate	12	600.00	240.00	0.00	840.00
B.B.A.	Professio nal Course	Graduate	15	750.00	300.00	0.00	1050.00
B.B.A.( International Business)	Professio nal Course	Graduate	3	150.00	60.00	0.00	210.00
B.B.A.( International Business)	Professio nal Course	Graduate	6	300.00	120.00	0.00	420.00
B.B.A.( International Business)	Professio nal Course	Graduate	79	3950.00	1580.00	0.00	5530.00
B.B.A. (Computer Application)	Professio nal Course	Graduate	38	1900.00	760.00	0.00	2660.00
B.B.A. (Computer Application)	Professio nal Course	Graduate	44	2200.00	880.00	0.00	3080.00
B.B.A. (Computer Application)	Professio nal Course	Graduate	46	2300.00	920.00	0.00	3220.00
B.Com.	Non Professio nal Course	Graduate	3	75.00	15.00	0.00	90.00
B.Com.	Non Professio nal Course	Graduate	36	900.00	180.00	0.00	1080.00
B.Com.	Non Professio nal Course	Graduate	51	1275.00	255.00	0.00	1530.00
B.Sc. Computer Science	Professio nal Course	Graduate	11	550.00	220.00	0.00	770.00
B.Sc. Computer Science	Professio nal Course	Graduate	23	1150.00	460.00	0.00	1610.00
B.Sc. Computer Science	Professio nal Course	Graduate	26	1300.00	520.00	0.00	1820.00





**Savitribai Phule Pune University  
Pro-Rata Online Transaction Details**



**College Name :** Vishwalata Arts, Science and Commerce college

**Challan No:**15360003048

**Challan Date :**19 Oct 2015

**Challan Total Amount:** 66668.00

**Bank Name:**STATE BANK OF HYDERABAD

**Academic Year:** 2015-2016

<b>Total Admission Amount</b>
24540.0000





# Vishwalata Arts, Commerce & Science College

(College Code : 892)

BHATGAON, Tal. Yeola - 423 401 Dist. Nashik ■ Hello : (02559) 225102, Fax : 225103

Ref. No.

Date :

## Clarifications No. 1.2.1

Percentage of programs in which Choice Based Credit System (CBCS)/ elective course system has been implemented.

1.2.1.1. Number of Programs in which CBCS/ Elective course system implemented.

Query No 4:- Please provide structure of the program clearly indicating the course, credit/Elective as approved by competent board.

Clarification:- We are presenting the structure of programs clearly indicating course , credit / elective system program design as approved by competent board.

1. B.Com
2. B.B.A.
3. B.Sc. (Computer Science)
4. B.C.A
5. B.B.A.(I.B.)
6. B.Sc.- (Chemistry, Mathematics, Physics, Electronics, Geography)
7. M.Com
8. M.Sc.(Comp. Sci.)



हानडे  
Principal

Vishwalata Arts Commerce  
& Science College Bhatgaon  
Tal.Yeola Dist-Nashik



**Savitribai Phule Pune University**  
**Faculty of Commerce & Management**  
**Structure for Three - Year**  
**B.Com. Degree course (Choice Based Credit System)**  
**(2019 Pattern)**

**With effect from June 2019**

**Preamble:-**

Commerce education is that area of education, which develops the required knowledge, skills and attitudes for the handling of Trade, Commerce and Industry. Commerce education is entirely different from other disciplines. Hence, it must charter Course routes to service the aspirations of the nation. To meet the growing needs of the business society, there is greater demand for sound development of commerce education. The relevance of commerce education has become more imperative, this means a marked change in the way commerce and management education is perceived in India. The Commerce education is dedicated to developing tomorrow's leaders, managers, and professionals.

The existing education system of imparting commerce education needs to be more dynamic to incorporate all local and global changes in the field of trade and commerce. The curriculum needs to be restructured accordingly. The learning inputs are required to be more update, skill based and with appropriate applications. This will be achieved through the introduction of Choice based Credit System at undergraduate level.

The choice based credit system offers a cafeteria approach where the students have the liberty to choose courses of their own choice. The credit system allows students to opt for additional courses where he /she can score more than the required credits. The system will focus on student centric learning methods, which include use of Information and Communication Technology, innovative methods of teaching and learning and emphasis on industry interaction to enable the learners to take up professional challenges more effectively.

**1. INTRODUCTION**

The B.Com Degree Course (2019 pattern) will be introduced in the following order:-

- a. First Year B.Com. 2019-2020
- b. Second Year B.Com. 2020-2021
- c. Third Year B.Com. 2021-2022



Principal  
Vishwanata Arts Commerce  
& Science College Bhatgaon,  
Tal. Yeola Dist-Nashik

The B.Com. Degree Course will consist of six semesters divided into three Years. The first year (Semester I and II) choice based credit system examination will be held at the end of the each semester.

The Second Year (Semester III and IV) and Third Year (Semester V and VI) choice based credit system examination will be held at the end of each semester.

## 2. ELIGIBILITY

- a) No Candidates shall be admitted to the First Year of the B.Com. Degree Course (2019 pattern) unless he/she has passed the Higher Secondary School Certificate Examination of the Maharashtra State Board of Higher Secondary Education Board or equivalent or University with English as a passing Course.
- b) No candidate shall be admitted to the Third Semester examination of the second year unless he/ she has cleared first two semesters satisfactorily for the course at the college affiliated to this University.
- c) No candidate shall be admitted to the Third Year B.Com. (Fifth semester) Degree Course (2019 pattern) unless he/she has cleared all the papers of first and second semester Examination of F.Y. B.Com. and has satisfactorily kept terms for the second year (Third and Fourth Semester) and also fifth semester for the third year of B.Com) satisfactorily in a college affiliated to this University.

## 3. A.T.K.T. Rules :

- If a candidate fails in all the courses (subject heads) of passing of semester I shall be allowed to proceed semester II. However, a student who fails in four theory courses and two practical courses at semester I and II taken together may be admitted to semester-III & IV.
- If a candidate fails in all the courses (subject heads) of passing of semester III shall be allowed to proceed to semester IV.
- If a candidate fails in all the courses (subject heads) of passing of semester V shall be allowed to proceed to semester VI. However, a student who fails in four theory courses and two practical courses at semester III and IV taken together may be admitted to semester V & VI.
- No candidate shall be allowed to proceed to semester V unless the candidate has cleared semester I & II in all courses (Subjects).
- ATKT rules are applicable for 2<sup>nd</sup> and 4<sup>th</sup> semester.

#### 4. COURSES CARRYING PRACTICALS

- a) Each practical course will be of one credit.
- b) There will be practical and practical examination for semester I and II of the F.Y.B.Com. For the Course Financial Accounting.
- c) There will be practical and practical examinations for the special Courses (Discipline Special Elective) of S.Y.B.Com. (Semester III and IV) and of T.Y.B.Com. (Semester V & VI)
- d) There will be Practical for the S.Y.B.Com level Compulsory Course Business Communication (Semester III and IV) & for T.Y.B.Com Auditing and Taxation (Semester V) & (Semester VI)
- e) A Student must offer the same Special Course at T.Y.B.Com. (Semester V & VI) which he / she has offered at S.Y.B.Com. (Semester III and IV)
- f) In an exceptional case, a student may change the Course chosen by him at third and fourth semester of second year during the first semester of the third year provided he keeps the additional terms of the Course at S.Y.B.Com.

#### Course having practical examination:-

Semester	Type of Course	Name of Practical Course	Course Code
I	Core Course	Financial Accounting – I	PR - 112
II	Core Course	Financial Accounting – II	PR - 122
III	Core Course	Business Communication – I	PR - 231
III	Discipline Specific Elective	<b>Special Course Paper (I)</b> a) Business Administration b) Banking and Finance c) Business Law and practices d) Cooperation and Rural Development e) Cost and Works Accounting f) Business Statistics g) Business Entrepreneurship h) Marketing Management i) Agricultural and Industrial Economics j) Defence Budgeting, Finance and Management k) Insurance, Transport and Tourism l) Computer Programming and Application	PR- 236
IV	Core Course	Business Communication – II	PR- 241
IV	Discipline Specific Elective	<b>Special Course Paper (I)</b> a) Business Administration b) Banking and Finance c) Business Law and practices d) Cooperation and Rural Development e) Cost and Works Accounting f) Business Statistics	PR- 246

		<ul style="list-style-type: none"> <li>g) Business Entrepreneurship</li> <li>h) Marketing Management</li> <li>i) Agricultural and Industrial Economics</li> <li>j) Defence Budgeting, Finance and Management</li> <li>k) Insurance, Transport and Tourism</li> <li>l) Computer Programming and Application</li> </ul>	
V	Core Course	Auditing & Taxation – I	PR- 354
V	Discipline Specific Elective	<p style="text-align: center;"><b>Special Course Paper (II)</b></p> <ul style="list-style-type: none"> <li>a) Business Administration</li> <li>b) Banking and Finance</li> <li>c) Business Law and practices</li> <li>d) Cooperation and Rural Development</li> <li>e) Cost and Works Accounting</li> <li>f) Business Statistics</li> <li>g) Business Entrepreneurship</li> <li>h) Marketing Management</li> <li>i) Agricultural and Industrial Economics</li> <li>j) Defence Budgeting, Finance and Management</li> <li>k) Insurance, Transport and Tourism</li> <li>l) Computer Programming and Application</li> </ul>	PR- 355
V	Discipline Specific Elective	<p style="text-align: center;"><b>Special Course Paper (III)</b></p> <ul style="list-style-type: none"> <li>a) Business Administration</li> <li>b) Banking and Finance</li> <li>c) Business Law and practices</li> <li>d) Cooperation and Rural Development</li> <li>e) Cost and Works Accounting</li> <li>f) Business Statistics</li> <li>g) Business Entrepreneurship</li> <li>h) Marketing Management</li> <li>i) Agricultural and Industrial Economics</li> <li>j) Defence Budgeting, Finance and Management</li> <li>k) Insurance, Transport and Tourism</li> <li>l) Computer Programming and Application</li> </ul>	PR- 356
VI	Core Course	Auditing & Taxation – II	PR- 364
VI	Discipline Specific Elective	<p style="text-align: center;"><b>Special Course Paper (II)</b></p> <ul style="list-style-type: none"> <li>a) Business Administration</li> <li>b) Banking and Finance</li> <li>c) Business Law and practices</li> <li>d) Cooperation and Rural Development</li> </ul>	PR- 365

		<ul style="list-style-type: none"> <li>e) Cost and Works Accounting</li> <li>f) Business Statistics</li> <li>g) Business Entrepreneurship</li> <li>h) Marketing Management</li> <li>i) Agricultural and Industrial Economics</li> <li>j) Defence Budgeting, Finance and Management</li> <li>k) Insurance, Transport and Tourism</li> <li>l) Computer Programming and Application</li> </ul>	
VI	Discipline Specific Elective	<p style="text-align: center;"><b>Special Course Paper (III)</b></p> <ul style="list-style-type: none"> <li>a) Business Administration</li> <li>b) Banking and Finance</li> <li>c) Business Law and practices</li> <li>d) Cooperation and Rural Development</li> <li>e) Cost and Works Accounting</li> <li>f) Business Statistics</li> <li>g) Business Entrepreneurship</li> <li>h) Marketing Management</li> <li>i) Agricultural and Industrial Economics</li> <li>j) Defence Budgeting, Finance and Management</li> <li>k) Insurance, Transport and Tourism</li> <li>l) Computer Programming and Application</li> </ul>	PR- 366

#### 5. MEDIUM OF INSTRUCTION

The medium of instruction for B.Com. Degree course shall be either Marathi or English except languages. The Medium of instructions for Business Communication (S:Y.B.Com) shall be English only.

#### 6. UNIVERSITY TERMS

The dates for the commencement and conclusion of the first and the second terms shall be as determined by the University Authorities. Only duly admitted students can keep the terms. The present relevant ordinances pertaining to grant of terms will be applicable.

#### 7. VERIFICATION AND REVALUATION

The candidate may apply for verification and revaluation or result through Principal of the College which will be done by the University as per ordinance framed in that behalf.

## 12. RESTRUCTURING OF COURSES – EQUIVALENCE AND TRANSITORY PROVISION:

The University will conduct examination of old course (2013 Pattern) for next three academic years from the date of implementation of course.

The candidate of old course will be given three chances to clear his/her Courses as per the old course (2013 Pattern) and thereafter he/she will have to appear for the Courses as per the equivalence given to old course (2013 Pattern).

## 13. SCHEMES OF CREDITS –

Total credits for three year integrated B.Com. Course is as follows:-

Sr. No.	Semester No	No. of courses	Lecture Hours	Credit per course	Credit for practical courses	Add on course credit (*)	Lectures + Practical + add on courses = Total Credits
1	I	7	48	3	1	1	21 + 2 = 23
2	II	7	48	3	1	1	21 + 2 = 23
3	III	6	48	3	2	0	18 + 2 = 20
4	IV	6	48	3	2	2	18 + 2 + 2 = 22
5	V	6	48	3	3	0	18 + 3 = 21
6	VI	6	48	3	3	2	18 + 3 + 2 = 23
<b>Total No. of credits</b>							<b>132</b>

### Suggested Add On courses (\*)

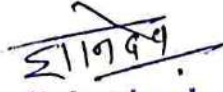
Sr. No.	Add on course	Class	Semester	Credit
1.	Value added course - I	F.Y.B.Com.	I	1
2.	Value added course – II	F.Y.B.Com.	II	1
3.	Environment Awareness	S.Y.B.Com.	IV	2
4.	Specific Add - on Course related to specialized Course/ Internship	T.Y.B.Com.	VI	2
<b>Total</b>				<b>6</b>

\*\*\*\*

**Revised structure of Choice Based Credit System Course  
First Year B. Com. Semester – I w.e.f. 2019- 20**

Course No.	Course / Title of Paper	Course	No. of lectures (Per Week)	No of Credits	Internal Assessment	University Assessment		Total Marks	Duration of Theory Examination
						Univ. Exam	Practical Exam		
111	Compulsory English- I	Ability Enhancement Compulsory Course	4	3	30	70	--	100	3 Hours
112	Financial Accounting - I	Core Course	4	4	30	50	20	100	3 Hours
113	Business Economics- I	Core Course	4	3	30	70	--	100	3 Hours
114 (A)	Business Mathematics and Statistics - I	Core Course	4	3	30	70	--	100	3 Hours
114 (B)	Computer Concepts and Application- I								
115	<b>Optional Group. (A) (Any one of the Following)</b> a) Organization Skill Development b) Banking and finance c) Commercial Geography d) Defence Organization and Management in India e) Cooperation f) Managerial Economics	Generic Elective Course	4	3	30	70	--	100	3 Hours




  
**Principal**  
 Vishwalata Arts, Commerce & Science College  
 Tal. Yeola Dist. Nashik

**First Year B. Com. Structure of the Syllabus w.e.f. 2019- 20  
Semester – II**

Course No.	Course / Title of Paper	Course	No. of lectures (Per Week)	No. of Credits	Internal Assessment	University Assessment		Total Marks	Duration of Theory Examination
						Univ. Exam	Practical Exam		
121	Compulsory English- II	Ability Enhancement Compulsory Course	4	3	30	70	–	100	3 Hours
122	Financial Accounting - II	Core Course	4	4	30	50	20	100	3 Hours
123	Business Economics- II	Core Course	4	3	30	70	–	100	3 Hours
124(A)	Business Mathematics and Statistics - II	Core Course	4	3	30	70	–	100	3 Hours
124(B)	Computer Concepts and Application- II								
125	<b>Optional Group. – (A)</b> <b>(Any one of the Following)</b> a) Organization Skill Development b) Banking and finance c) Commercial Geography d) Defence Organization and Management in India e) Cooperation f) Managerial Economics	Generic Elective Course	4	3	30	70	–	100	3 Hours



  
**Principal**  
 Vishwalata Arts, Commerce  
 Science College, Bhatgaon  
 Tal Yeola Dist Nashik



SAVITRIBAI PHULE PUNE UNIVERSITY

**REVISED BBA PROGRAMME STRUCTURE CBCS 2019 PATTERN**

**BACHELOR OF BUSINESS ADMINISTRATION (BBA)**

THREE YEAR FULL TIME COURSE

BBA I YEAR CURRICULUM APPLICABLE W.E.F. AY 2019-20

BBA II YEAR CURRICULUM APPLICABLE W.E.F. AY 2020-21

BBA III YEAR CURRICULUM APPLICABLE W.E.F. AY 2021-22

\*\*\*\*\*

**BBA PROGRAMME CONTENT**

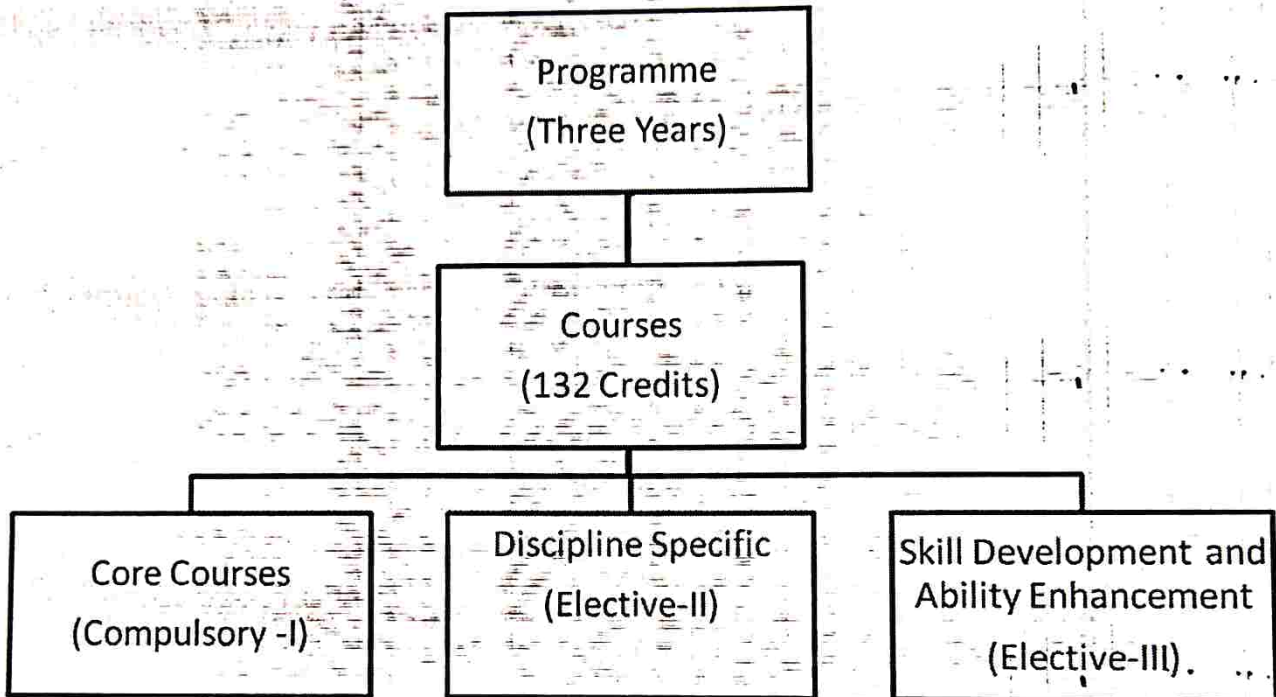
1. PREAMBLE
2. Objectives Of The Programme
3. Introduction To The Programme
4. Eligibility
5. Duration Of The Programme
6. Highlights Of The New Curriculum
7. Choice Based Credit System (CBCS)
8. Additional Credits
9. Guidelines For Successful Implementation Of CBCS
10. Teaching Instructions
11. Equivalence, Transitory Provision, Transcript And Standard Of Passing
12. Details On Course Content
13. List Of The Courses
14. Annexure (I) Course Content
15. Annexure(II) Contents Of Skill-Based Courses
16. Acknowledement



Principal  
Vishwalata Arts Commerce  
& Science College Bhatgaon.  
Tal. Yeola Dist-Nashik

7.3 Outline of the CBCS: Bachelor of Business Administration- BBA Degree Programme 2019 pattern.

Outline of the Choice Based Credit System (2019 Pattern)



**7.3 I. Core Course:** Core courses are the foundation courses of management education. They are compulsory for all the students. Core courses are of two types: Generic Core and Subject Core.

**1. Generic Core (GC):** This is the course which is mandatory and has to be studied by the student as a core part to fulfill the requirements of a degree in the said discipline of study. Therefore, Generic Core courses are mandatory and fundamental in nature. These courses cannot be substituted by any other courses. Such courses are also known as Hard Core Courses. Generic Core courses in Semester I and II provide foundations of Management and Administration. Generic Core courses in Semester III and IV focus on Functional Areas whereas, Generic Core courses in the Semester V and VI are integrative and provide insights about different fields of business.

**2. Subject Core (SC):** These are also known as Soft Core Courses. These may be subject-specific/specialized/advanced/supportive to the discipline subject of study, which provides an extended scope and enable exposure to some other disciplines that help in nurturing the candidate's proficiency, domain knowledge, skills, etc. Practical /Tutorial work is considered as a special course involving application of knowledge in solving / analyzing /exploring a real life situation, which will help the students to understand core subject in better manner.

#### **7.4 II. Elective Courses :**

**1. Discipline Specific Elective (DSE) Course:** Elective course is a course which can be chosen from a pool of courses. Elective Courses which may be offered by the main discipline/subject of study is referred as **Discipline Specific Elective**. DSE Courses develop generic proficiencies amongst the students.

The Institute has the flexibility to offer courses based on Targeted Industry Linkages – sectoral requirements and networking at the college level. A student can select any one specialization from the five areas which are mentioned below. The student will study eight (8) courses in second and third year. DSE courses helps to develop discipline/domain knowledge and nurture candidate's proficiency/skill.

**Bachelor of Business Administration Degree offers the following Electives :**

- A) Marketing Management (MM)
- B) Financial Management (FM)
- C) Human Resources Management (HRM)
- D) Services Management (SM)
- E) Agri Business Management (ABM)

**Dissertation/Project for DSE courses:** An elective course designed to acquire special/advanced knowledge, as a supplement study/support study to a project work, with an advisory support of a teacher/faculty member is called dissertation/project.

**7.5 III.A. Skill Enhancement Courses (SEC):** These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based instructions. Open Course contents are mentioned in Annexure II.

11 Scheme of Credits - CC- Core Course , DSE – Discipline Specific elective , CCT- Core Course Tutorials , AECC – Ability Enhancement Compulsory Courses , SEC- Skill Enhancement Courses.

Total - 132 Credits for Three years Programme

Sr. No.	Semester	CC – Credit	DSE – credit	CCT- Credit	AECC- credit	SEC – Credit	Lectures + add on courses = Total Credits
1	I	12		8			
2	II	12		8		4	12+8+2=22
3	III	12	8		2		12+8+2=22
4	IV	12	8			2	12+8+2=22
5	V	12	10				12+10=22
6	VI	12	10				12+10=22
<b>Total</b>		<b>72</b>	<b>36</b>	<b>16</b>	<b>2</b>	<b>6</b>	<b>72+36+16+2+6=132</b>

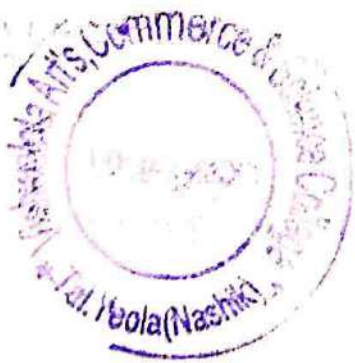
– Discipline Specific Elective (DSE) - Specialization – 1. Marketing , 2. Finance , 3. Human Resource 4. Services

12 . Skill Enhancement Course (30 hours) Add on courses - Per year students must complete one add on course of 30 hours per



**F.Y.B.B.A.-Updated Programme Structure CBCS-Pattern 2019**

Group 1	Course Details Generic Core (GC) and Subject Core (SC) (Compulsory)			Internal Evaluation		External Evaluatio n
	Course Code	Course Title	Credits	Core Course	Concurrent Evaluation	
	<b>First Year Semester I</b>					
101	Principles of Management	3	GC	30	-	70
102	Business Communication Skills	4	SC	30	20	50
103	Business Accounting	3	GC	30	-	70
104	Business Economics – Micro	3	GC	30	-	70
105	Business Mathematics	3	GC	30	-	70

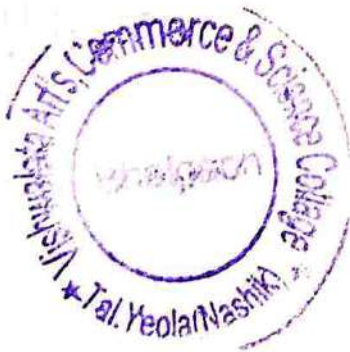


*[Handwritten Signature]*

**Principal**

**Vishwalata Arts, Commerce  
Science College, Talgaon  
Tal Yeola Dist Nashik**

106	Business Demography	4	SC	30	20	50
	<b>Total Credits for the Semester I</b>	20				
	GC (12)+SC(8)=20					
	<b>First Year Semester II</b>					
201	Basics of cost accounting	3	GC	30		70
202	Origin and Development of Global Business	4	SC	30	20	50
203	Commercial Geography	3	GC	30	-	70
204	Principles of Marketing	3	GC	30	-	70
205	Business Statistics	3	GC	30	-	70
206	Fundamentals of computers	4	SC	30	20	50
	<b>Credits for the semester II</b>	20				
	GC (12)+SC(8) =20					



~~31/9/99~~  
Principal  
Vishwalata Arts, Commerce  
Science College, Bhatgaon  
Tal. Yeola Dist. Nashik



# Savitribai Phule Pune University

(Formerly University of Pune)

Three-Year B.Sc. Degree Program in Computer Science

(Faculty of Science & Technology)

**F.Y.B.Sc. (Computer Science)**

**Choice Based Credit System Syllabus**

To be implemented from Academic Year 2019-2020



## Titles of Papers, Credit Allocation and Scheme of Evaluation

## Semester I (Total credits=22)

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
CC-I	CS-111	Problem Solving using Computer and 'C' Programming	2		15	35	50
	CS-112	Database Management Systems	2		15	35	50
	CS-113	Practical course based on CS101 and CS102		1.5	15	35	50
CC-II*		Mathematics – I, II and III					
CC-III*		Electronics – I,II and III					
CC-IV*		Statistics – I, II and III					

## Semester II (Total credits=22)

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
CC-V	CS-121	Advanced 'C' Programming	2		15	35	50
	CS-122	Relational Database Management Systems	2		15	35	50
	CS-123	Practical course based on CS201 and CS202		1.5	15	35	50
CC-VI*		Mathematics – I,II and III					
CC-VII*		Electronics – I,II and III					
CC-VIII*		Statistics – I,II and III					



## S. Y. B. Sc. (Computer Science)

## Semester III (Total credits=22)

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
CC-IX	CS-231	Data-Structures and Algorithms – I	2		15	35	50
	CS-232	Software Engineering	2		15	35	50
	CS-233	Practical course based on CS301		2	15	35	50
CC-X*		Mathematics – I, II and III					
CC-XI*		Electronics – I,II and III					
AECC-I*		Environment Science – I	2				
AECC-II*		Language Communication – I	2				

## Semester IV (Total credits=22)

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
CC-XII	CS-241	Data Structures and Algorithms – II	2		15	35	50
	CS-242	Computer Networks - I	2		15	35	50
	CS-243	Practical course based on CS401		2	15	35	50
CC-XIII*		Mathematics – I,II and III					
CC-XIV*		Electronics – I, II and III					
AECC-III*		Environment Science – I	2				
AECC-IV*		Language Communication – I	2				

## T. Y. B. Sc.( Computer Science)

## Semester V (Total credits=22)

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
DSEC - I	CS-351	Operating Systems - I	2		15	35	50
	CS-352	Computer Networks - II	2		15	35	50
	CS-357	Practical course based on CS501		2	15	35	50
DSEC - II	CS-353	Web Technologies - I	2				
	CS-354	Foundations of Data Science	2				
	CS-358	Practical course based on CS503		2			
DSEC - III	CS-355	Object Oriented Programming - I (Core Java)	2				
	CS-356	Theoretical Computer Science and Compiler Construction - I	2				
	CS-359	Practical Course based on CS505		2			
SECC - I	CS-3510	Python Programming / R Programming	1	1	15	35	50
SECC - II	CS-3511	Open Elective	1	1	15	35	50

## Semester VI (Total credits=22)

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
DSEC - IV	CS-361	Operating Systems - II	2		15	35	50
	CS-362	Software Testing	2		15	35	50
	CS-367	Practical course based on CS601		2	15	35	50
DSEC - V	CS-363	Web Technologies - II	2				
	CS-364	Data Analytics	2				
	CS-368	Practical course based on CS603 and CS604		2			
DSEC - VI	CS-365	Object Oriented Programming - II (Advanced Java)	2				
	CS-366	Theoretical Computer Science and Compiler Construction - II	2				
	CS-369	Practical Course based on CS605		2			
SECC- III	CS-3610	Mobile Application Development OR Software Testing Tools	1	1	15	35	50
SECC - IV	CS-3611	Project OR Open Elective	1	1	15	35	50

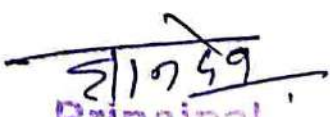
**Choice Based Credit System Syllabus**  
**To be implemented from Academic Year 2019-2020**  
**F.Y.B.Sc. (Computer Science)**  
**Sem I**

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
CC-I	CS-111	Problem Solving using Computer and 'C' Programming	2		15	35	50
	CS-112	Database Management Systems	2		15	35	50
	CS-113	Practical course based on CS101 and CS102		1.5	15	35	50
CC-II*		Mathematics – I, II and III					
CC-III*		Electronics – I,II and III					
CC-IV*		Statistics – I, II and III					

**Sem II**

Course type	Paper Code	Paper title	Credits		Evaluation		
			T	P	CA	UA	TOTAL
CC-V	CS-121	Advanced 'C' Programming	2		15	35	50
	CS-122	Relational Database Management Systems	2		15	35	50
	CS-123	Practical course based on CS201 and CS202		1.5	15	35	50
CC-VI*		Mathematics – I,II and III					
CC-VII*		Electronics – I, II and III					
CC-VIII*		Statistics – I,II and III					



  
**Principal**  
 Vishwala Commerce  
 Science College, Bhatgaon  
 Tal. Veela Dist. Nashik

**Savitribai Phule Pune University, Pune**

**Bachelor of Business Administration (Computer Application)**

**BBA(CA)**

(Under faculty of Commerce & Management)

(To be implemented from Academic year 2019-20)

**1. Name of Programme:** Bachelor of Business Administration (Computer Application)

**2. Introduction:**

The degree shall be titled as Bachelor of Business Administration (B.B.A.)( Computer Application) under the Faculty of Commerce and Management. First Year B.B.A.(CA) choice based credit system is implemented w.e.f. the academic year 2019-2020 , Second Year B.B.A.(CA) II will be implement w.e.f. 2020-2021 and Third Year B.B.A.(CA) III w.e.f. 2021-2022

**3. Programme Objectives:**

- To produce skill oriented human resource.
- To impart practical skills among students.
- To make industry ready resource.
- To bring the spirit of entrepreneurship.

**4. Programme Structure:**

- The Programme is of a Three Year (Six semesters) Full Time Degree Programme.
- The programme shall be based on credit system comprising 132 credits.



*Principal*  
Principal  
Vishwalata Arts Commerce  
& Science College, Bhatgaon,  
Tal. Yeola Dist-Nashik

### 10. Restructuring of courses –Equivalence and Transitory Provision

The University will conduct examination of old course for next three academic years from the date of implementation of new course.

The candidate of old course will be given three chances to clear his subjects as per the old course and thereafter he will have to appear for the subjects under new course as per the equivalence given to old course.

### 11. Completion of Degree Programme:

A student who earns 132 credits, shall be considered to have completed the requirements of the B.B.A.(CA) degree program and CGPA will be calculated for such student.

### 12. Credit Allocation

CC-Core Course, EC-Elective Course, PR-Practical, PJ-Project, AECC-Ability Enhancement Compulsory Courses, SEC-Skill Enhancement Courses.

### Total - 132 Credits for Three years Programme

Sr. No.	Semester	CC – Credit	EC Credit	PR – Credit	PJ – Credit	AEC – Credit	SEC – Credit	Lectures + Project +add on courses= Total Credits
1	I	15		4			2	15+4+2 =21
2	II	15		4			2	15 +4 +2=21
3	III	9	6	6		2		9+6+6+2=23
4	IV	9	3	4	4		2	9+3+4+4+2=22
5	V	9	3	4	4		2	9+3+4+4+2=22
6	VI	10	3	4	4		2	10+3+4+4+2=23
Total		67	15	26	12	2	10	67+15+26+12+2+10=132

**Titles of Papers and scheme of study for B.B.A. (C.A) Programme.**  
**(To be implemented from Academic year 2019-20)**

**Sem I**

Subject Code	Subject Name	Course	Credits	
			Th	Pr
CA-101	Business Communication	CC	3	
CA-102	Principles of Management	CC	3	
CA-103	C Language	CC	3	
CA-104	Database Management System	CC	3	
CA-105	Statistics	CC	3	
CA-106	Computer Laboratory Based on 103 & 104 (2 credits each)	PR		4
107	Add-On (PPA) (30 Hours)	SEC	2	



*(Handwritten signature)*

**Principal**  
**Vishwalata Arts Commerce**  
**Science College, Dhatgaon**  
**Tal Yeola Dist Nashik**

Sem II

Subject Code	Subject Name	Course	Credits	
			Th	Pr
CA-201	Organization Behavior & Human Resource Management	CC	3	
CA-202	Financial Accounting	CC	3	
CA-203	Business Mathematics	CC	3	
CA-204	Relational database	CC	3	
CA-205	Web Technology HTML-JS-CSS	CC	3	
CA-206	Computer Laboratory Based on 204 & 205(2 credits each)	PR		4
207	Add-On (Advance C) (30 Hours)	SEC	2	



~~21/7/19~~  
Principal

Vishwalata Arts Commerce  
Science College, Dhatgaon  
Tal Yeola Dist Nashik

SAVITRIBAI PHULE PUNE UNIVERSITY

REVISED BBA IB PROGRAMME STRUCTURE CBCS 2019 PATTERN

BACHELOR OF BUSINESS ADMINISTRATION- INTERNATIONAL BUSINESS (BBA- IB)

THREE YEAR FULL TIME COURSE

BBA IB I YEAR CURRICULUM APPLICABLE W.E.F. AY 2019-20

BBA IB II YEAR CURRICULUM APPLICABLE W.E.F. AY 2020-21

BBA IB III YEAR CURRICULUM APPLICABLE W.E.F. AY 2021-22

\*\*\*\*\*

BBA IB PROGRAMME CONTENT

1. PREAMBLE
2. Objectives of the Programme
3. Introduction to the Programme
4. Eligibility
5. Duration of the Programme
6. Highlights of the New Curriculum
7. Choice Based Credit System (CBCS)
8. Additional Credits
9. Guidelines for Successful Implementation of CBCS
10. Teaching Instructions
11. Equivalence, Transitory Provision, Transcript and Standard of Passing
12. Details on Course Content
13. List of the Courses
14. Annexure (I) Course Content
15. Annexure (II) Contents of Skill-Based Courses
16. Acknowledgement



  
Principal  
Vishwalata Arts Commerce  
& Science College Bhatgaon  
Tal. Yeola Dist-Nashik



Services Management and Human Resource Management. The students will select Part (I) and Advanced Part (II) of the same course. They will have to complete the exposure and project work as applicable to the course.

**3. Skill Courses (SEC & AECC)**—The list of 16 Skill Enhancement Courses is provided. The college can select courses as mentioned in the structure to suit the requirements of the students. Each course will carry 2 credits having duration of 30 hours. The courses mentioned in the list will be updated as per the requirements of the business environment. The Board of Studies will make the necessary changes in the list as per the changing requirements of the Economy, Environment and society. These courses can also be replaced by approved online courses. It is mandatory for every Institute to conduct the Compulsory Ability Enhancement Course in Semester III. The Institute can select basic or advanced courses.

## 12. List of Courses Offered

### BBA IB -Bachelor of Business Administration –International Business Updated Programme Structure CBCS - Pattern 2019

#### FYBBA IB

Group I	Course Details			Internal Evaluation		External Evaluation
	Generic Core (GC) and Subject Core (SC) (Compulsory)					
Course Code	Course Title	Credits	Core Course	Concurrent Evaluation	Tutorial /Practical	SPPU Evaluation
<b>First Year Semester I</b>						
101	Principles of Management	3	GC	30	-	70
102	Business Communication Skills	4	SC	30	20	50
103	Business Accounting	3	GC	30	-	70
104	Business Economics – Micro	3	GC	30	-	70
105	Business Mathematics	3	GC	30	-	70

Services Management and Human Resource Management. The students will select Part (I) and Advanced Part (II) of the same course. They will have to complete the exposure and project work as applicable to the course.

**3. Skill Courses (SEC & AECC)**—The list of 16 Skill Enhancement Courses is provided. The college can select courses as mentioned in the structure to suit the requirements of the students. Each course will carry 2 credits having duration of 30 hours. The courses mentioned in the list will be updated as per the requirements of the business environment. The Board of Studies will make the necessary changes in the list as per the changing requirements of the Economy, Environment and society. These courses can also be replaced by approved online courses. It is mandatory for every Institute to conduct the Compulsory Ability Enhancement Course in Semester III. The Institute can select basic or advanced courses.

## 12. List of Courses Offered

### BBA IB -Bachelor of Business Administration –International Business

#### Updated Programme Structure CBCS - Pattern 2019

#### FYBBA IB

Group I	Course Details			Internal Evaluation		External Evaluation
	Generic Core (GC) and Subject Core (SC) (Compulsory)					
Course Code	Course Title	Credits	Core Course	Concurrent Evaluation	Tutorial /Practical	SPPU Evaluation
<b>First Year Semester I</b>						
101	Principles of Management	3	GC	30	-	70
102	Business Communication Skills	4	SC	30	20	50
103	Business Accounting	3	GC	30	-	70
104	Business Economics – Micro	3	GC	30	-	70
105	Business Mathematics	3	GC	30	-	70

106	Business Demography	4	SC	30	20	50
	<b>Total Credits for the Semester I</b>	20				
	<b>GC (12)+SC(8)=20</b>					
	<b>First Year Semester II</b>					
201	Basics of cost accounting	3	GC	30		70
202	Origin and Development of Global Business	4	SC	30	20	50
203	Commercial Geography	3	GC	30	-	70
204	Principles of Marketing	3	GC	30	-	70
205	Business Statistics	3	GC	30	-	70
206	Fundamentals of computers	4	SC	30	20	50
	<b>Credits for the semester II</b>	20				
	<b>GC (12)+SC(8) =20</b>					
<b>SYBB A -IB</b>	<b>Second Year Semester III</b>					
Course Code	Course Title	Credits	Core Course	Concurrent Evaluation	Tutorial /Practical	SPP U Evaluation
301	Elements of Human Resource Management	3	GC	30	-	70
302	Global Competencies and Personality Development	3	GC	30	-	70
303	International Economics	3	GC	30	-	70
304	Production and Operations Management	3	GC	30	-	70
	<b>Credits For Semester III- CC 12</b>	12				
	<b>Second Year Semester IV</b>					
401	Import Export Procedure	3	GC	30	-	70
402	Research Methodology	3	GC	30	-	70

403	Business Ethics	3	GC	30	-	70
404	Management Information System	3	GC	30	-	70
	<b>Total credits GC12</b>	<b>12</b>				
<b>TYBB A-IB</b>	<b>Third Year Semester V</b>					
501	International Relations	3	GC	30	-	70
502	International Business Law	3	GC	30	-	70
503	Business Reporting and Analysis	3	GC	30	-	70
504	Foreign Exchange Management	3	GC	30	-	70
	<b>Total credits CC – 12</b>	<b>12</b>				
	<b>Third Year Semester VI</b>					
601	New Venture creation and start ups/	3	GC	30	-	70
602	International Project management	3	GC	30	-	70
603	Decision Making and Risk management.	3	GC	30	-	70
604	Management of Agribusiness and Agri Exports	3	GC	30	-	70
	<b>Total credits CC – 12</b>	<b>12</b>				
	<b>Total Credits From GC and SC</b>					
	<b>(Sem) I 20 + (Sem) II 20 (Sem) III12 +(Sem) IV12 (Sem) V12 and (Sem) IV12 = 88</b>					
<b>Group II (SE)</b>	<b><u>List of Specific Elective (SE) Courses</u></b>					
<b>SYBB A-IB</b>	<b>Course Titles</b>	<b>Credits</b>	<b>Semester</b>	<b>Concurrent Evaluation.</b>	<b>Tutorial /Project</b>	<b>SPP U Evaluation</b>

106	Business Demography	4	SC	30	20	50
	Total Credits for the Semester I	20				
	GC (12)+SC(8)=20					
	<b>First Year Semester II</b>					
201	Basics of cost accounting	3	GC	30		70
202	Origin and Development of Global Business	4	SC	30	20	50
203	Commercial Geography	3	GC	30	-	70
204	Principles of Marketing	3	GC	30	-	70
205	Business Statistics	3	GC	30	-	70
206	Fundamentals of computers	4	SC	30	20	50
	Credits for the semester II	20				
	GC (12)+SC(8) =20					
<b>SYBB A-IB</b>	<b>Second Year Semester III</b>					
Course Code	Course Title	Credits	Core Course	Concurrent Evaluation	Tutorial /Practical	SPP U Evaluation
301	Elements of Human Resource Management	3	GC	30	-	70
302	Global Competencies and Personality Development	3	GC	30	-	70
303	International Economics	3	GC	30	-	70



*(Handwritten signature)*

Principal

Vishwata Arts & Science College, Bhingaraon  
Tal. Veeta Dist. Nashik


304	Production and Operations Management	3	GC	30	-	70
Credits For Semester III- CC 12		12				
Second Year Semester IV						
401	Import Export Procedure	3	GC	30	-	70
402	Research Methodology	3	GC	30	-	70



571799  
Principal  
Vishwalata Arts Commerce  
Science College, Bhatgaon  
Tal Yeola Dist Nashik

213	Business Ethics & Professional Value	04	04	03	40	60	100
214	Elements of Knowledge Management	04	04	03	40	60	100
<b>Group G (Advanced Banking &amp; Finance)</b>							
215	Banking Law & Practices	04	04	03	40	60	100
216	Monetary Policy	04	04	03	40	60	100
<b>Group II (Advanced Marketing)</b>							
217	Customer Relationship Management & Retailing	04	04	03	40	60	100
218	Services Marketing	04	04	03	40	60	100



  
 Principal  
 Vishwanath's Commerce  
 Science College, Jalgaon  
 Tal. Yeola Dist. Nashik

REVISED BBA IB PROGRAMME STRUCTURE CBCS 2019 PATTERN BACHELOR OF BUSINESS ADMINISTRATION- INTERNATIONAL BUSINESS (BBA- IB)

Group I	Course Details			Internal Evaluation		External Evaluatio n
	Generic Core (GC) and Subject Core (SC) (Compulsory)					
Course Code	Course Title	Credits	Core Course	Concurrent Evaluation	Tutorial /Practical	SPPU Evaluatio n
<b>First Year Semester I</b>						
101	Principles of Management	3	GC	30	-	70
102	Business Communication Skills	4	SC	30	20	50
103	Business Accounting	3	GC	30	-	70
104	Business Economics – Micro	3	GC	30	-	70
105	Business Mathematics	3	GC	30	-	70



21/9/19  
Principal  
Vishwajata Arts, Commerce & Science College, Bhatgaon  
Tal Yeola Dist Nashik



Savitribai Phule Pune University [SPPU]

**B.Sc. (Chemistry)**

(Three Years Integrated Degree Program)

**Choice Based Credit System [CBCS]**

From Academic Year

2019-2020

**First Year (F.Y. B. Sc.)**

Board of Studies (Chemistry)

Savitribai Phule Pune University [SPPU]

Pune-41107



*[Signature]*  
Principal  
Vishwalata Arts Commerce  
& Science College Bhatgaor.  
Tal. Yeola Dist-Nashik

**Structure of F. Y. B. Sc. Chemistry**

Semester	Course	Discipline Specific Core Course (DSCC)*
I	Theory	CH-101 : Physical Chemistry ( 2 credit , 36 L)
	Theory	CH-102 : Organic Chemistry (2 credit, 36 L)
	Practical	CH-103 : Chemistry Practical –I (1.5 Credit, 46.8 L)
II	Theory	CH-201 : Inorganic Chemistry ( 2 credit , 36 L)
	Theory	CH-202 : Analytical Chemistry (2 credit, 36 L)
	Practical	CH-203 : Chemistry Practical –II (1,5 Credit, 46.8 L)

**\*N.B.:**

- i. Each lecture (L) will be of 50 minutes.
- ii. Each practical of 3h 15 min and 12 practicals per semester
- iii. 12 weeks for teaching 03 weeks for Contentious assessments
- iv. For details refer UG rules and regulations (CBCS for Science program under science & Technology) given in Appendix

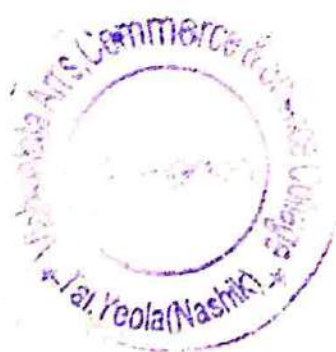
## Chemistry

CBCS: 2019-2020

F. Y. B. Sc.

Choice Based Credit System [CBCS] Syllabus  
To be implemented from Academic Year 2019-2020

Semester	Course	Discipline Specific Core Course (DSCC)*
I	Theory	CH-101 : Physical Chemistry ( 2 credit , 36 L)
	Theory	CH-102 : Organic Chemistry (2 credit, 36 L)
	Practical	CH-103 : Chemistry Practical –I (1.5 Credit, 46.8 L)
II	Theory	CH-201 :Inorganic Chemistry ( 2 credit , 36 L)
	Theory	CH-202 : Organic Chemistry (2 credit, 36 L)
	Practical	CH-203 : Chemistry Practical –II (1.5 Credit, 46.8 L)



31/12/19  
Principal  
Vishwajeta Arts, Commerce & Science College,  
Tal. Yeola Dist. Nashik

F.Y.B.Sc  
(Physics)

CBCS: 2019-2020

F. Y. B. Sc

Physics

SubjectName	Year	Semester	Course Type	Course Code	Course Name	Credit
Physics	1	I	Compulsory Course	PHY-111	Mechanics and Properties of Matter	2
				PHY-112	Physics Principles and Applications	2
				PHY-113	Physics Laboratory-IA	1.5
		II	Compulsory Course	PHY-121	Heat and Thermodynamics	2
				PHY-122	Electricity and Magnetism	2
				PHY-123	Physics Laboratory-IB	1.5



31/09/19

Principal

Vishwalata Arts, Commerce  
Science College, Bhatgaon  
Tal Yeola Dist Nashik



# Savitribai Phule Pune University

(Formerly University of Pune)

Three Year B.Sc. Degree Program in Mathematics

(Faculty of Science & Technology)

**F.Y.B.Sc. (Mathematics)**

**Choice Based Credit System Syllabus**

To be implemented from Academic Year 2019-2020



Course Outcome:

Upon successful completion of this course, the student will be able to:

- i) The mathematical maturity of students in their current and future courses shall develop.
- ii) The student develops theoretical, applied and computational skills.
- iii) The student gains confidence in proving theorems and solving problems.

Structure of the course:

	Semester - I		Semester -II		Credit
Paper I	MT-111	Algebra	MT-121	Analytical Geometry	2
Paper II	MT-112	Calculus - I	MT-122	Calculus - II	2
Paper III	MT-113	Mathematics Practical	MT-123	Mathematics Practical	1.5

Proposed Structure of S. Y. B. Sc. Mathematics Courses:

	Semester - III		Semester -IV		
Paper I	MT-231	Calculus of Several Variables	MT-241	Linear Algebra-I	2
Paper II	MT-232 (A)	Laplace Transform and Fourier Series	MT-242(A)	Vector Calculus	2
	MT-232 (B)	Computational Geometry	MT-242(B)	Numerical Analysis	2
Paper III	MT-233	Mathematics Practical	MT-243	Mathematics Practical	2

Proposed Structure of T. Y. B. Sc. Mathematics Courses:

Semester- V		Semester- VI		Credit
MT 351	Matric Spaces	MT 361	Complex Analysis	2
MT 352	Real Analysis-I	MT 362	Real Analysis-II	2
MT 353	Problem Course on MT 351 and MT 352	MT 363	Problem Course on MT 361 and MT 362	2
MT 354	Group Theory-I	MT 364	Ring Theory-I	2
MT 355	Ordinary Differential Equations-I	MT 365	Partial Differential Equations-I	2
MT 356	Problem Course on MT 354 and MT 355	MT 366	Problem Course on MT 364 and MT 365	2

Select Any Two out of six courses				
MT357:A	Operations Research	MT367: A	Optimization Techniques	2
MT357:B	Number Theory	MT367: B	Graph theory	2
MT357:C	C- Programming	MT367: C	Lebesgue Integration	2
MT357:D	Lattice Theory	MT367: D	Financial Mathematics	2
MT357:E	Python Course -I	MT367: E	Python Course-II	2
MT357:F	Machine Learning Course- I	MT367: F	Machine Learning Course- II	2
MT 338	Practical based on papers selected from 357 A to 357 F	MT 348	Practical based on papers selected from 367 A to 367 F	2
MT-3510	Skill Enhancement course in maths	MT- 3511	Skill Enhancement course in maths	2
MT-3610	Skill Enhancement course in maths	MT- 3611	Skill Enhancement course in maths	2

All three above courses are compulsory.

### 1. Equivalence of Previous syllabus along with new syllabus:

	Old course	New Course
Paper I	MT-101 : Algebra and Geometry	MT-111: Algebra and MT-121 : Analytical Geometry
Paper II	MT-102 : Calculus and Differential Equations	MT-112 : Calculus - I and MT-122 : Calculus – II
Paper III	MT-103 : Mathematics Practical	MT – 113 : Mathematics Practical and MT – 113 : Mathematics Practical

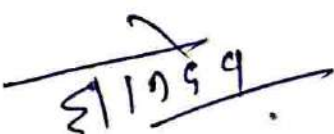
## F.Y.B.Sc. (Mathematics)

### Choice Based Credit System Syllabus

To be implemented from Academic Year 2019-2020

	Semester - I		Semester -II		Credit
Paper I	MT-111	Algebra	MT-121	Analytical Geometry	2
Paper II	MT-112	Calculus - I	MT-122	Calculus - II	2
Paper III	MT-113	Mathematics Practical	MT-123	Mathomatics Practical	1.5

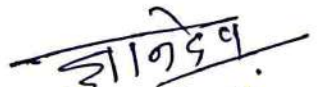


  
Principal  
Vishwalata Arts Commerce  
Science College, Bhaigson, Tal. Yeola Dist. Nashik



Course No.	Course / Title of Paper	Course	No. of lectures (Per Week)	No. of Credits	Internal Assessment	University Assessment		Total Marks	Duration of Theory Examination
						Univ. Exam.	Practical Exam.		
126	Optional Group. (B) (Any one of the Following) a) Essentials of E- Commerce b) Insurance & Transport c) Marketing & Salesmanship d) Consumer Protection and Business Ethics e) Business Environment & Entrepreneurship f) Foundation Course in Commerce	Generic Elective Course	4	3	30	70	--	100	3 Hours
127	Any one of the following Language- II Additional English/ Marathi/ Hindi/ Gujarati/ Sindhi/ Persian/ Urdu/ French/ German / Sanskrit / Arabic	Ability Enhancement Course	4	3	30	70	--	100	3 Hours



  
**Principal**  
 Vishwalata Arts Commerce  
 Science College, Bhargavaon  
 Tal Yeola Dist Nashik



# Savitribai Phule Pune University

*(Formerly University of Pune)*

**Three Year B.Sc. Degree Program in Physics**

**(Faculty of Science & Technology)**

**F.Y.B.Sc. (Physics)**

**Choice Based Credit System Syllabus**

**To be implemented from Academic Year 2019-2020**



*ETA 30*  
**Principal**  
Vishwata Arts Commerce  
& Science College Bhatgaon  
Tal. Yeola Dist-Nashik

## Structure of the Course:

Subject Name	Year	Semester	Course Type	Course Code	Course Name	Credit
Physics	1	I	Compulsory Course	PHY-111	Mechanics and Properties of Matter	2
				PHY-112	Physics Principles and Applications	2
				PHY-113	Physics Laboratory-IA	1.5
		II	Compulsory Course	PHY-121	Heat and Thermodynamics	2
				PHY-122	Electricity and Magnetism	2
				PHY-123	Physics Laboratory-IB	1.5
	2	III	Compulsory Course	PHY-231	Mathematical Methods in Physics I	2
				PHY-232	Electronics I /Instrumentation	2
				PHY-233	Physics Laboratory-2A	2
			Ability Enhancement Compulsory Course	PHY-2310	Environment -I	2
		PHY-2311		Language-I	2	
		IV	Compulsory Course	PHY-241	Oscillations, Waves and Sound	2
				PHY-242	Optics	2
				PHY-243	Physics Laboratory-2B	2
			Ability Enhancement Compulsory Course	PHY-2410	Environment -II	2
				PHY-2411	Language-II	2
	3			V	Discipline Specific Elective Course	PHY- 351
		PHY- 352	Electrodynamics			2
		PHY- 353	Classical Mechanics			2
		PHY- 354	Atomic and Molecular Physics			2
		PHY- 355	Computational Physics			2
		PHY- 356	Elective I (Select any One)			2
		PHY- 357	Physics Laboratory-3A			2
PHY- 358		Physics Laboratory-3B	2			
PHY- 359		Physics Laboratory-3C	2			
Skill Enhancement Course		PHY-3510	Maintenance and Repairing of Laboratory equipment - I	2		
	PHY- 3511	Household Electrification, Maintenance and repairing - I	2			

CBCS: 2019-2020

-F. Y: B. Sc-

Physics

	VI	Discipline Specific Elective Course	PHY- 361	Solid State Physics	2
			PHY- 362	Quantum Mechanics	2
			PHY- 363	Thermodynamics and Statistical Physics	2
			PHY- 364	Nuclear Physics	2
			PHY- 365	Electronics II /Advanced Electronics	2
			PHY- 366	Elective II (Select any One)	2
			PHY- 367	Physics Laboratory-4A	2
			PHY- 368	Physics Laboratory-4B	2
			PHY- 369	Project	2
		Skill Enhancement Course	PHY-3610	Maintenance and Repairing of Laboratory Equipment – II	2
			PHY- 3611	Household Electrification, Maintenance and Repairing- II	2



# Savitribai Phule Pune University

(Formerly University of Pune)

Three Year B.Sc. Degree Program in Electronic Science

(Faculty of Science & Technology)

**F.Y.B.Sc. (Electronic Science)**

**Choice Based Credit System (CBCS) Syllabus**

To be implemented from Academic Year 2019-2020



**Title of the Course: B.Sc (Electronic Science)****Preamble:**

Electronics technology has revolutionized various fields including communication, consumer appliances, medical, defense and so on. The advances in technology are making systems smaller, smarter and powerful. Electronics is an important branch of Science devoted to design implementation and analysis of circuits and systems. Knowledge of Electronics is based on fundamental laws of Physics and though new chips/SOC's are fabricated every day, basic principles remain the same.

The goal of the three-year course is to instill in students a confidence that they can get a grip of the subject and apply it for designing, testing and analyzing systems. The course will also make use of problem-solving approach wherein the students will be trained to apply the acquired knowledge to design and analyze circuits for specific applications. The students will be familiarized with programming languages, various development tools, modeling and simulation tools through lab sessions.

The syllabus has been designed such that basic fundamental concepts, knowledge and specific practical skills of the students are developed. The students will be first introduced to various components, devices and their applications, Network theorems and applications of electronics in day to day life. Digital Electronics fundamentals, Operational amplifier circuits, and its applications will be covered in the second semester. In the Second year the students will be taught the basic principles of communication, Analog and digital circuit design and Microcontrollers. In the third year the students will be given an insight to concepts of Embedded System Design, VLSI Technology, Communication systems and various discipline specific courses with a Project in the final semester.

**Titles of Papers and Scheme of Study Evaluation****F. Y. B. Sc. Electronic Science**

Sem	Paper Code	Paper	Paper title	Credits	Lectures/Week			Evaluation		
					Th	Tut	Pr.	CA	UE	Total
I	EL- 111	I	Basics of Applied Electronics	2	3			15	35	50
	EL- 112	II	Electronic Devices and Circuits	2	3			15	35	50
	EL-113	III	Electronics Lab IA	1.5			3.15	15	35	50
II	EL-121	I	Fundamentals of Digital Electronics	2	3			15	35	50
	EL-122	II	Analog and Digital device Applications	2	3			15	35	50
	EL-123	III	Electronics Lab IB	1.5			3.15	15	35	50

## S. Y. B. Sc. Electronic Science

Sem	Paper Code	Paper	Paper title	Credits	Lectures/Week			Evaluation		
					Th	Tut	Pr.	CA	UE	Total
III	EL-231	I	Analog Communication	2	4			15	35	50
	EL-232	II	Digital System Design	2	4			15	35	50
	EL-233	III	Electronics Lab IIA	2			4	15	35	50
IV	EL-241	I	Analog Circuit Design	2	4			15	35	50
	EL-242	II	Microcontroller	2	4			15	35	50
	EL-243	III	Electronics Lab IIB	2			4	15	35	50

## T. Y. B. Sc. Electronic Science

Sem		Paper Code	Paper	Paper title	Credits
V	Discipline Specific Elective Course	EL-351	I	Theory Paper 1	2
		EL-352	II	Theory Paper 2	2
		EL-353	III	Theory Paper 3	2
		EL-354	IV	Theory Paper 4	2
		EL-355	V	Theory Paper 5	2
		EL-356	VI	Theory Paper 6	2
		EL-357	VII	Electronics Lab IIIA	2
		EL-358	VIII	Electronics Lab IIIB	2
		EL-359	IX	Electronics Lab IIIC	2
	Skill Enhancement Course	EL-3510	X	Theory Paper 7	2
		EL-3511	XI	Theory Paper 8	2
VI	Discipline Specific Elective Course	EL-361	I	Theory Paper 1	2
		EL-362	II	Theory Paper 2	2
		EL-363	III	Theory Paper 3	2
		EL-364	IV	Theory Paper 4	2
		EL-365	V	Theory Paper 5	2
		EL-366	VI	Theory Paper 6	2
		EL-367	VII	Lab IVA: Project	2
		EL-368	VIII	Lab IVB: Project	2
		EL-369	IX	Lab IVC: Project	2
	Skill Enhancement Course	EL-3610	X	Theory Paper 7	2
		EL-3611	XI	Theory Paper 8	2



## F.Y.B.Sc. (Electronic Science)

Choice Based Credit System (CBCS) Syllabus To be implemented  
from Academic Year 2019-2020


F. Y. B. Sc. Electronic Science

CBCS: 2019-2020

Electronic Science

Sem	Paper Code	Paper	Paper title	Credits	Lectures/Week			Evaluation		
					Th	Tut	Pr.	CA	UE	Total
I	EL-111	I	Basics of Applied Electronics	2	3			15	35	50
	EL-112	II	Electronic Devices and Circuits	2	3			15	35	50
	EL-113	III	Electronics Lab IA	1.5			3.15	15	35	50
II	EL-121	I	Fundamentals of Digital Electronics	2	3			15	35	50
	EL-122	II	Analog and Digital device Applications	2	3			15	35	50
	EL-123	III	Electronics Lab IB	1.5			3.15	15	35	50



  
Principal  
Vishwala Arts Commerce  
Science College, Bhargava  
Tal Yeola Dist Nashik

## (Geography)

Choice Based System Syllabus

To be implemented from Academic Year 2019-2020

CBCS: 2019- F.Y.B.Sc. Geography  
Structure of the course

Course code for choice based credit system

Year	Semester	Course Type	Course code	Course Name	Credit
1	1	Compulsory Course	GG 111	Introduction to Physical Geography-I (Geomorphology)	2
			GG 112	Introduction to Physical Geography -II (Geography of Atmosphere and Hydrosphere)	2
			GG 113	Practicals in Physical Geography	1.5
	2	Compulsory Course	GG 121	Introduction to Human Geography	2
			GG 122	Population and Settlement Geography	2
			GG 123	Practicals in Human Geography	1.5



5/1/19

Principal

Vishwaiah Commerce  
Science College, Jal. Yeola, n  
Tal. Yeola Dist. Nashik



# Savitribai Phule Pune University

(Formerly University of Pune)

Three Year B.Sc. Degree Program in Geography

(Faculty of Science & Technology)

**F.Y.B.Sc. (Geography)**

**Choice Based Credit System Syllabus**

To be implemented from Academic Year 2019-2020



*Principal*  
Principal  
Vishwalata Arts Commerce  
& Science College Bhatgaon,  
Tal. Yeola Dist-Nashik

## Structure of the course

## Course code for choice based credit system

Year	Semester	Course Type	Course code	Course Name	Credit
1	1	Compulsory Course	GG-111	Introduction to Physical Geography-I (Geomorphology)	2
			GG-112	Introduction to Physical Geography -II (Ggeography of Atmosphere and Hydrosphere)	2
			GG-113	Practicals in Physical Geography	1.5
	2	Compulsory Course	GG-121	Introduction to Human Geography	2
			GG-122	Population and Settlement Geography	2
			GG-123	Practicals in Human Geography	1.5
2	3	Compulsory Course	GG-231	Environmental Geography -I	2
			GG-232	Geography of Maharashtra (Physical)- I	2
			GG-233	Surveying- I	2
	4	Compulsory Course	GG-241	Environmental Geography -II	2
			GG-242	Geography of Maharashtra (Human) -II	2
			GG-243	Surveying - II	2
3	5	Discipline Specific Elective	GG-351	Regional Geography of India (Physical)- I	2
			GG-352	Geography of Economic Activities-I	2
			GG-353	Fundamentals of Tourism - I	2
			GG-354	Pedology	2
			GG-355	Management of Natural Disasters	2
			GG-356	Geoinformatics-I	2
			GG-357	Techniques in Quantitative Analysis	2
			GG-358	Field Techniques in Mapping	2
			GG-359	Techniques in Geomorphology	2
			Skill Enhancement Course	GG-3510	Skill Enhancement Course in Geography - I
	GG-3511	Skill Enhancement Course in Geography -II		2	
	6	Discipline Specific Elective	GG-361	Regional Geography of India (Human) -II	2
			GG-362	Geography of Economic Activities-II	2
			GG-363	Tourism Activities and Management -II	2
			GG-364	Weathering	2
			GG-365	Management of Manmade Disasters	2
			GG-366	Geoinformatics-II	2
			GG-367	GIS Based Project Report	2
GG-368			Maps and Mapping Techniques	2	
GG-368			Soil and Sediment Analysis	2	
Skill Enhancement Course		GG-3610	Skill Enhancement Course in Geography - III	2	
	3611GG	Skill Enhancement Course in Geography - IV	2		

<b>Class- F.Y.B.Sc. GEOGRAPHY</b>		
Paper- CC	Semester - I	Semester - II
I	GG 111 -Introduction to Physical Geography - I (Geomorphology)	GG 121-Introduction to Human Geography
II	GG 112 - Introduction to Physical Geography - II (Ggeography of Atmosphere and Hydrosphere)	GG 122- Population and Settlement Geography
III- Practical	GG 113- Practicals in Physical Geography	GG 123- Practical in Human Geography
<b>Class- S.Y.B.Sc.- CC</b>		
IV	GG 231- Environmental Geography -I	GG 241- Environmental Geography -II
V	GG 232- Geography of Maharashtra (Physical) - I	GG 242- Geography of Maharashtra (Human) - II
VI- Practical	GG 233- Surveying - I	GG- 243- Surveying -II
<b>Class- T.Y.B.Sc.- DSEC</b>		
VII	GG 351- Regional Geography of India (Physical) I	GG 361- Regional Geography of India (Human) - II
VIII	GG 352- Geography of Economic activities - I	GG 362- Geography of Economic Activities-II
IX	GG 353- Fundamentals of Tourism - I	GG 363- Tourism Activities and Management- II
X	GG 354-Pedology	GG 364- Weathering
XI	GG 355- Management of Natural Disasters	GG 365- Management of Manmade Disasters
XII	GG 356-Geoinformatics-I	GG 366-Geoinformatics-II
XIII- Practical	GG 357- Techniques in Quantitative Analysis	GG 367- GIS Based Project Report
XIV- Practical	GG 358- Field Techniques in Mapping	GG 368- Maps and Mapping Techniques
XV- Practical	GG 359-Techniques in Geomorphology	GG 369- Soil and Sediment Analysis
	<b>SEC</b>	
X	GG 3610- Skill Enhancement Course in Geography - I	GG 3610- Skill Enhancement Course in Geography - III
XI	GG 3611- Skill Enhancement Course in Geography -II	GG 3611- Skill Enhancement Course in Geography - IV



# SAVITRIBAI PHULE PUNE UNIVERSITY

Revised Syllabus of

## Master of Commerce (M.Com.) Semester Pattern with Credit System with effect from June 2019

The M. Com. Syllabus for regular students is being revised from the academic year 2019-20.  
The course structure is as below:-

### 1. Objectives :

- To equip and train Post Graduate students to accept the challenges of business world by providing opportunities for study and analysis of advanced commercial and business methods and processes.
- To develop independent logical thinking and facilitate personality development.
- To equip the students to seek suitable careers in management and entrepreneurship.
- To acquaint students with significance of research in business.
- To impart skills regarding methods of data collection and their interpretations.
- To develop communication and analytical skills among students.

### 2. Duration :

The M.Com. Course will be of Two Years duration consisting of two part. I.e. Part I and Part II. Each part is having Two Semesters.

Thus, the M.Com. Course is of Four Semesters. For each Semester, there will be Four Papers of 100 marks each. M.Com. Degree will be of 1600 marks in aggregate.

### 3. Duration and Structure of Programme:

The M.Com (Semester pattern with Credit System) degree Programme shall be of 2 years' duration divided into two parts, Part I and Part II, and 4 semesters.

### 4. Eligibility :

The student who has passed any Bachelors degree of this University or any other recognized University shall be held eligible to be admitted to M.Com. Course.

### 5. Course Structure:

The M.Com. degree course will be of two year duration consisting of four semesters and of minimum 64 credits as below:

Sr. No.	Semester	Total Credits
1	Semester I	16
2	Semester II	16
3	Semester III	16
4	Semester IV	16
	<b>Grand Total</b>	<b>64</b>



Principal  
Vishwalata Arts Commerce  
& Science College Bhatgaon  
Tal. Yeola Dist. Nashik

Four extra credits for project work at 4<sup>th</sup> Semester (This will include credits for fieldwork, data presentation and report writing)

In each Semester, there will be four papers of 100 marks each out of which 40 marks will be for Internal Assessment (attendance, home assignments, class tests, long term papers, classroom presentation and 60 marks for University Examination. Thus M.Com. degree examination, four Semesters shall be of 1600 marks.

In addition to the above, students are required to secure following ten credits. These credits are compulsory in nature.

Semester	Human Rights	Introduction to cyber security / information security	Skill development	Total Credits
I	1 credit	1 credit	--	2 credits
II	1 credit	1 credit	--	2 credits
III	--	1 credit	2 credits	3 credits
IV	--	1 credit	2 credits	3 credits
<b>Total Credits</b>	<b>2 credits</b>	<b>4 credits</b>	<b>4 credits</b>	<b>10 credits</b>

- Syllabus and other details regarding 'Human Rights' has been displayed on the home page of the university website.
- Syllabus and other details regarding 'Introduction to cyber security / information security' has been displayed on the 'syllabi' page of the university website.

6. The Scheme of Papers: The following will be the Scheme of papers:

**The List of Courses**

**Semester I**

Semester	Subject Types	Course Code	Title of the Paper	Hrs/Week	Credit	Exam. Hours	Maximum Marks			
							Internal	Univ.	Total	
Semester I	Core Compulsory	101	Management Accounting	04	04	03	40	60	100	
		102	Strategic Management	04	04	03	40	60	100	
	Core Elective/ Optional Subjects/ Special Subjects	<i>To choose any one Group of the following</i>								
		<b>Group A (Advanced Accounting &amp; Taxation)</b>								
		103	Advanced Accounting	04	04	03	40	60	100	
		104	Income Tax	04	04	03	40	60	100	
		<b>Group B (Commercial Laws &amp; Practices)</b>								
		105	Information system and E-Commerce Practices	04	04	03	40	60	100	
		106	Intellectual Property Laws	04	04	03	40	60	100	
		<b>Group C (Advanced Cost Accounting &amp; Cost system)</b>								
		107	Advanced Cost Accounting	04	04	03	40	60	100	
		108	Costing Technique Examinations and Responsibility Accounting	04	04	03	40	60	100	
		<b>Group D (Co-operation &amp; Rural Development)</b>								
		109	Co-operative Movement in India	04	04	03	40	60	100	
		110	Rural Development	04	04	03	40	60	100	
		<b>Group E (Business Practices &amp; Environment)</b>								
		111	Organized Traders and Markets	04	04	03	40	60	100	
		112	Business Environment and Policy	04	04	03	40	60	100	
<b>Group F (Business Administration)</b>										
113	Production and Operation Management	04	04	03	40	60	100			
114	Financial Management	04	04	03	40	60	100			
<b>Group G (Advanced Banking &amp; Finance)</b>										
115	Legal Framework of Banking	04	04	03	40	60	100			
116	Central Banking	04	04	03	40	60	100			
<b>Group H (Advanced Marketing)</b>										
117	Marketing Techniques	04	04	03	40	60	100			
118	Consumer Behaviour	04	04	03	40	60	100			



## Semester II

Semester	Subject Types	Course Code	Title of the Paper	Hrs/ Week	Credit	Exam. Hours	Maximum Marks			
							Internal	Univ.	Total	
Semester II	Core Compulsory	201	Financial Analysis and Control/ Principals of Financial Accounting	04	04	03	40	60	100	
		202	A. Industrial Economics B. Business Statistics	04	04	03	40	60	100	
	Core Elective/ Optional Subjects/ Special Subjects	<i>To choose any one Group of the following</i>								
		<b>Group A (Advanced Accounting &amp; Taxation)</b>								
		203	Specialized Areas in Accounting	04	04	03	40	60	100	
		204	Business Tax Assessment & Planning	04	04	03	40	60	100	
		<b>Group B (Commercial Laws &amp; Practices)</b>								
		205	E- Security & Cyber Laws	04	04	03	40	60	100	
		206	Laws Regulating to Copyrights & Design	04	04	03	40	60	100	
		<b>Group C (Advanced Cost Accounting &amp; Cost system)</b>								
		207	Application Cost Accounting	04	04	03	40	60	100	
		208	Cost Control & Cost System	04	04	03	40	60	100	
		<b>Group D (Co-operation &amp; Rural Development)</b>								
		209	International Co-operative Movement	04	04	03	40	60	100	
		210	Management of Co-operative Business	04	04	03	40	60	100	
		<b>Group E (Business Practices &amp; Environment)</b>								
		211	Modern Business Practices	04	04	03	40	60	100	
		212	Business Environment Analysis	04	04	03	40	60	100	
		<b>Group F (Business Administration)</b>								
		213	Business Ethics & Professional Value	04	04	03	40	60	100	
214	Elements of Knowledge Management	04	04	03	40	60	100			
<b>Group G (Advanced Banking &amp; Finance)</b>										
215	Banking Law & Practices	04	04	03	40	60	100			
216	Monetary Policy	04	04	03	40	60	100			
<b>Group H (Advanced Marketing)</b>										
217	Customer Relationship Management & Retailing	04	04	03	40	60	100			
218	Services Marketing	04	04	03	40	60	100			

**Master of Commerce (M.Com.) Semester Pattern with  
Credit System with effect from June 2019**

**Sem I**

Semester	Subject Types	Course Code	Title of the Paper	Hrs/Week	Credit	Exam. Hours	Maximum Marks				
							Internal	Univ.	Total		
Semester I	Core Compulsory	101	Management Accounting	04	04	03	40	60	100		
		102	Strategic Management	04	04	03	40	60	100		
	<i>To choose any one Group of the following</i>										
	<b>Group A (Advanced Accounting &amp; Taxation)</b>										
	Core Elective/ Optional Subjects/ Special Subjects	103	Advanced Accounting	04	04	03	40	60	100		
		104	Income Tax	04	04	03	40	60	100		
		<b>Group B (Commercial Laws &amp; Practices)</b>									
		105	Information system and E-Commerce Practices	04	04	03	40	60	100		
		106	Intellectual Property Laws	04	04	03	40	60	100		
		<b>Group C (Advanced Cost Accounting &amp; Cost system)</b>									
		107	Advanced Cost Accounting	04	04	03	40	60	100		
		108	Costing Technique Examination s and Responsibility Accounting	04	04	03	40	60	100		
		<b>Group D (Co-operation &amp; Rural Development)</b>									
		109	Co-operative Movement in India	04	04	03	40	60	100		
		110	Rural Development	04	04	03	40	60	100		
		<b>Group E (Business Practices &amp; Environment)</b>									
	111	Organized Traders and Markets	04	04	03	40	60	100			
	112	Business Environment and Policy	04	04	03	40	60	100			
	<b>Group F (Business Administration)</b>										



  
**Principal**  
**Vishwalata Arts Commerce  
Science College, Bhatgaon  
Tal Yeola Dist Nashik**

F..Y.B.Sc. Botany Choice Based Credit System Syllabus To be Implemented from Academic Year 2019-2020

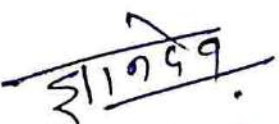
Title of the Course: B. Sc Botany

1. Structure of Course:

2.

Structure B.Sc. Botany syllabus					
Year	Semester	Course Type	Course code	Course Name	Credits
1	1	Compulsory Course	BO 111	Plant life and utilization I	2
			BO 112	Plant morphology and Anatomy	2
			BO 113	Practical based on BO 111 & BO 112	1.5
	2	Compulsory Course	BO 121	Plant life and utilization II	2
			BO 122	Principles of plant science	2
			BO 123	Practical based on BO 121 & BO 122	1.5



  
Principal  
Vishwatape Arts, Commerce & Science College, Tal. Yeola, Dist. Nashik

**Sem II**

Semester	Subject Types	Course Code	Title of the Paper	Hrs/Week	Credit	Exam. Hours	Maximum Marks			
							Internal	Univ.	Total	
Semester II	Core Compulsory	201	Financial Analysis and Control/ Principals of Financial Accounting	04	04	03	40	60	100	
		202	A. Industrial Economics B. Business Statistics	04	04	03	40	60	100	
	Core Elective/ Optional Subjects/ Special Subjects	<i>To choose any one Group of the following</i>								
		<b>Group A (Advanced Accounting &amp; Taxation)</b>								
		203	Specialized Areas in Accounting	04	04	03	40	60	100	
		204	Business Tax Assessment & Planning	04	04	03	40	60	100	
		<b>Group B (Commercial Laws &amp; Practices)</b>								
		205	E- Security & Cyber Laws	04	04	03	40	60	100	
		206	Laws Regulating to Copyrights & Design	04	04	03	40	60	100	
		<b>Group C (Advanced Cost Accounting &amp; Cost system)</b>								
		207	Application Cost Accounting	04	04	03	40	60	100	
		208	Cost Control & Cost System	04	04	03	40	60	100	
		<b>Group D (Co-operation &amp; Rural Development)</b>								
		209	International Co-operative Movement	04	04	03	40	60	100	
210	Management of Co-operative Business	04	04	03	40	60	100			
<b>Group E (Business Practices &amp; Environment)</b>										
211	Modern Business Practices	04	04	03	40	60	100			
212	Business Environment Analysis	04	04	03	40	60	100			
<b>Group F (Business Administration)</b>										



*[Handwritten Signature]*

**Principal**

**Vishwalata Arts Commerce  
Science College, Bhatgaon  
Tal Yeola Dist Nashik**

113	Production and Operation Management	04	04	03	40	60	100
114	Financial Management	04	04	03	40	60	100
<b>Group G (Advanced Banking &amp; Finance)</b>							
115	Legal Framework of Banking	04	04	03	40	60	100
116	Central Banking	04	04	03	40	60	100
<b>Group II (Advanced Marketing)</b>							
117	Marketing Techniques	04	04	03	40	60	100
118	Consumer Behaviour	04	04	03	40	60	100



*Handwritten signature*

**Principal**  
**Vishwaleti Arts Commerce**  
**Science College, Yeola, Tal.**  
**Tal Yeola Dist Nashik**



# Savitribai Phule Pune University

*(Formerly University of Pune)*

**Two Year Degree Program in Computer Science**

**(Faculty of Science & Technology)**

Revised Syllabi for

**M.Sc. (Computer Science) Part-I**

**(For Colleges Affiliated to Savitribai Phule Pune University)**

**Choice Based Credit System Syllabus**

**To be implemented from Academic Year 2019-2020**



*Principal*  
Principal

Vishwata Arts, Commerce  
& Science College - Bhatgaon  
Tal. Yeola Dist. Nashik

**Course Structure:**

Year/ Sem	Course Type	Course Code	Course Name	Credit	% of Assessment			
					IA	UE	Total	
I Year Sem-I	Core Compulsory Theory Paper	CSUT111	Paradigm of Programming Language	4	30	70	100	
		CSUT112	Design and Analysis of Algorithms	4	30	70	100	
		CSUT113	Database Technologies	4	30	70	100	
	Choice Based Optional Paper	CSDT114A	Cloud computing	2	15	35	50	
		CSDP114A	Cloud Computing Practical	2	15	35	50	
		OR						
		CSDT114B	Artificial Intelligence	2	15	35	50	
		CSDP114B	Artificial Intelligence Practical	2	15	35	50	
		OR						
		CSDT114C	Web Services	2	15	35	50	
CSDP114C	Web Services Practical	2	15	35	50			
Core Compulsory Practical Paper	CSUP115	PPL and Database Technologies Practical	4	30	70	100		

Year/ Sem	Course Type	Course Code	Course Name	Credit	% of Assessment			
					IA	UE	Total	
I Year Sem-II	Core Compulsory Theory Paper	CSUT121	Advanced Operating System	4	30	70	100	
		CSUT122	Mobile Technologies	4	30	70	100	
		CSUT123	Software Project Management	4	30	70	100	
	Choice Based Optional Paper	CSDT124A	Project	2	15	35	50	
		CSDP124A	Project related Assignments	2	15	35	50	
		OR						
		CSDT124B	Human Computer Interaction	2	15	35	50	
		CSDP124B	Human Computer Interaction Practical	2	15	35	50	
		OR						
		CSDT124C	Soft Computing	2	15	35	50	
CSDP124C	Soft Computing Practical	2	15	35	50			
Core Compulsory Practical Paper	CSUP125	Practical on Advanced OS & Mobile Technologies	4	30	70	100		

Year/ Sem	Course Type	Course Code	Course Name	Credit	% of Assessment		
					IA	UE	Total
II Year Sem-III	Core Compulsory Theory Paper	CSUT231	Software Architecture and Design Pattern	4	30	70	100
		CSUT232	Machine Learning	4	30	70	100
		CSUT233	Evolutionary Algorithms	4	30	70	100
	Choice Based Optional Paper	CSDT234A	Big Data	2	15	35	50
		CSDP234A	Big Data Practical	2	15	35	50
		OR					
		CSDT234B	Web Analytics	2	15	35	50
		CSDP234B	Web Analytics Practical	2	15	35	50
		OR					
		CSDT234C	Project	2	15	35	50
CSDP234C	Project related Assignments	2	15	35	50		
Core Compulsory Practical Paper	CSUP235	Practical on Software Architecture and Design Pattern and Machine Learning	4	30	70	100	

Year/ Sem	Subject	Paper	Title of Paper	Credit	% of Assessment		
					IA	UE	Total
II Year Sem-IV	Core	CSUIT241	Industrial Training /Institutional project	20			

IA :- Internal Assessment, UE :- University Examination




M. Sc. [I]

Computer Science

**Choice Based Credit System Syllabus  
To be implemented from Academic Year 2019-2020**

Year/ Sem	Course Type	Course Code	Course Name	Credit	% of Assessment		
					IA	UE	Total
I Year Sem-I	Core Compulsory Theory Paper	CSUT111	Paradigm of Programming Language	4	30	70	100
		CSUT112	Design and Analysis of Algorithms	4	30	70	100
		CSUT113	Database Technologies	4	30	70	100
	Choice Based Optional Paper	CSDT114A	Cloud computing	2	15	35	50
		CSDP114A	Cloud Computing Practical	2	15	35	50
		OR					
		CSDT114B	Artificial Intelligence	2	15	35	50
		CSDP114B	Artificial Intelligence Practical	2	15	35	50
		OR					
		CSDT114C	Web Services	2	15	35	50
		CSDP114C	Web Services Practical	2	15	35	50
Core Compulsory Practical Paper	CSUP115	PPL and Database Technologies Practical	4	30	70	100	



  
Principal  
Vishwalata Arts, Commerce  
Science College, Tal. Yeola  
Tal. Yeola Dist. Nashik

Year/ Sem	Course Type	Course Code	Course Name	Credit	% of Assessment			
					IA	UE	Total	
I Year Sem-II	Core Compulsory Theory Paper	CSUT121	Advanced Operating System	4	30	70	100	
		CSUT122	Mobile Technologies	4	30	70	100	
		CSUT123	Software Project Management	4	30	70	100	
	Choice Based Optional Paper	CSDT124A	Project	2	15	35	50	
		CSDP124A	Project related Assignments	2	15	35	50	
		OR						
		CSDT124B	Human Computer Interaction	2	15	35	50	
		CSDP124B	Human Computer Interaction Practical	2	15	35	50	
		OR						
		CSDT124C	Soft Computing	2	15	35	50	
		CSDP124C	Soft Computing Practical	2	15	35	50	
	Core Compulsory Practical Paper	CSUP125	Practical on Advanced OS & Mobile Technologies	4	30	70	100	



*(Handwritten signature)*

**Principal**

Vishwala Arts, Commerce  
Science College, Bhatgaon  
Tal Yeola Dist Nashik