सोलापूर विद्यापीठ सोलापूर

परीक्षा विभाग

परिपत्रक क्र. ३ / २०१५

वाचा: १. **संदर्भ क्र. सोविसो/परीक्षा/वेळापत्रक/२०१४-१५/१४६१, दि.११ ऑक्टोंबर, २०१४**

२. **संदर्भ क्र. सोविसो/अभ्यासमंडळे/२०१५-१६/४७८०, दि.१९ ऑगस्ट, २०१५**

विद्यापीठाशी संलग्नित सर्व महाविद्यालयातील मा.प्राचार्य/प्राचार्या/संचालक/अध्यक्ष व मा.संचालक/विभागप्रमुख सर्व शैक्षणिक संकुले विद्यापीठ परिसर यांना या परिपत्रकाद्वारे आदेशान्वये कळविण्यात येते की, **संदर्भ क्र.१** मधील परिपत्रकामध्ये दि.११ जून २०१५ रोजीच्या परीक्षा मंडळच्या ठरावान्वये बदल करण्यात आलेला आहे.

शैक्षणिक वर्ष २०१४-१५ पासून सर्व विद्याशाखांच्या प्रथम वर्षाच्या प्रथम सत्रास क्रेडीट ग्रेडींग सिस्टीम प्रणाली (CGPA Pattern) लागू करण्यात आली आहे. त्याप्रमाणे शैक्षणिक वर्ष २०१५-१६ (ऑक्टो/नोव्हें-२०१५) पासून सर्व पदव्युत्तर (पी.जी.) अभ्यासक्रमांच्या प्रथम वर्षास (विद्यापीठ संलग्नित) निवड आधारित श्रेयांक प्रणाली (Choice Based Credit System) लागू करण्यात आलेली असून सर्व विद्याशाखेच्या अभ्यासक्रमाचा आराखडा (Structure) हे ७०-३० प्रमाणे ठेवण्यात आलेला आहे.

वरीलप्रमाणे CGPA व CBCS प्रणालीमध्ये लेखी परीक्षेच्या स्वरुप एकसारखे असल्याने (७०-३०) परीक्षेच्या दृष्टीकोनातून एकसारखेपणा यावा व विद्यार्थ्यांचे हीत लक्षात घेता सर्व परीक्षेमध्ये एकसमांतरता असावी. या उद्देशाने **"ऑक्टो/नोव्हें २०१५"** या द्वितीय परीक्षा हंगामापासून **सर्व यु.जी./पी.जी. विद्याशाखांच्या CGPA व CBCS प्रणालीमध्ये ७० गुणाच्या लेखी पेरीक्षेमधील पेपरची वेळ ही एकूण ०२.३० तासाची** असेल याची सर्व संबंधितानी नोंद घ्यावी. **(सदरची बाब अभियांत्रिकी व तंत्रज्ञान विद्याशाखेतंर्गत अभ्यासक्रमांना लागू नाही)**

सदर, बाब सर्व संलग्नित महाविद्यालयातील मा.प्राचार्य/प्राचार्या/संचालक यांनी विद्यार्थी, शिक्षक व प्रशासकीय कर्मचारी यांच्या सत्वर निदर्शनास आणावी.

(बी.पी.पाटील)
परीक्षा नियंत्रक

संदर्भ क्रं. : सोविसो/परीक्षा/वेळापत्रक/ऑक्टो-नोव्हें-२०१५/२०१५-१६/७९१ **दिनांक : २५ ऑगस्ट, २०१५**

सोलापूर विद्यापीठ

।। विद्यया संपन्नता ।।

NAAC Accredited-2015
'B' Grade (CGPA-2.62)

सोलापूर विद्यापीठ, सोलापूर

अभ्यासमंडळे विभाग

परिपत्रक

सर्व संलग्नित महाविद्यालयातील मा.प्राचार्य/प्राचार्या, व संचालक/अध्यक्ष यांना या परिपत्रकाव्दारे कळविण्यात येते की, खाली नमूद केलेल्या वर्गाच्या अभ्यासक्रमाची शै. वर्ष २०१८-१९ पासून लागू करण्यासंदर्भात विद्यापीठ प्राधिकरणाने दि. २१ जून, २०१८ रोजी झालेल्या विद्यापरिषदेच्या बैठकीत मान्यता दिली आहे. सदर अभ्यासक्रम विद्यापीठाच्या (http://su.digitaluniversity.ac under the link of ⟹ BOS (Syllabus, Circulars etc) ⟹ Revised Semester Pattern Syllabus ⟹ Select Faculty) या संकेतस्थळावर उपलब्ध करून देण्यात आले आहेत.

विज्ञान व तंत्रज्ञान विद्याशाखा (Faculty of Science & Technology)

Sr. No	Name of the Subject	Sr. No	Name of the Subject
1.	B.Sc.III-Chemistry (Sem-V&VI)	2.	B.Sc.III-Electronics (Sem-V&VI)
3.	B.Sc.III-Microbiology(Sem-V&VI)	4.	B.Sc.III-Biotechnology(Sem-V&VI)
5.	B.Sc.III-Zoology(Sem-V&VI)	6.	B.Sc.III-Physics(Sem-V&VI)
7.	B.Sc.III-Botany(Sem-V&VI)	8.	B.Sc.III-Geology(Sem-V&VI)
9.	B.Sc.III-Statistics(Sem-V&VI)	10.	B.Sc.III-Mathematics(Sem-V&VI)
11.	B.Sc.III-Computer Science(Sem-V&VI)	12.	B.Sc.III-ECS (Sem-V&VI)
13.	B.Sc.III-Entrepreneurship(Sem-V&VI)	14.	BCA-III
15.	Geography (B.A.III)	16.	B.Sc.Part-I&II-Electronics -CBCS Pattern (Revised-w.e.f. 2018-19)
17.	M.Sc.Part-I&II-Electronics-CBCS Pattern (Revised-w.e.f.-2018-19)	18.	T.E.-Civil Engineering
19.	T.E.-Electronics Engineering	20.	T.E.-Electrical Engineering
21.	T.E.-E&TC	22.	T.E.-Computer Science & Engineering
23.	T.E.-Bio-Medical Engineering	24.	T.E.-Information Technology
25.	T.Y.B.Pharmacy	26.	B.Architecture-III
27.	B.Architecture-V-CGPA Pattern	28.	Rules of NPTEL Courses
29.	NPTEL Course List	30.	Self Learning-H.S.S. Courses

वाणिज्य व व्यवस्थापन विद्याशाखा (Faculty of Commerce & Management)

Sr. No	Name of the Subject	Sr. No	Name of the Subject
1.	Adv. Costing Paper-I&II	2.	Adv. Accountancy Paper-I
3.	Adv. Cost Accounting Paper-I&II	4.	Adv. Accountancy Paper-II
5.	Adv. Banking Paper-I&II	6.	Adv. Statistics Paper-I&II
7.	Business Economics-III	8.	Co-operative Development
9.	Industrial Management Paper-I&II	10.	Modern Management Practice
11.	BBA-III	12.	M.B.A.-II
13.	Business Regulatory Framework	14.	Insurance Paper-I&II
15.	B.Com.II-Corporate Accounting – CBCS (Revised Syllabus-w.e.f.2018)		

मानवविज्ञान विद्याशाखा (Faculty of Humanities)

Sr. No	Name of the Subject	Sr. No	Name of the Subject
1.	B.A.III-Marathi (Sem-V&VI)	2.	B.A.III-English (Sem-V&VI)
3.	B.A.III-Hindi (Sem-V&VI)	4.	B.A.III-Kannada (Sem-V&VI)
5.	B.A.III-Urdu (Sem-V&VI)	6.	B.A.III-Music (Sem-V&VI)
7.	B.A.III-Sanskrit (Sem-V&VI)	8.	B.A.III-Prakrit (Sem-V&VI)
9.	M.A.II-English-CBCS (Revised-w.e.f. 2018-19)	10.	B.A./B.Sc.-III-Compulsory English
11.	B.A.III-Economics (Sem-V&VI)	12.	B.A.III-History (Sem-V&VI)
13.	B.A.III-Political Science (Sem-V&VI)	14.	B.A.III-Sociology (Sem-V&VI)
15.	B.A.III-AIHC&A (Sem-V&VI)	16.	B.A.III-Philosophy (Sem-V&VI)
17.	B.Lib & I.Sc.-I-(Revised-w.e.f.2018)	18.	B.A.LL.B. –III
19.	LL.B.-III	20.	B.A.LL.B.-V (Sem-X-Paper No.IX) Correction –CGPA Pattern

आंतर-विद्याशाखीय अभ्यास विद्याशाखा (Faculty of Interdisciplinary Studies)

Sr. No	Name of the Subject	Sr. No	Name of the Subject
1.	B.A.III-Physical Education	2.	B.Ed.-Two Year (Revised-CBCS-w.e.f.2018)
3.	B.P.Ed. Two Year (Revised-CBCS-w.e.f.2018)	4.	M.Ed. Two Year (Revised-CBCS-w.e.f.2018)
5.	M.P.Ed Two Year (Revised-CBCS-w.e.f.2018)		

वरीलप्रमाणे तयार केलेले अभ्यासक्रम आपल्या महाविद्यालयातील संबंधित अध्यापक, विद्यार्थी व इतर संबंधितांच्या निदर्शनास आणून द्यावे, ही विनंती.

(प्रा.डॉ. व्ही. बी. पाटील)
विशेष कार्यासन अधिकारी
शैक्षणिक, संशोधन आणि विकास

दिनांक:
20 JUL 2018

संदर्भ : सोविसो/अमंवि/२०१८-१९/ 6161

प्रत माहिती व पुढील योग्य त्या कार्यवाहीस्तव :

१. मा. कुलगुरू कार्यालय, सोलापूर विद्यापीठ, सोलापूर.
२. मा. कुलसचिव कार्यालय, सोलापूर विद्यापीठ, सोलापूर.
३. मा. संचालक, बी.सी.यु.डी., सोलापूर विद्यापीठ, सोलापूर.
४. मा. संचालक, परीक्षा व मूल्यमापन, सोलापूर विद्यापीठ, सोलापूर.
५. यंत्रणा विश्लेषक, सोलापूर विद्यापीठ, सोलापूर.
६. उपकुलसचिव, परीक्षा विभाग, सोलापूर विद्यापीठ, सोलापूर.
७. परीक्षा विभागातील सर्व उपविभाग, सोलापूर विद्यापीठ, सोलापूर.
८. एम.के.सी.एल.विभाग, सोलापूर विद्यापीठ, सोलापूर.

Solapur University, Solapur

B. A., B.com and B. Sc. Part – I Compulsory English

(Semester I &II)

(CBCS Semester Pattern Syllabus)

w.e.f. June, 2016

1) Title of the course:- B. A. B.Com., B.Sc. Part – I Compulsory English

2) Introduction:

English is the secondary language introduced as the compulsory subject at B.A., B.com and B. Sc. Part I. It introduces the language skills, communication skills, and grammar and language comprehension. This course includes prose, poetry grammar and communication skills. For this course the textbook entitled **On Track English Skills for Success** is designed. The text is in four sections. These are prose, Poetry, Grammar and vocabulary and Communication skills.

The prose and poetry section aim to strengthen students reading comprehension skills and give them an opportunity for developing literary sensibility and taste. The section on grammar and vocabulary provides brief, useful guidelines on the form and the function of language. The section on communication skills includes topics on some useful oral and written communication.

3) Objectives of the Course:

1) To comprehend the language skills.

2) Use some simple language expression in day to day life.

3) To develop the vocabulary of the students

4) To improve the communicative skills of the students

4) Advantage of the Course:

English is the world language. It is spoken in world wide. Students of the undergraduate level should use English in their day to day life.

5) Eligibility of Course:

For admission into bachelor's degree of Arts one should pass higher secondary school certificate examination that is H.S.C. or 12^{th} Arts, commerce, science or equivalent examination from a recognized board.

6) Duration:

The Duration for B. A., B.com, B. Sc. – I course in one year with two semester pattern

B. A – I :- Semester I &II

B.com– I :- Semester I &II

B. Sc. – I :- Semester I &II

7) **Medium of Instruction:** English

8) Structure of the Course: -

B. A. B. Com, B.Sc. Part - I

Semester I

English Compulsory

(30 CA+ 70 UA= 100 Marks)

Credit – 4 **60 contact Hrs**

Sr. No	Units	Credit	Contact Hrs
1	Prose	1	15
2	Poetry	1	15
3	Grammar and Vocabulary	1	15
4	Communication Skills	1	15
	Total	4	60

B. A. B. Com, B.Sc. Part - I

Semester II

English Compulsory

(30 CA+ 70 UA= 100 Marks)

Credit – 4 **60 contact Hrs**

Sr. No	Units	Credit	Contact Hrs
1	Prose	1	15
2	Poetry	1	15
3	Grammar and Vocabulary	1	15
4	Communication Skills	1	15
	Total	4	60

Solapur University, Solapur
B. A., B.com and B. Sc. Part – I Compulsory English
Semester I
(CBCS Semester Pattern Syllabus w.e.f. June, 2016)

Credit - I **15 Contact Hrs**

Unit : 1- Prose

1.1 After Twenty Years
1.2 The Connoisseur
1.3 The Myth of Artificial Intelligence

Credit - I **15 Contact Hrs**

Unit: 2 - Poetry

2.1 Bangle Sellers
2.2 An Irish Airman Forces His Death

Credit - I **15 Contact Hrs**

Unit: 3 - Grammar and Vocabulary

3.1 Nouns and Pronouns
3.2 Articles
3.3 Preposition
3.4 Genitives and Possessives

Credit - I **15 Contact Hrs**

Unit: 4 - Communication Skills

4.1 Paragraph Writing
4.2 Essay Writing
4.3 Note Making

-

Solapur University, Solapur
B. A., B.com and B. Sc. Part – I Compulsory English
Semester II
(CBCS Semester Pattern Syllabus w.e.f. June, 2016)

Credit - I **15 Contact Hrs**

Unit : 1- Prose

1.1 Work Brings Solace
1.2 Vivekananda: The Great Journey to the West
1.3 Human Rights and Legal Responsibilities

Credit - I **15 Contact Hrs**

Unit: 2 - Poetry

2.1 Brahma
2.2 Full Moon

Credit - I **15 Contact Hrs**

Unit: 3 - Grammar and Vocabulary

3.1 Genitives and Possessives
3.2 Adjectives
3.3 Homonyms, homophones, homographs
3.4 Synonyms and Antonyms

Credit - I **15 Contact Hrs**

Unit: 4 - Communication Skills

4.1 Writing Notices, Agendas and Minutes
4.2 Curriculum Vitae
4.3 Emails

Textbook

On Track English Skills For Success

Solapur University, Solapur
Faculty of Commerce
Choice Based Credit System (CBCS)
(w.e.f.2016-17)
Structure for B. Com. - I

Subject/ Core Course	Name and Type of the Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Name							
Class :→	B.Com.- I Semester - I								
	Ability Enhancement Course(AECC)	1.English Paper I (communication skill)	4	4	100	70	28	30	12
	Core	2.Financial Accountancy Paper-I	4	4	100	70	28	30	12
	Core	3.Principles of Business Management Paper-I	4	4	100	70	28	30	12
	Core	4.Business Economics Paper-I	4	4	100	70	28	30	12
	Elective	**5. Elective-I- Principles of Marketing-** Paper-I	4	4	100	70	28	30	12
		Marathi- Paper-I							
		Hindi- Paper-I							
		Urdu- Paper-I							
		Kannada- Paper-I							
		English-Paper-I (Opt)							
		6. Elective-II- Insurance	4	4	100	70	28	30	12
		Business Mathematics- Paper-I							
		Economic Commercial Geography- Paper-I							
		Political Science-Paper-I							
		History-Paper-I							
		Sociology-Paper-I							
		H.S.R.M.-Paper-I							
		Public Administration-Paper-I							
Total			**24**	**24**	**600**	**350**	**140**	**150**	**60**

Solapur University, Solapur
Faculty of Commerce
Choice Based Credit System (CBCS)
(w.e.f.2016-17)
Structure for B. Com. - I

Subject/ Core Course	Name and Type of the Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Name							
Class :→	B.Com.- I Semester - II								
	Ability Enhancement Course(AECC)	1.English Paper II (communication skill)	4	4	100	70	28	30	12
	Core	2.Financial Accountancy Paper-II	4	4	100	70	28	30	12
	Core	3.Principles of Business Management Paper-II	4	4	100	70	28	30	12
	Core	4.Business Economics Paper-II	4	4	100	70	28	30	12
	Elective	**5. Elective-I- Principles of Marketing-** Paper-II	4	4	100	70	28	30	12
		Marathi- Paper-II							
		Hindi- Paper-II							
		Urdu- Paper-II							
		English-Paper-II (Opt)							
		Kannada- Paper-II							
		6. Elective-II- Insurance-Paper-II	4	4	100	70	28	30	12
		Business Mathematics-Paper-II							
		Economic Commercial Geography- Paper-II							
		Political Science-Paper-II							
		History-Paper-II							
		Sociology-Paper-II							
		H.S.R.M.-Paper-II							
		Public Administration-Paper-II							
Total			**24**	**24**	**600**	**350**	**140**	**150**	**60**

B.Com-I(Sem-I&II) ATKT for 04 Subjects

Solapur University, Solapur

Faculty of Commerce

Choice Based Credit System (CBCS)

(w.e.f.2016-17)

Structure for B. Com. - II

Subject/ Core Course	Name and Type of the Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Name							
Class :→	**B.Com.- II Semester - III**								
	Ability Enhancement Course(AECC)	1.English Paper I (communication skill)	4	4	100	70	28	30	12
	Core	2.Business Economics Paper-I	4	4	100	70	28	30	12
	Core	3.Corporate Accounting	4	4	100	70	28	30	12
	Core	4.Fundamentals of Entrepreneurship	4	4	100	70	28	30	12
	Core	5. Business Statistics	4	4	100	70	28	30	12
	Elective	**6. Elective-I**	4	4	100	70	28	30	12
		Money and Financial System							
		Foundation of Human Skills							
		Organizational Behavior							
		Marketing Research							
		Human Resource Management							
		Management Information System							
		Retail Management							
		Production Management							
Total			**24**	**24**	**600**	**420**	**168**	**180**	**72**

Solapur University, Solapur
Faculty of Commerce
Choice Based Credit System (CBCS)
(w.e.f.2016-17)
Structure for B. Com. - II

Subject/ Core Course	Name and Type of the Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Name							
Class :→	**B.Com.- II Semester - IV**								
	Ability Enhancement Course(AECC)	1.English Paper I (communication skill)	4	4	100	70	28	30	12
	Core	2. Business Economics Paper-II	4	4	100	70	28	30	12
	Core	3. Corporate Accounting	4	4	100	70	28	30	12
	Core	4. Fundamentals of Entrepreneurship	4	4	100	70	28	30	12
	Core	5. Business Statistics	4	4	100	70	28	30	12
	Elective	**6. Elective-II**	4	4	100	70	28	30	12
		Money and Financial System							
		Science Technology & Development							
		Discrete Mathematics							
		Management Information System							
		Geography of Tourism							
		Military Science							
		History of Social Reforms in Maharashtra							
		Social Ecology							
		Production Management							
Total			**24**	**24**	**600**	**420**	**168**	**180**	**72**

B.Com.II (Sem-III&IV)-ATKT For 4 Papers

Solapur University, Solapur
Faculty of Commerce
Choice Based Credit System (CBCS)
(w.e.f. 2016-17)
Structure for B. Com. - III

Subject/ Core Course	Name and Type of the Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Name							
Class :→	**B.Com. - III Semester -V**								
	Core	1.Business Regulatory Framework	4	4	100	70	28	30	12
	Core	2.Business Economics Paper-III	4	4	100	70	28	30	12
	Core	3.Co-oprative Development	4	4	100	70	28	30	12
	Core	4.Modern Management Practices	4	4	100	70	28	30	12
	Elective	**5. Elective-I Advanced Accountancy-Paper-I**	4	4	100	70	28	30	12
		Advanced Banking Paper-I							
		Advanced Cost Accounting-Paper-I							
		Industrial Management Paper-I							
		Advanced Insurance-Paper-I							
		Advanced Statistics-Paper-I							
		6. Elective-II Advanced Accountancy-Paper-II	4	4	100	70	28	30	12
		Advanced Banking-Paper-II							
		Advanced Cost Accounting Paper-II							
		Industrial Management-Paper-II							
		Advanced Insurance-Paper-II							
		Advanced Statistics- Paper-II							
Total			**24**	**24**	**600**	**420**	**168**	**180**	**72**

Solapur University, Solapur
Faculty of Commerce
Choice Based Credit System (CBCS)
(w.e.f. 2016-17)
Structure for B. Com. - III

Subject/ Core Course	Name and Type of the Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Name							
Class :→	**B.Com. - III Semester -VI**								
	Core	1.Business Regulatory Framework	4	4	100	70	28	30	12
	Core	2.Business Economics – Paper-III	4	4	100	70	28	30	12
	Core	3.Co-oprative Development	4	4	100	70	28	30	12
	Core	4.Modern Management Practices	4	4	100	70	28	30	12
	Elective	**5. Elective-I Advanced Accountancy-Paper-I**	4	4	100	70	28	30	12
		Advanced Banking Paper-I							
		Advanced Cost Accounting-Paper-I							
		Industrial Management Paper-I							
		Advanced Insurance-Paper-I							
		Advanced Statistics-Paper-I							
		6. Elective-II Advanced Accountancy-Paper-II	4	4	100	70	28	30	12
		Advanced Banking-Paper-II							
		Advanced Cost Accounting Paper-II							
		Industrial Management-Paper-II							
		Advanced Insurance-Paper-II							
		Advanced Statistics- Paper-II							
Total			**24**	**24**	**600**	**420**	**168**	**180**	**72**

Detailed plan for implementing CBCS or expanding the scope of CBCS in academic year 2016-17

M.Sc./M.A. (PG Course)	Core Course	Elective Course	Open Elective Courses
Sem-I	75%	25%	----
Sem-II	50%	25%	25%
Sem-III	50%	25%	25%
Sem-IV	75%	25%	----
B.SC.(UG)	**Core Course**	**Elective Course**	**Open Elective Courses**
Sem-I	20%	80%	----
Sem-II	20%	80%	----
Sem-III	----	100%	----
Sem-IV	20%	80%	----
Sem-V	80%	20%	----
Sem-VI	80%	20%	----
B.Com.(UG)	**Core Course**	**Elective Course**	**Open Elective Courses**
Sem-I	67%	33%	----
Sem-II	67%	33%	----
Sem-III	67%	33%	----
Sem-IV	67%	33%	----
Sem-V	67%	33%	----
Sem-VI	67%	33%	----
B.A.(UG)	**Core Course**	**Elective Course**	**Open Elective Courses**
Sem-I	33%	67%	----
Sem-II	33%	67%	----
Sem-III	33%	67%	----
Sem-IV	33%	67%	----
Sem-V	17%	83%	----
Sem-VI	17%	83%	----

सोलापूर विद्यापीठ
कुलसचिव कार्यालय (अभ्यासमंडळे विभाग)
सोलापूर पुणे राष्ट्रीय महामार्ग, केगाव, सोलापूर - ४१३ २५५
ईपीएबीएक्स - ०२१७ -२७४४७७८ (११ लाईन्स)
विस्तृत क्र. ११३ फॅक्स नं. - ०२१७-२७४४७७०
संकेतस्थळ : http://su.digitaluniversity.ac/www.sus.ac.in
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NAAC Accredited-2015
'B' Grade (CGPA 2.62)

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EPABX No. 0217- 2744778 (11 lines)
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संदर्भ क्र. सोविसो/अमंवि/२०१७/ 8716 दिनांक:- - 8 NOV 2017

प्रति,
मा. प्राचार्य,
सर्व बी.सी.ए. अभ्यासक्रम संलग्नित महाविद्यालये,
सोलापूर विद्यापीठ, सोलापूर.

विषय :- बी.सी.ए. भाग १ व २ (सेमि.१ ते ४) CGPA पॅटर्न अभ्यासक्रमामधील विषयास CBCS पॅटर्नानुसार समकक्ष विषयाबाबत...

महोदय/महोदया,

उपरोक्त विषयास अनुसरून आपणास कळविण्यात येते की, बी.सी.ए. भाग १ व २ (सेमि.१ ते ४) CGPA पॅटर्न अभ्यासक्रमानुसार परीक्षा संधी संपल्याने CGPA पॅटर्न अभ्यासक्रमातंर्गत असणाऱ्या सर्व विषयांसाठी CBCS पॅटर्नमधील समकक्ष विषय सोबत जोडलेल्या तक्त्यानुसार निश्चित करण्यात येत आहेत.

सदरील बाब विद्यार्थी, शिक्षक व इतर संबंधितांच्या निदर्शनास आणून द्यावी, ही विनंती.

कळावे,

आपला विश्वासू,
Bshewale 08/11/17
उप. कुलसचिव

प्रत:- माहितीस्तव व पुढील कार्यवाहीस्तव
परीक्षा विभाग, सोलापूर विद्यापीठ, सोलापूर.

BCA-Part-I&II Equivalence Subject

BCA-I (Sem-I)

Sr.No	Old Subject Namew.e.f. June 2014 CGPA (under commerce faculty)	Equivalence Subject Namew.e.f. June 2016 CBCS (under science faculty)
1	Introduction to Information Technology	Fundamentals of Computer
2	Procedural Programming through 'C'	Basics of 'C' Programming.
3	Fundamentals of Financial Accounting	Financial Accounting with Tally
4	Business Communication	Communication Skills
5	Discrete Mathematics	Discrete Mathematics

BCA-I (Sem-II)

Sr.No	Old Subject Namew.e.f. June 2014 CGPA (under commerce faculty)	Equivalence Subject Namew.e.f. June 2016 CBCS (under science faculty)
1	OOP with C++	Advanced Programming in C
2	Web Technology	Web Technology
3	Financial Accounting with Tally	Digital Electronics
4	Development of Human Skills	Software Engineering
5	Business Statistics	Computer Oriented Statistics

BCA-II (Sem-III)

Sr.No	Old Subject Namew.e.f. June 2015 CGPA (under commerce faculty)	Equivalence Subject Namew.e.f. June 2017 CBCS (under science faculty)
1	Data Structure using 'C'	Data structures using 'C'
2	Networking and Data Communication	Networking & Data communication
3	Database Management System	DBMS with Oracle
4	Core Java	OOP with C++
5	Financial Management	Operations Research

BCA-II (Sem-IV)

Sr.No	Old Subject Namew.e.f. June 2015 CGPA (under commerce faculty)	Equivalence Subject Namew.e.f. June 2017 CBCS (under science faculty)
1	Software Engineering	Software Testing
2	RDBMS with Oracle	Python
3	Operating System	Operating System
4	Web Technology-II	Advanced Web technology
5	E-Commerce	E-Governance

Solapur University, Solapur
Faculty Of Commerce
Choice Based Credit System(CBCS)
(w.e.f - June 2016)
Structure for PGDCA(Post Graduate Diploma In Computer Applications)

Introduction :

The name of the program shall be Post Graduate Diploma in Computer Applications (P.G.D.C.A.)

Course Objectives :

There are three major objectives of this diploma course.

1. To prepare a Computer Operator and Accounting operator various office packages effectively with some analytical approach and who can be directly employed by many organizations.
2. To prepare a person who can work as Web Programmer , Assistant Programer in an Organization & to train students to a level where they can readily compete for a seats for lateral entry to advance degree courses like M.C.A.,M.C.M., M. Sc. (C.S.) etc.
3. To introduce students with programming

The course has been designed keeping in mind the desirable characteristics of a component professional. We have identified these characteristics to be the following.

1. Good knowledge and skill base of the following form the core field
   - Office Application Packages
   - Web designing
   - Programming methodology and techniques.
   - LAN and Internet.
   - Database user.

2. Ability to work in team
   - Course Duration : One year (TWO SEMESTERS)
   - Intake Capacity :60
   - Number of Computers : 15.
   - Eligibility :

1. Graduate of any discipline (under 10+2+3) pattern from any recognized university
2. Student who is perusing any post graduate course of Solapur University can be admitted to P.G.D.C.A. course i.e. student may be allowed to do Simultaneously two courses.
3. Students who are doing the post graduate degree in external mode in any University other than Solapur University, can do PGDCA Course

Structure of the Course

Sem - I

Subject /Core Course	Name and Type of The Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Paper No. & Name							
Class:->	**PGDCA(Post Graduate Diploma In Computer Applications)Sem -I**								
	Ability Enhancement Courses(AECC)	1. Communication Skills	4	4	100	70	28	30	12
	Core	2. Fundamentals Of Computer And Information Technology	4	4	100	70	28	30	12
	Core	3. Introduction to Accounting Package And MS-Office	4	4	100	70	28	30	12
	Core	4. Software Engineering With 'C' Programming	4	4	100	70	28	30	12
	Core	5. Web Programming With PHP	4	4	100	70	28	30	12
	Core	6. (i) Lab Course 1 Based On Paper No. 2,3,4	2	4	50	-	-	50	20
		(ii) Mini Project Based On Paper No. 5	3		50	-	-	50	20
		Total	25	24	600	350	--	250	--

Sem -II

Subject /Core Course	Name and Type of The Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Paper No. & Name							
Class:->	**PGDCA(Post Graduate Diploma In Computer Applications)Sem –II**								
	Core	7. DBMS And RDBMS Using Oracle	4	4	100	70	28	30	12
	Core	8. ASP.Net Using C #	4	4	100	70	28	30	12
	Core	9. Java Programming	4	4	100	70	28	30	12
	Core	10. Lab Course 2 Based On Paper No. 7, 8 ,9	3	4	100	-	-	100	40

SOLAPUR UNIVERSITY, SOLAPUR.

Choice Based Credit System Syllabus and Structure of the Bachelor of Computer Applications (BCA)

To be effective from June 2016 (Under Science Faculty)

1) Title:

The degree shall be titled as Bachelor of Computer Applications (BCA)

2) Objectives of the course:

This is a three years bachelor degree course in computer applications aimed at developing computer professional versatile in use of computers mostly in business world. The emphasis is to have generality of developing professionals as programmer, system analysts, database administrators, documentation officer etc.

3) Duration:

i) The course shall be a full time course.
ii) The duration of course shall be three years.
iii) The course shall be run on self-supporting basis.

4) Number of Students:

A batch shall consist of not more than 60 students.

5) Eligibility:

i) A candidate for being eligible for admission to the Degree Course in Computer Science. Candidate shall have passed XII std. Examination of the Maharashtra Board of Higher Secondary Education or its equivalent or any Diploma of not less than two years.

ii) A candidate has to appear for a common entrance test to be conducted by respective college for getting admission to this course.

1. Percentage at HSC	100
2.Percentage at Entrance	100
Total	200

The merit list will be prepared on the basis of percentage of HSC and percentage at entrance examination. Students will be admitted on the basis of Merit list.

6) Medium:

The medium of instruction and examination will be only in English.

a) Details of Internal examination:

1. Attendance	05 marks
2. Assignment	20 marks (3 Home & 2 class assignments)
3. Mid-Test	05 marks
Total	30 marks

b) Marks of Lab course and mini project will be given by the concerned college on the basis of evaluation by the internal teacher.

c) Original Report and Viva-Voce:

Project Report will be assessed by the internal teacher at the end of sixth semester out of 70 marks and there will be viva-voce examination of 80 marks. The panel of examiners will consist of one internal and one external appointed by university.

Standard of Passing:

A candidate must obtain minimum 40% marks for passing in each university examination paper, internal examination, Lab course, Major Project.

i) Class will be awarded on the basis of marks obtained by the candidate in all the six semester examination.

ii) Candidate who has secure 40% marks in each head of internal credit and semester examination shall be declared to have passed in the paper.

iii) A candidate who fails in any particular theory papers shall be allowed to reappear for that theory paper. However, his/her internal credit marks shall be carrying forwarded.

Award of Class:

Class should be awarded to the students of BCA on the basis of aggregate marks in the six semesters.

The award of class shall be as under:

Aggregate 70% and above	First class with distinction
Aggregate 60% and above	First Class But less than 70%,
Aggregate 50% and above	Second Class But less than 60%
Aggregate 40% and above	Pass Class But less than 50%

Titles of Papers and Scheme of Study and Evaluation for B.C.A. Program

Semester- I

Course code	Title of Course	Credits		Lectures/Week			Evaluation		
		Th	Pr.	Th	Tu	Pr.	CA	UE	Total
BCA101	Fundamentals of Computer	4	-	5	-	-	30	70	100
BCA102	Basics of 'C' Programming.	4	-	5	-	-	30	70	100
BCA103	Financial Accounting with Tally	4	-	5	-	-	30	70	100
BCA104	Communication Skills	4	-	5	-	-	30	70	100
BCA105	Discrete Mathematics	4	-	5	-	-	30	70	100
BCA106	Lab 1 Based on 101, 102, 103, 105	-	4	-	-	8	30	70	100
	Total	**20**	**4**	**25**	**-**	**8**	**180**	**420**	**600**

Semester- II

Course code	Title of Course	Credits		Lectures/Week			Evaluation		
		Th	Pr.	Th	Tu	Pr.	CA	UE	Total
BCA201	Advanced Programming in C	4	-	5	-	-	30	70	100
BCA202	Web Technology	4	-	5	-	-	30	70	100
BCA203	Software Engineering	4	-	5	-	-	30	70	100
BCA204	Digital Electronics	4	-	5	-	-	30	70	100
BCA205	Computer Oriented Statistics	4	-	5	-	-	30	70	100
BCA206	Lab 2 Based on 201, 202, 204, 205	-	4	-	-	8	30	70	100
	Total	**20**	**4**	**25**	**-**	**8**	**180**	**420**	**600**

SOLAPUR UNIVERSITY, SOLAPUR.

Syllabus and Structure of the Bachelor of Computer Applications (BCA)

To be effective from June 2017 (Under Science Faculty)

1) Title:

The degree shall be titled as Bachelor of Computer Applications (BCA)

2) Objectives of the course:

This is a three years bachelor degree course in computer applications aimed at developing computer professional versatile in use of computers mostly in business world. The emphasis is to have generality of developing professionals as programmer, system analysts, database administrators, documentation officer etc.

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1. Attendance	05 marks
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3. Mid-Test	05 marks
Total	30 marks

b) Marks of Lab course and mini project will be given by the concerned college on the basis of evaluation by the internal teacher.

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Project Report will be assessed by the internal teacher at the end of sixth semester out of 70 marks and there will be viva-voce examination of 80 marks. The panel of examiners will consist of one internal and one external appointed by university.

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i) Class will be awarded on the basis of marks obtained by the candidate in all the six semester examination.

ii) Candidate who has secure 40% marks in each head of internal credit and semester examination shall be declared to have passed in the paper.

iii) A candidate who fails in any particular theory papers shall be allowed to reappear for that theory paper. However, his/her internal credit marks shall be carrying forwarded.

Award of Class:

Class should be awarded to the students of BCA on the basis of aggregate marks in the six semesters.

The award of class shall be as under:

Aggregate 70% and above	First class with distinction
Aggregate 60% and above	First Class But less than 70%,
Aggregate 50% and above	Second Class But less than 60%
Aggregate 40% and above	Pass Class But less than 50%

Syllabus Structure for BCA-II Course

Faculty Name	
BOS Name	
Subject Name	
Course Pattern	CBCS
Syllabus Implement from Academic Year	June-2017

Year of Course FY/SY/TY	Sem	Paper Code (Computer Code will be given by Computer Section)	Paper Code (BOS Code)	Paper Name (This name is displayed on mark sheet)	Paper Number (I/II/III)	Paper Type (1. Core/Compulsory 2. Fundamental/Optional/Elective)	Credits	Number of Lectures in Hr/WK	Total Lecture in Semester	Teaching Learning Method (Lecture/ Laboratory)	Assessment Method (Theory/ Practical/ Teamwork/Oral/Viva/Field Work/Project/Seminar)	Total Marks		Theory				Practical/TeamWork/Oral/Viva/FieldWork/Project/Seminar			
														ESE(UA)		ICA(CA)		ESE(UA)		ICA(CA)	
												Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks
SY	III	BCA 301		Data structures using 'C'		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	III	BCA 302		Networking & Data communication		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	III	BCA 303		DBMS with Oracle		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	III	BCA 304		OOP with C++		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	III	BCA 305		Operations Research		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-

SY	III	BCA 306		Lab 3 Based on 301, 303, 304		1	12	-		Laboratory	Practical	100	40	-	-	-	-	70	28	30	12
SY	IV	BCA 401		Software Testing		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	IV	BCA 402		Python		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	IV	BCA 403		Operating System		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	IV	BCA 404		Advanced Web technology		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	IV	BCA 405		E- Governance		1	4	5		Lecture	Theory	100	40	70	28	30	12	-	-	-	-
SY	IV	BCA 406		Lab 4 Based on 402, 404		1	12	-		Laboratory	Practical	100	40	-	-	-	-	70	28	30	12

Practical batch - contents No. of students – 20
Practical batch - 12 lab. hours per week

Faculty Name	Science and Technology
BOS Name	Computer Science
Subject Name	Computer Science – BCA
Course Pattern	CBCS
Syllabus Implement from Academic Year	June-2018

Year of Course FY/SY/TY	Semester	Paper Code(Computer Code will be given by Computer Section)	Paper Code (BOS Code)	Paper Name (This name is displayed on mark sheet)	Paper Number (I/II/III)	Paper Type (1. Core/Compulsory 2. Fundamental/Optional/Elective)	Credits	Number of Lectures in Hr/WK	Total Lecture in Semester	Teaching Learning Method (Lecture/ Laboratory)	Assessment Method (Theory/Practical / Team work/ Oral /Viva/ Field Work/ Project/ Seminar)	Total Marks		Theory				Practical/Team Work/ Oral/ Viva/ Field Work/ Project/ Seminar			
														ESE(UA)		ICA(CA)		ESE(UA)		ICA(CA)	
												Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks
TY	V	BCA 501		Core Java		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 502		Visual Programming		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 503		Linux and Shell Programming		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 504		Computer Graphics		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 505-A		Data Warehouse and Data Mining		2	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 505-B		Theory of Computation		2	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 506		Lab 5 Based on 501, 502, 503 Mini Project using 501/502		1	4	12		Laboratory	Practical	100	40					50 50	20 20		

TY	VI	BCA 601		Advanced Java		I	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 602		Dot Net Technology		I	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 603		Recent Trends in IT		I	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 604-A		Cryptography and Network Security		2	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 604-B		System Programming		2	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 605		Lab 6 Based on 601, 602		I	4	8		Laboratory	Practical	100	40	70	28	30	12	70	28	30	12
TY	VI	BCA 606		Major Project Work based on any programming |language in syllabus		I	4	8		Laboratory	Project	100	40	70	28	30	12	70	28	30	12

Faculty Name	Science and Technology
BOS Name	Computer Science
Subject Name	Computer Science – BCA
Course Pattern	CBCS
Syllabus Implement from Academic Year	June-2018

Year of Course FY/SY/TY	Semester	Paper Code(Computer Code will be given by Computer Section)	Paper Code (BOS Code)	Paper Name (This name is displayed on mark sheet)	Paper Number (I/II/III)	Paper Type (1. Core/Compulsory 2. Fundamental/Optional/Elective)	Credits	Number of Lectures in Hr/WK	Total Lecture in Semester	Teaching Learning Method (Lecture/ Laboratory)	Assessment Method (Theory/Practical / Team work/ Oral /Viva/ Field Work/ Project/ Seminar)	Total Marks		Theory				Practical/Team Work/ Oral/ Viva/ Field Work/ Project/ Seminar			
														ESE(UA)		ICA(CA)		ESE(UA)		ICA(CA)	
												Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks
TY	V	BCA 501		Core Java		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 502		Visual Programming		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 503		Linux and Shell Programming		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 504		Computer Graphics		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 505-A		Data Warehouse and Data Mining		2	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 505-B		Theory of Computation		2	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	V	BCA 506		Lab 5 Based on 501, 502, 503 Mini Project using 501/502		1	4	12		Laboratory	Practical	100	40					50 50	20 20		

TY	VI	BCA 601		Advanced Java		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 602		Dot Net Technology		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 603		Recent Trends in IT		1	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 604-A		Cryptography and Network Security		2	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 604-B		System Programming		2	4	5		Lecture	Theory	100	40	70	28	30	12				
TY	VI	BCA 605		Lab 6 Based on 601, 602		1	4	8		Laboratory	Practical	100	40	70	28	30	12	70	28	30	12
TY	VI	BCA 606		Major Project Work based on any programming |language in syllabus		1	4	8		Laboratory	Project	100	40	70	28	30	12	70	28	30	12

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Science& Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: Bachelor of Computer Applications

Name of the Course: B.C.A. I (Sem–I & II)

(Syllabus to be implemented from w.e.f. June 2019)

Punyashlok Ahilyadevi Holkar Solapur University

Choice Based Credit System (CBCS), (w.e.f.2019)

Structure for B. C. A. (Science) – Part I

Subject/ Core Course	Name and Type of the Paper		No. of papers/ Practical	Hrs/week			Total Marks Per Paper	UA	CA	Credits
	Type	Name		L	T	P				
Class :	**B.C. A.- I Semester –I**									
Ability Enhancement Course(AECC)		English(communication skill)	Paper- I	4.0			100	80	20	4.0
Core	DSC1A	Fundamentals of Computer	Paper-I	2.5	--	--	50	40	10	4.0
		Logic Development With 'C' Programming	Paper-II	2.5	--	--	50	40	10	
	DSC2A	Basics of Web Programming – I	Paper-I	2.5	--	--	50	40	10	4.0
		Software Engineering- I	Paper-II	2.5	--	--	50	40	10	
	DSC3A	Basics of Mathematics – I	Paper-I	2.5	--	--	50	40	10	4.0
		Statistical Methods-I	Paper-II	2.5	--	--	50	40	10	
	DSC4A	DigitalElectronics	Paper-I	2.5	--	--	50	40	10	4.0
		Development of Human Skills	Paper-II	2.5	--	--	50	40	10	
Total				**24**	--	--	**500**	**400**	**100**	**20**
Class :	**B. C. A. - I Semester - II**									
Ability Enhancement Course(AECC)		English (communication skill)	Paper- II	4.0			100	80	20	4.0
Core	DSC1B	Advanced Programming in C	Paper-III	2.5	--	--	50	40	10	4.0
		Introduction to Operating System	Paper-IV	2.5	--	--	50	40	10	
	DSC2B	Basics of Web Programming – II	Paper-III	2.5	--	--	50	40	10	4.0
		OfficeAutomation	Paper-IV	2.5	--	--	50	40	10	
	DSC3B	Basics of Mathematics – II	Paper-III	2.5	--	--	50	40	10	4.0
		StatisticalMethods-II	Paper-IV	2.5	--	--	50	40	10	
	DSC4B	Introduction to Microprocessor	Paper-III	2.5	--	--	50	40	10	4.0
		Software Engineering- II	Paper-IV	2.5	--	--	50	40	10	
Democracy, Elections and Good Governance				3.0			50	40	10	NC
Total (Theory)				**27**	--	--	**550**	**440**	**110**	**20**
Core		DSC 1 A & 1B	Practical I & II	--	--	4	100	80	20	4.0
		DSC 2 A & 2B	Practical I & II	--	--	4	100	80	20	4.0
		DSC 3 A & 3B	Practical I & II	--	--	4	100	80	20	4.0
		DSC 4 A & 4B	Practical I & II	--	--	4	100	80	20	4.0
			Total (Practical)			**16**	**400**	**320**	**80**	**16**
			Grand Total	**51**		**16**	**1450**	**1160**	**290**	**56**

Abbreviations:

L: Lectures T: Tutorials P: Practical's UA : University Assessment CA : College Assessment DSC / CC: Core Course AEC : Ability Enhancement Course

DSE : Discipline Specific Elective Paper SEC : Skill Enhancement Course GE : Generic Elective CA: Continuous Assessment ESE: End Semester Examination

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

पुण्यश्लोक अहिल्यादेवी होळकर
सोलापूर विद्यापीठ
॥ विद्यया संपन्नता ॥
NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Science& Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: Bachelor of Computer Applications

Name of the Course: B.C.A. I (Sem–I & II)

(Syllabus to be implemented from w.e.f. June 2019)

Punyashlok Ahilyadevi Holkar SolapurUniversity, Solapur

Choice Based Credit System
Syllabus and Structure of the
Bachelor of Computer Applications (BCA)

With effective from June 2019

1) Title:

The degree shall be titled as Bachelor of Computer Applications (BCA)

2) Objectives of the course:

This is a three years bachelor degree course in computer applications aimed at developing computer professional versatile in use of computers mostly in business world. The emphasis is to have generality of developing professionals as programmer, system analysts, database administrators, documentation officer etc.

3) Duration:

1. The course shall be a full time course.
2. The duration of course shall be three years.
3. The course shall be run on self-supporting basis.

4) Number of Students:

A batch shall consist of not more than 60 students.

5) Eligibility:

1. A candidate for being eligible for admission to the Degree Course in Computer Science. Candidate shall have passed XII std. Examination of the Maharashtra Board of Higher Secondary Education or its equivalent or any Diploma of not less than two years.
2. A candidate has to appear for a common entrance test to be conducted by respective college for getting admission to this course.

1. Percentage at HSC	100
2.Percentage at Entrance	100
Total	200

The merit list will be prepared on the basis of percentage of HSC and percentage at entrance examination. Students will be admitted on the basis of Merit list.

6) Medium:

The medium of instruction and examination will be only in English.

a) Marks internal for theory and of Lab course and mini project will be given by the concerned college on the basis of evaluation by the internal teacher.

b) Original Report and Viva-Voce:

Project Report will be assessed by the internal teacher at the end of sixth Semester.

The panel of examiners will consist of one internal and one external appointed

by university.

Standard of Passing:

A candidate must obtain minimum 40% marks for passing in each university examination paper, internal examination, Lab course, Major Project.

i. Class will be awarded on the basis of marks obtained by the candidate in all the six semester examination.

ii. Candidate who has secure 40% marks in each head of internal credit and semester examination shall be declared to have passed in the paper.

iii. A candidate who fails in any particular theory papers shall be allowed to reappear for that theory paper. However, his/her internal credit marks shall be carrying forwarded.

Award of Class:

Class should be awarded to the students of BCA on the basis of aggregate marks in the six semesters.

The award of class shall be as under:

Aggregate 70% and above	First class with distinction
Aggregate 60% and above	First Class But less than 70%,
Aggregate 50% and above	Second Class But less than 60%
Aggregate 40% and above	Pass Class But less than 50%

Punyashlok Ahilyadevi Holkar Solapur University

Choice Based Credit System (CBCS), (w.e.f.2019)

Structure for B. C. A. (Science) – Part I

Subject/ Core Course	Name and Type of the Paper		No. of papers/ Practical	Hrs/week			Total Marks Per Paper	UA	CA	Credits
	Type	Name		L	T	P				
Class :	**B.C. A.- I Semester –I**									
Ability Enhancement Course(AECC)		English(communication skill)	Paper- I	4.0			100	80	20	4.0
Core	DSC1A	Fundamentals of Computer	Paper-I	2.5	--	--	50	40	10	4.0
		Logic Development With 'C' Programming	Paper-II	2.5	--	--	50	40	10	
	DSC2A	Basics of Web Programming – I	Paper-I	2.5	--	--	50	40	10	4.0
		Software Engineering- I	Paper-II	2.5	--	--	50	40	10	
	DSC3A	Basics of Mathematics – I	Paper-I	2.5	--	--	50	40	10	4.0
		Statistical Methods-I	Paper-II	2.5	--	--	50	40	10	
	DSC4A	DigitalElectronics	Paper-I	2.5	--	--	50	40	10	4.0
		Development of Human Skills	Paper-II	2.5	--	--	50	40	10	
Total				**24**	--	--	**500**	**400**	**100**	**20**
Class :	**B. C. A. - I Semester - II**									
Ability Enhancement Course(AECC)		English (communication skill)	Paper- II	4.0			100	80	20	4.0
Core	DSC1B	Advanced Programming in C	Paper-III	2.5	--	--	50	40	10	4.0
		Introduction to Operating System	Paper-IV	2.5	--	--	50	40	10	
	DSC2B	Basics of Web Programming – II	Paper-III	2.5	--	--	50	40	10	4.0
		OfficeAutomation	Paper-IV	2.5	--	--	50	40	10	
	DSC3B	Basics of Mathematics – II	Paper-III	2.5	--	--	50	40	10	4.0
		StatisticalMethods-II	Paper-IV	2.5	--	--	50	40	10	
	DSC4B	Introduction to Microprocessor	Paper-III	2.5	--	--	50	40	10	4.0
		Software Engineering- II	Paper-IV	2.5	--	--	50	40	10	
Democracy, Elections and Good Governance				3.0			50	40	10	NC
Total (Theory)				**27**	--	--	**550**	**440**	**110**	**20**
Core		DSC 1 A & 1B	Practical I & II	--	--	4	100	80	20	4.0
		DSC 2 A & 2B	Practical I & II	--	--	4	100	80	20	4.0
		DSC 3 A & 3B	Practical I & II	--	--	4	100	80	20	4.0
		DSC 4 A & 4B	Practical I & II	--	--	4	100	80	20	4.0
			Total (Practical)			**16**	**400**	**320**	**80**	**16**
			Grand Total	**51**		**16**	**1450**	**1160**	**290**	**56**

Abbreviations:

L: Lectures T: Tutorials P: Practical's UA : University Assessment CA : College Assessment DSC / CC: Core Course AEC : Ability Enhancement Course

DSE : Discipline Specific Elective Paper SEC : Skill Enhancement Course GE : Generic Elective CA: Continuous Assessment ESE: End Semester Examination

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

पुण्यश्लोक अहिल्यादेवी होळकर
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॥ विद्यया संपन्नता ॥

NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Commerce & Management

CHOICE BASED CREDIT SYSTEM

Syllabus: Post Graduate Diploma in Computer Application

Name of the Course: PGDCA I (Sem.– I & II)

(Syllabus to be implemented from w.e.f. June 2020)

Punyshlok Ahilyadevi Holkar Solapur University, Solapur

PGDCA(Post Graduate Diploma in Computer Application)

STRUCTURE FOR COLLEGE & UNIVERSITY CAMPUS

Choice Based Credit System w.e.f.2020-21

Semester	Code	Title of the Paper	Semester Exam			L	T	P	Total Credits
			Theory	IA	Total				
Subject									
HCT	PGDCA1.1	Communication skill	80	20	100	4	1	0	5
HCT	PGDCA1.2	Fundamental of computer and information technology	80	20	100	4	1	0	5
HCT	PGDCA 1.3	Introduction to accounting Package and MS-office	80	20	100	4	1	0	5
	PGDCA 1.4	Software Enginnering with C Programming	80	20	100	4	1	0	5
DSE	PGDCA 1.5	Web programming with PHP	80	20	100	4	1	0	5
DSE	PGDCA 1.6	I) Lab Course based on PGDCA – 1.2,1.3,1.4 II) Mini project based on 1.5		50 50	50 50	2 3		50 50	5
			400	200	600				
		PGDCA Semister -II							
Subject		**Hard Core** Compulsory Papers							
HCT	PGDCA 1.7	DBMS with oracle	80	20	100	4	1	0	5
HCT	PGDCA 1.8	ASP.NET using C#	80	20	100	4	1	0	5
HCT	PGDCA 1.9	JAVA and Python Programming	80	20	100	4	1	0	5
HCT	PGDCA 2.0	Lab Course 2 Based on PGDCA 1.7,1.8,1.9 Major Project	-	100 100	100 200			3 3	6
			240	260	600			0	

HCT -Hard Core Theory

DSE -Discipline Specific Elective

SCT -Soft Core Theory

OET -Open Elective Theory

IA -Internal Assessment – Home Assignment'Unit Test' Seminar' PPT Presentation'' Industrial Visit/ Oral Exam' Group Discussion' Case Study' Internship' Survey/ Field Visit report.

L Lecture

T Theory

P Practical

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: B. C. A.

Name of the Course: B.C.A. II (Sem.– III & IV)

(Syllabus to be implemented from w.e.f. June 2020)

Punyashlok Ahilyadevi Holkar Solapur University
Faculty of Science and Technology
Choice Based Credit System (CBCS), (w.e.f.2020-21)
Structure for B. C. A. – Part II (Science)

Subject/ Core Course	Name and Type of the Section		No. of Papers/ Practical	Hrs/week			Total Marks Per Section	UA	CA	Credits
	Type	Name		L	T	P				
Class :	**B.C. A.- II Semester – III**									
Core	DSC1C	OOPS with C++-I	Section -I	03	--	--	50	40	10	4.0
		Data structures using 'C'- I	Section-II	03	--	--	50	40	10	
	DSC2C	Database Management System	Section-I	03	--	--	50	40	10	4.0
		Software Testing & Quality Assurance	Section-II	03	--	--	50	40	10	
	DSC3C	Web Development using PHP	Section-I	03	--	--	50	40	10	4.0
		Computer Networks-I	Section-II	03	--	--	50	40	10	
	AECC	Environmental Studies		03	--	--	50	40	10	NC
	SEC-I	Financial Accounting with Tally		06	--	--	100	80	20	4.0
Total				**27**	--	--	**450**	**360**	**90**	**16**
Class :	**B. C. A. - II Semester - IV**									
Core	DSC1D	OOPS with C++-II	Section -I	03	--	--	50	40	10	4.0
		Data structures using 'C'- II	Section-II	03	--	--	50	40	10	
	DSC2D	MySQL	Section-I	03	--	--	50	40	10	4.0
		Ethics and Cyber law	Section-II	03	--	--	50	40	10	
	DSC3D	Angular JS	Section-I	03	--	--	50	40	10	4.0
		Advanced Computer Networks	Section-II	03	--	--	50	40	10	
	SEC-II	Python Programming		06	--	--	100	80	20	4.0
Total (Theory)				**24**	--	--	**400**	**320**	**80**	**16**
Core	DSC 1 C & 1 D		Practical I & II	--	--	8	100	80	20	4.0
	DSC 2 C & 2 D		Practical I & II	--	--	8	100	80	20	4.0
	DSC 3 C & 3 D		Practical I & II	--	--	8	100	80	20	4.0
Total (Practical)						**24**	**300**	**240**	**60**	**12**
Grand Total				**51**	--	**24**	**1150**	**920**	**230**	**44**

***Core Subjects: Chemistry/Physics/Electronics/Computer Science/Mathematics/Statistics/Botany/Zoology/ Microbiology/Geology/ Geography/Psychology**

Abbreviations: L: Lectures, T: Tutorials, P: Practical's, UA:University Assessment, CA: College Assessment, DSC / CC: Core Course, AEC : Ability Enhancement Course, DSE : Discipline Specific Elective Section, SEC : Skill Enhancement Course, GE : Generic Elective, CA: Continuous Assessment,
ESE: End Semester Examination

School of Commerce and Management
Solapur University, Solapur
M. Com.
Choice Based Credit System
w.e.f. June 2016-17

Semester	Code	Title of the Paper	Semester Exam			L	T	P	Credits
			Theory	I A	Total				
First									
M.Com.		**Hard Core**							
	HCT 1.1	Management Concepts	70	30	100	4	0	0	4
	HCT 1.2	Managerial Economics -I	70	30	100	4	0	0	4
	HCT 1.3	E-Commerce	70	30	100	4	0	0	4
		Soft Core (Any One)							
	SCT 1.1	Advanced Accountancy-I	70	30	100	4	0	0	4
	SCT 1.2	Advanced Banking-I	70	30	100	4	0	0	4
		Practical/ Field Work							
	HCP 1.1	Practical Work – HCT 1.3	70	30	100	0	0	4	4
	SCP 1.1	Practical/ Field Work- SCT 1.1/ 1.2	70	30	100	0	0	4	4
		Tutorial	00	25	25	0	1	0	1
		Total (First Semester)	**420**	**205**	**625**	**20**	**1**	**4**	**25**
Second									
M.Com.		**Hard Core**							
	HCT 2.1	Organisational Behaviour	70	30	100	4	0	0	4
	HCT 2.2	Managerial Economics -II	70	30	100	4	0	0	4
		Soft Core (Any One)							
	SCT 2.1	Advanced Accountancy-II	70	30	100	4	0	0	4
	SCT 2.2	Advanced Banking-II	70	30	100	4	0	0	4
		Open Elective (Any One)							
	OET 2.1	Accounting Practices	70	30	100	4	0	0	4
	OET 2.2	Entrepreneurship	70	30	100	4	0	0	4
		Practical/Field Work							
	HCP 2.1	Practical Work – HCT 2.1/ 2.2	70	30	100	0	0	4	4
	SCP 2.1	Practical/Field Work- SCT 2.1/ 2.2	70	30	100	0	0	4	4
		Tutorial	00	25	25	0	1	0	1
		Total (Second Semester)	**420**	**205**	**625**	**20**	**1**	**4**	**25**

Third									
M.Com.		**Hard Core**							
	HCT 3.1	Business Finance-I	70	30	100	4	0	0	4
	HCT 3.2	Management Accounting-I	70	30	100	4	0	0	4
		Soft Core (Any One)							
	SCT 3.1	Advanced Accountancy-III	70	30	100	4	0	0	4
	SCT 3.2	Advanced Banking-III	70	30	100	4	0	0	4
		Open Elective (Any One)							
	OET 3.1	Final Account	70	30	100	4	0	0	4
	OET 3.2	Office Management	70	30	100	4	0	0	4
		Practical/Field Work							
	HCP 3.1	Practical Work – HCT 3.2	70	30	100	0	0	4	4
	SCP 3.1	Practical Work- SCT 3.1/ 3.2	70	30	100	0	0	4	4
		Tutorial	00	25	25	0	1	0	1
		Total (Third Semester)	**420**	**205**	**625**	**20**	**1**	**4**	**25**
Four									
M.Com.		**Hard Core**							
	HCT 4.1	Business Finance-II	70	30	100	4	0	0	4
	HCT 4.2	Management Accounting-II	70	30	100	4	0	0	4
	HCT 4.3	International Business	70	30	100	4	0	0	4
		Soft Core (Any One)							
	SCT 4.1	Advanced Accountancy-IV	70	30	100	4	0	0	4
	SCT 4.2	Advanced Banking-IV	70	30	100	4	0	0	4
		Practical/Field Work							
	HCP 4.1	Practical Work- HCT 4.2	70	30	100	0	0	4	4
	MP 4.1	Major Project	70	30	100	0	0	4	4
		Tutorial	00	25	25	0	1	0	1
		Total (Fourth Semester)	**420**	**205**	**625**	**20**	**1**	**4**	**25**

4 Credits of Theory = 4 Hours of Teaching per Week

2 Credits of Practical = 4 hours per Week

L = Lecture T = Tutorials P = Practical IA= Internal Assessment

HCT Hard Core Theory SCT= Soft Core Theory

HCP= Hard Core Practical SCP=Soft Core Practical

OET= Open Elective Theory OEP= Open Elective Practical

MP= Major Project

Solapur University, Solapur

Choice Based Credit System

M.Com. Syllabus

Semester I

HCT 1.1: Management Concepts

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	Nature of Management	Lectures : 15
Concept, Social Responsibilities of Business - Manager and Environment Levels in Management - Managerial Skills - Planning - Steps in Planning Process - Scope and Limitations - Flexibility in Planning - Characteristics of a sound Plan - Management by Objectives (MBO) - Policies and Strategies - Scope and Formulation.		
Unit No. 2	**Leadership**	**Lectures : 15**
Concept, Leadership styles, Approaches to leadership- Trait approach, Behavioural approach, and situational approach. Theories of leadership- Likert's four system leadership, Managerial grid theory, Fiedler's contingency leadership theory, Harsey and Blancharda's situational leadership theory.		
Unit No. 3	**Motivation and Control**	**Lectures : 15**
Process of motivation- Theories of motivation need hierarchy theory, theory X and theory Y, two factor theory, Alderfer's ERG theory, McCleland's learned need theory, Control- Concept, objectives, nature and process of control, levels and areas of control, Z-Theory of Management. Management Education in India: Objectives, Present position and difficulties		
Unit No. 4	**Decision Making**	**Lectures : 15**
Concept, Nature and process of Decision Making, Types of Decisions, Rationality and Creativity in Decision making. Need and significance of coordination, Principles and Techniques of Effective Coordination. Nature and process of Communication, Communication Network, Direction of Communication, Barriers in Communication, Ten Components of Good Communication.		

Suggested Readings:

1. Management - John Schermerhorn
2. Management and Behavioural Processes - K Shridhar Bhatt
3. Management: Leading people and Organizations in the 21st Century - Gary Dessler
4. Essentials of Management Weihrich -Harold Koontz, O'Donnell and Heinz
5. Management - Principles and Practices -M. Prakash and Parag Diwan
6. Management - concepts and Strategies - Chandan, J.S.
7. Management and Organizational Behavior -P. Subbarao

HCT 1.2: Managerial Economics-I

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Managerial Economics**	**Lecture: 15**
Meaning and definition- Nature and scope Role of managerial economics- objectives of managerial economics significance of managerial economics.		
Unit No. 2	**Demand Analysis**	**Lecture: 15**
Meaning and determinants of demand, Demand function- Market demand- Elasticity of demand- types of elasticity- measurement of elasticity – Significance Or uses of elasticity of demand.		
Unit No. 3	**Break- Even analysis and cost control**	**Lecture: 15**
Meaning of BEA- Break Even chart- Formula method for determining BEP- Assumptions of BEA- Limitation- Usefulness of BEA- Cost Control – meaning techniques of cost control – Areas of cost Control.		
Unit No. 4	**Market Structure**	**Lecture: 15**
Classification- monopolistic competition – meaning – features- price determination in short and long period oligopoly market- meaning- features- price determination in short and long period.		

Suggested Readings:

1. Managerial Economics Patil J.F. & Sahastrabudhe
2. Managerial Economics Dwvedi D.N.
3. Managerial Economics Hauge D.C
4. Managerial Economics Deen Joel
5. Modern Economic Ahuja H.L.
6. Indian Economic Misra Puri
7. Managerial Economic M.N. Shinde

HCT 1.3 : E-Commerce

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Introduction to E-Commerce**	**Lectures: 10**
Meaning and concept of E-Commerce and Definition, E-Commerce based activities, Goals of E-Commerce, Technical Components of E-Commerce, Functions, Advantages and disadvantages of E-Commerce, Scope of E-Commerce, Electronic Commerce Applications, Framework of E-Commerce, Supply Chain Management, Electronic Commerce and Electronic Business.		
Unit No. 2	**Planning Online-Business**	**Lectures: 20**
Nature and dynamics of the internet, Electronic business models: B2B, B2C, C2C, C2B. Web-site Design: Web sites as market place, E –commerce, pure online vs. brick and click business; assessing requirement for an online business designing, developing and deploying the system. **Technology for Online-Business:** Internet and its Evolution, IT Infrastructure, Middleware, Domain names, Contents: Text and Integrating E-business applications. Component of Internet Information technology structure, Development of Intranet, Extranet and their Difference.		
Unit No. 3	**E-commerce Strategies**	**Lectures: 20**
Consumer Oriented- strategies for marketing, sales & promotion, e-CRM, order delivery cycle, Business oriented – strategies for purchasing & support activities, Strategies foe web Auction, Virtual communication, Web portal. **Operations of E-Commerce :** Online-payment mechanism; Electronic Payment systems; payment Gateways; Visitors to website; Tools for promoting websites; Risk management options for e - payment systems.		

Unit No. 4	Security and Legal Aspects of E-Commerce	Lectures: 10
Threats in E-Commerce, Security of Clients and Service-Provider; Cyber Laws – Relevant provisions of Information Technology Act 2000, offences, secure electronic records and digital signatures penalties and adjudication.		

Suggested Readings:

1. Agarwala, Kamlesh N., Amit Lal and Deeksha Agarwala, Business on the Net: An Introduction to the Whats and Hows of E -Commerce, Macmillan India Ltd.
2. Bajaj, Deobyani Nag, E-Commerce, Tata McGraw Hill Company, New Delhi.
3. Turban, E., et. al., Electronic commerce: A Managerial Perspective, Pearson Education Asia.
4. Diwan, Prag and Sunil Sharma, Electronic Commerce -A Manager's Guide to E-Business, Vanity Books International, Delhi.
5. Dietel, Harvey M., Dietel, Paul J., and Kate Steinbuhler., E-business and E-commerce for managers, Pearson Education.
6. Greenstein, M. and T.M. Feinman, Electronic Commerce: Security, Risk Management and Control, Tata McGraw hill.
7. Kosiur, David, Understanding Electronic Commerce, Prentice Hall of India Private Ltd., New Delhi. 8. Whiteley, David, E-commerce, McGraw Hill, New York.

SCT 1.1: Advanced Accountancy-I

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	Accounting of insurance companies (General and Life Insurance Companies)	**Lectures : 14**
Unit No. 2	Contract Accounts	**Lectures : 14**
Unit No. 3	Royalty Accounts	**Lectures : 12**
Unit No. 4	A) Departmental Accounting B) Human Resource Accounting	**Lectures : 20**

Suggested Readings:

1) Advanced Accountancy :- R.L. Gupta

2) Advanced Accountancy :- Chakravarty

3) Steps in Advanced Accountancy :- Maheshwary

4) Advanced Problems & Solution in Accountancy :- Shukla & Grewal

5) Advanced Accountancy :- Shukla & Grewal

6) Advanced Accountancy :- M. G. Patkar

7) Advanced Accounts :- Jain & Narang

8) Advanced Accountancy :- S. P. Iyangar

9) Advanced Accounting :- Beans F. A.

SCT 1.2: Advanced Banking - I

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Commercial Banks and Priority Sectors**	**Lecture: 15**

A) Classification of Priority Sector Advances-Agriculture, Small-scale industries; other activities/ Borrowers in the Priority Sector

B) Commercial Banks and Agricultural Finance. Objectives of Agricultural finance – Types – RBI's Guidelines to commercial Banks on Agricultural finance – ARDC, AFC, RRBS, The Lead Bank Scheme, SFDA, MFAL, IRDP, NABARD.

C) Commercial Banks and SSI's PMRY, credit to MSMEs, credit to KVIC, Scheme for Guarantee of Loans to SSIs, Credit Guarantee Scheme for Small Borrowers, SIDBI, Recent Developments in SSI Sector Lending.

Unit No. 2	**Micro Finance**	**Lecture: 15**

A) Meaning and significance, - SHGs – Bank Linkage Programme (SBLP) Model and MFI Model

B) Micro – Finance in the Indian Context-Policy Initiatives in India; Regulation of Micro Finance Institutions.

C) Micro- insurance- consultative Group Recommendations. D) Progress of Micro-finance in India – Impact of Micro-finance in India.

Unit No. 3	The State Bank of India	Lecture: 15
A) Origin, Organisation Management and Objectives B) Information Technology C) Risk Management D) NPAs Management E) SBI & The Priority Sectors i) Small Scale Industries ii) Export Credit iii) Agricultural Banking		
Unit No. 4	**The Reserve Bank of India**	**Lecture: 15**
A) Objectives, Organization & Nationalization of the RBI B) Functions of the RBI 1) Monopoly of Note Issue 2) Monetary Policy 3) Banker's Bank and Lender of the Last Resort 4) Banker to the Government 5) Exchange Control 6) Developmental Role C) Control of credit by the RBI.		

Suggested Readings:

1. Reddy Appannaiah - Theory & Practice Of Banking
2. Parameswaran R. Natarajan S. - Indian Banking
3. deodhar,abhyankar - Indian financial syste

Semester Second

HCT 2.1: Organizational Behaviour

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Organizational Behavior**	**Lectures : 15**
Concept and Significance, Contributing disciplines to OB, Evolution of OB, Relationship between management and OB, Models of OB, Emergence and ethical perspective		
Unit No. 2	**Individual and Group Behaviour**	**Lectures : 15**
Individual Behaviour- Ability, Personality, Learning, Perception, Values, Attitudes, Job satisfaction **Group Behaviour**- Group- definition and importance, types of group, group formation, group development, group composition, group performance factors; Principle-centered approach to team development		
Unit No. 3	**Organizational culture Organizational change and Development**	**Lectures : 15**
A) **Organizational Culture**- Meaning, Characteristics, Significance or functions, types of Organizational culture. Managing diversity B) **Organizational Change and Development**- Need for change, forces and targets for change- Tasks, people, culture, technology, structure phases of planned change. Change strategies- **Organizational Development**- Concept and process diagnosis, Intervention, evaluation. OD interventions-Individual, team, Organization wide.		
Unit No. 4	**Organizational Conflicts and Stress Management**	**Lectures : 15**
A) **Organizational Conflict**- concept, types sources and levels of organizational conflict, Traditional and Modern approach to conflict, Functional and dysfunctional conflict, Resolution of conflict B) **Stress Management**- Work stress, factors causing stress, managing stress		

Suggested Readings:

1. Organisational Behaviour - L.M.Prasad
2. Organisational Behaviour - John W. Newstrom & Keith Davis
3. Organisational Behaviour - Stephon Robbins
4. Organisation Behaviour - Ashwathappa
5. Organisational Behaviour - Dr. Anjali Ghanekar
6. Organisational Behaviour - Dr. S S Khanka
7. Management and Behavioural Processes - K Shridhar Bhatt

HCT 2.2 : Managerial Economics-II

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Cost analysis**	**Lecture: 15**
Money cost, Real cost, opportunity cost, accounting Economic costs, fixed & variable cost. Short & long run total cost schedule of a firm relation bet AC & MC Estimation of cost function.		
Unit No. 2	**Business cycle and Business policies**	**Lecture: 15**
Stages of business cycle theories of business cycle- G.R. Hwatrey's theory, schumpeter's innovation theory- measures to control business cycle.		
Unit No. 3	**Inflation and Definition**	**Lecture: 15**
Types of inflation – course of inflation effects of inflation. Deflation – disinflation and reflation control of deflation- stagflation.		
Unit No. 4	**Alternative theories of firm**	**Lecture: 15**
Traditional theory of profit maximization. Baumol's sales maximization model – Williamson's theory of managerial discretion.		

Suggested Readings:

1. Managerial Economics by Dr. Mukund Mahajan (Nirali Prakashan)
2. Managerial Economics theory & applications Dr. D.M. Mithani, Himalaya Publishing
3. Managerial Economics Suma Damodaran (Oxford University Press)
4. Managerial Economics G.S. Gupta
5. Managerial Economics P.L. Mehata

SCT 2.1: Advanced Accountancy-II

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Introduction**	**Lectures : 15**
Meaning – nature, need, scope and objectives of cost accounting, Difference between Financial Accounting and Cost Accounting. Elements of Cost - Classification of Cost, Preparation of Cost sheet, Reconciliation of Cost and Financial Accounts, Preparation of Reconciliation statement		
Unit No. 2	**Cost Accounting of Material**	**Lectures : 15**
Procurement procedure, store Procedure, Stores Accounting and control. Receipt's and Issues of materials, Different methods of pricing of Issues of Materials, fixation of various stock levels and economic ordering quantity.		
Unit No. 3	**Cost Accounting of Labour**	**Lectures : 15**
Recording and analysis of Labour cost, overtime, Idle time, Holiday Work, Holiday's with pay, Casual Workers, Labour turnover, Time & motion study, Methods of remuneration, Labor and incentive system.		
Unit No. 4	**Cost Accounting of Overhead's**	**Lectures : 15**
Classification, Allocation and Apportionment, Departmentalization and Absorption of overheads. Under and over absorption of overheads. Treatment of depreciation, Interest on capital and Research and Development cost.		

Suggested Readings:

1. Advanced Accountancy - Shukla Grewal & Gupta
2. Advanced Accountancy - Jain & Narang
3. Cost Accounting - Methods and Practice - B K Bhar
4. Cost Accounting - Jain and Narang
5. Cost Accounting - P.V. Ratnam
6. Cost Accounting - S N Maheshwari
7. Cost Accounting - Problems and Solutions - Khanna, Pandey, Ahuza.
8. Cost Accounting - K. Alex.

SCT 2.2 : Advanced Banking – II

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Money and Capital Market**	**Lecture: 15**
Indian money market –money market instruments in India –present day developments –DFHI-Comparison of London, New York & Indian money market. Indian capital market-structure – Bombay stock exchange –SEBI.		
Unit No. 2	**Financial institutions**	**Lecture: 15**
IFCI, IDBI, ICICI, SIDBI, IIBI, SFCS, UTI.		
Unit No. 3	**Major Issues in the Indian Financial System**	**Lecture: 15**
A) Narasimham Committee Report (I) 1991 on the financial system – follow up Action. B) Narasimham Committee (II) 1998 - Recommendations – Follow up Action. C) Working Group on Housing Finance - Follow –up- Action.		
Unit No. 4	**Evolution and Progress of Banking & Financial Institutions In India**	**Lecture: 15**
Development banking, Social Banking, Reforms of banking system in India		

Suggested Readings:

1. Srivastawa P.K. - Banking Theory & Practice.
2. Shekhar K.C. - Banking Theory & Practice
3. Radhaswami M & Vasudevan S.V. - Banking

OET 2.1 : Accounting Practices

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Introduction**	**Lecture: 15**
Need and Importance, Book-keeping, Accounting, Accountancy, Accounting and Book-keeping , Users of accounting information , Branches of accounting , Basic accounting terms		
Unit No. 2	**Double Entry System of Book-Keeping**	**Lecture: 15**
Basic concepts and conventions, Accounting Standards, Principles of Double entry system, Golden rules of accounting		
Unit No. 3	**Journal and Ledger**	**Lecture: 15**
Meaning, Format, Rules for debiting and crediting, Journal – Illustrations Meaning – Utility – Format – Posting – Balancing an account, Distinction between Journal and Ledger		
Unit No. 4	**Subsidiary Books**	**Lecture: 15**
Need, Purchase book – Sales book – Returns books – Bills of exchange – Bills book – Journal proper. Features – Advantages – Kinds of cash books, Petty Cash Book		

Suggested Readings:

1. T.S.Grewal – Double Entry Book Keeping.
2. R.L. Gupta – Principles and Practice of Accountancy
3. T.S.Grewal – Introduction to Accountancy
4. Patil & Korlahalli – Principles and Practices of Accountancy
5. S.Kr.Paul – Accountancy Vol. I.
6. Institute of Company Secretaries of India – Principle of Accountancy.
7. Vinayagam, P.L.Mani, K.L.Nagarajan – Principles of Accountancy.

OET 2.2: Entrepreneurship

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Introduction**	**Lecture: 10**
Concept and Definitions, Entrepreneur v/s Intrapreneur; Role of entrepreneurship in economic development; Entrepreneurship process; Factors impacting emergence of entrepreneurship; Managerial versus entrepreneurial Decision Making; Entrepreneur v/s Investors; Entrepreneurial attributes and characteristics; Entrepreneurs versus inventors; Entrepreneurial Culture; Women Entrepreneurs; Social Entrepreneurship; Classification and Types of Entrepreneurs; EDP Programmes; Entrepreneurial Training; Traits/Qualities of an Entrepreneurs.		
Unit No. 2	**Creating Entrepreneurial Venture**	**Lecture: 20**
Generating Business idea- Sources of Innovation, methods of generating ideas, Creativity and Entrepreneurship; Challenges in managing innovation; Business planning process; Drawing business plan; Business plan failures; Entrepreneurial leadership- components of entrepreneurial leadership; Entrepreneurial Challenges; Legal issues – forming business entity, considerations and Criteria, requirements for formation of a Private/Public Limited Company, Intellectual Property Protection- Patents Trademarks and Copyrights – importance for startups, Legal Acts Governing Business in India.		
Unit No. 3	**Functional plans**	**Lecture: 15**
Marketing plan– for the new venture, environmental analysis, steps in preparing marketing plan, marketing mix, contingency planning; Organizational plan – designing organization structure and Systems; Financial plan – pro forma income statements, pro forma cash budget, funds Flow and Cash flow statements; Pro forma balance sheet; Break Even Analysis; Ratio Analysis.		
Unit No. 4	**Entrepreneurial Finance & Management**	**Lecture: 15**
Entrepreneurial Finance: Debt or equity financing, Sources of Finance- Commercial banks, private placements, venture capital, financial institutions supporting entrepreneurs; Lease Financing; Funding opportunities for Startups in India. **Enterprise Management:** Managing growth and sustenance- growth norms; Factors for growth; Time management, Negotiations, Joint ventures, Mergers & acquisitions.		

Suggested Readings:

1. Kumar, Arya, Entrepreneurship: Creating and Leading an Entrepreneurial Organization, Pearson, India.

2. Hishrich., Peters, Entrepreneurship: Starting, Developing and Managing a New Enterprise, Irwin

3. Taneja, Entrepreneurship, Galgotia Publishers.

4. Barringer, Brace R., and R. Duane Ireland, Entrepreneurship, Pearson Prentice Hall, New Jersy (USA)

5. Hisrich, Robert D., Michael Peters and Dean Shephered, Entrepreneurship, Tata McGraw Hill, New Delhi

6. Lall, Madhurima, and Shikha Sahai, Entrepreneurship, Excel Books, New Delhi

7. Charantimath, Poornima, Entrepreneurship Development and Small Business Enterprises, Pearson Education, New Delhi

8. Natarajan., K and E. Gordon, Entrepreneurship Development, Himalya Publication, India.

9. Vasant, Desai., Small- Scale Industries and Entrepreneurship, Himalya Publication, India.

10. Kuratko, D.F., and T. V. Rao, Entrepreneurship: A South-Asian Perspective, Cengage Learning.

Semester Third

HCT 3.1: Business Finance - I

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Introduction to Business Finance**	**Lectures : 15**
Concept, Nature, Scope, Objectives and Importance		
Unit No. 2	**Financial Planning and Administration**	**Lectures : 15**
Capital needs of Business Methods of assessing the financial requirements, financial plan. Characteristics of financial plan. Capitalization- over capitalization and under capitalization, theories of capitalization- Cost Theory and Earning Theory – Changes in Capitalization.		
Unit No. 3	**Sources of Business Finance**	**Lectures : 15**
Short term, medium term and Long term Sources- Corporate Securities, Public Deposits, Self financing – Meaning, Advantages and Disadvantages. Mutual funds – Meaning, types of Mutual Funds		
Unit No. 4	**Foreign Capital**	**Lectures : 15**
Forms of Foreign Capital, Role and Importance of Foreign Capital, Foreign Collaborations – meaning, Forms of Foreign Collaborations. New Government Policy.		

Suggested Readings:

1. Essentials of Business Finance – Dr. R. M. Shrivastava.
2. Business Finance – Dr. P. V. Kulkarni.
3. Investment and Securities Market in India – V. A. Adhani.
4. Investment Management - V. K. Bhalla.
5. Financial Services in India – M. A. Kothak.

HCT 3.2: Management Accounting-I

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Management Accounting: Nature and Scope**	**Lecture: 10**
Introduction, Definitions of Management Accounting, Nature of Management Accounting, Functions of Management Accounting, Scope of Management Accounting, The Management Accountant, Management Accounting and Financial Accounting, Cost Accounting and Management Accounting, Limitations of Management Accounting.		
Unit No. 2	**Financial Statement Analysis and Working Capital Management**	**Lecture: 10**
Introduction, Financial Statements, Financial Statement Analysis, Methodical Presentation of Financial Statement Analysis, Techniques /Tools of Financial Statement Analysis, Meaning – Significance-determinants of working capital, Planning of working capital requirement, sources and application of working capital, working capital forecasting		
Unit No. 3	**Ratio Analysis**	**Lecture: 20**
Introduction to financial analysis, Use of financial ratios, Precaution in using ratio analysis, Types of ratios, Liquidity ratios, Debt (or leverage) ratios, Coverage ratios Profitability ratios, Market-value ratios.		
Unit No. 4	**Funds Flow Statement and Cash Flow Statement**	**Lecture: 20**
Introduction, Meaning & Definitions, Objectives, Limitations, Procedure of Preparing Funds Flow Statement, Statement of Changes in Working Capital, Funds Flow Statement, Parties Interested in Funds Flow Statement, Typical Items Which Require Particular Care, Introduction-Cash Flow Statement, Meaning, Purpose and Uses, Structure of Cash Flow Statement, Treatment of Some Typical Items- Format of Cash Flow Statement, Procedure for preparing Cash Flow Statement- Practical Problems, Limitations of Cash Flow Statement, Comparison between Cash Flow Statement and Funds Flow Statement.		

Suggested Readings:

1. Ashish K. Bhattacharya, Principles and Practices of Cost Accounting (3rd.), New Delhi: Prentice Hall of India Private Limited, 2004.
2. Charles T. Horngren, Cost Accounting, A Managerial Emphasis, Prentice Hall Inc., 1973.
3. D. T. Decoster and E. L. Schafer, Management Accounting, New York: John Willey and Sons, 1979.
4. John G. Blocker and Wettmer W. Keith, Cost Accounting, New Delhi: Tata Mc Grw Publishing Co. Ltd., 1976.
5. R. K. Sharma and Shashi K. Gupta, Management Accounting- Principles and Practice (7th.), New Delhi: Kalyani Publishers, 1996.
6. Jain and Khan: Management Accounting, TMH, Delhi.
7. Pandey, I.M.: Financial Management, Vikas Publishing House, Delhi.
8. Periasamy, P.: Financial, Cost and Management Accounting, HPH, Delhi.
9. Maheshwari, S.N.: Accounting for Management and Control, Sultan Chand and Sons, Delhi.
10. Van Horne: Financial Management and Analysis, Pearson Publication, Delhi.
11. Horngren & Sundem, Introduction to Management Accounting, Prentice Hall of India, N.Delhi.
12. Anthony R.N. and Reece J.S., Management Accounting Principles, 6th ed., Homewood, Illinois, Richard D.Irwin, 1995.
13. Hansen & Mowen, Management Accounting, Thomson Learning, Bombay.
14. Mittal, S.N., Management Accounting and Financial Management, Shree Mahavir Book Depot, N.Delhi.
15. Gupta, R.L., and Radha Swamy, M, Advanced Accounting, Sultan chand & Sons, N.Delhi.
16. Khan, M.Y. and Jain, P.K., Management Accounting, TMH, N.Delhi.

SCT 3.1: Advanced Accountancy- III

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Introduction of Audit**	**Lectures : 15**
Definition, Objectives of an Audit, Scope of an Audit, Advantages of Audit, Limitations of an audit, Audit Programme, Contents of Audit Programme, Advantages and Disadvantages of an Audit Programme, Audit Working Papers, Commencement of New Audit		
Unit No. 2	**Types of Audit**	**Lectures : 15**
Kinds of Audit, Statutory / Mandatory Audit, Voluntary / Independent Audit, Interim Audit, Concurrent Audit, Continuous Audit, Balance Sheet Audit, Financial Audit, Cost Audit, Management Audit, Social Audit		
Unit No. 3	**Vouching, Internal Control and Check**	**Lectures : 15**
Definition of Vouching, Objectives of vouching, Need and importance of vouching, Meaning of Internal Control And Internal Check , objective and Characteristics of Good Internal Control, advantages and disadvantages of Internal Control And internal check, Techniques Of Internal Control, Test Checking And Routine Checking, Verification And Valuation of Assets And Liabilities.		
Unit No. 4	**Qualification, Appointment, Rights and Duties**	**Lectures : 15**
Qualification of Auditors, Disqualification of Auditors, Appointment of Company Auditor, Removal of the auditor, Auditor's Remuneration, Rights & Powers of an Auditor, Duties & responsibilities of the auditor Auditors Report- Qualifications, qualified and unqualified report		

Suggested Readings:

1. Institute of Chartered Accountants of India, Auditing and Assurance Standards, ICAI, New Delhi
2. Gupta, Kamal and Ashok Arora, Fundamentals of Auditing, Tata Mc-Graw Hill Publishing Co. Ltd., New Delhi.
3. Ghatalia, S.V., Practical Auditing, Allied Publishers Private Ltd., New Delhi.
4. Singh, A. K. and Gupta Lovleen, Auditing Theory and Practice, Galgotia Publishing Company.
5. B.N. Tandon, S. Sudharsanam & S. Sundharabahu, A handbook of Practical Auditing, S. Chand, New Delhi.

SCT 3.2: Advanced Banking – III

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Commercial banks & Small Scale Industries**	**Lecture: 15**
A) Prime Minister's Rozgar Yojana Swarna Jayanti Shahari Rozgar Yojana (SSRY) – Credit to Micro, small & Medium Enterprises (MSME) Sector. B) Master Circular Lending to Micro, Small & Medium Enterprises (MSME) Sector. C) Common Guidelines for Priority Sector Advances.		
Unit No. 2	**Mutual Funds & Credit Cards in India**	**Lecture: 15**
Definition, Types of Mutual funds, other funds- Their Progress in India- Response of NRIs to Mutual Funds- Present status of Mutual funds. Performance of credit card business in India. ATM – Debit Cards Vs. Credit Cards- Agriculture Credit Cards.		
Unit No. 3	**E- Payment, Settlements & Data Communication**	**Lecture: 15**
RTGS- SFMS- SWIFT- CHIPS- CHAPS- CHATS- Cheque Truncation- Major Networks for Data Communication- VAST Network in India		
Unit No. 4	**Technology in Banking Computerization in Banks**	**Lecture: 15**
The Internet & E-Commerce in Banking- Hi- Tech Banking- Core Banking- ATM Cards- Debit Cards- Advantages & Disadvantages- Credit Cards- Secured Credit Cards- Cirrus Logo- Prepaid Credit Cards- Credit Card Security- Profits & Losses- Credit Cards Numbering. Smart Cards- Contact Smart Cards- Contact less Smart Cards- Cryptographic Smart Cards- Application of smart Cards.		

Suggested Readings:

1. Tannan M.L. - Banking Law & Practice In India,
2. Sayer R.S. - Modern Banking
3. Maheshwari S.N. Maheshwari S.K. - Banking Law & Practice

OET 3.2: Office Management

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Introduction**	**Lectures : 15**
Meaning, functions and importance of office management; office management and organization. Principles of office management and organization, Principal departments of modern office, Centralization vs. decentralization of office services.		
Unit No. 2	**HRM for Office Management**	**Lectures : 15**
Qualifications and qualities of office manager, Authorities and responsibilities of an office manager, Recruitment, Selection and Training of office staff, Office supervision-duties and responsibilities of supervisory staff, Motivation- Financial and non-financial incentives to subordinates		
Unit No. 3	**Office Automation and Correspondence**	**Lectures : 15**
A study of various types of commonly used appliances i.e. calculator, cash register, telephone, facsimile, computer, scanner, printer, etc. Correspondence- Routine of handling mail, Importance of correspondence in business and Govt. offices, Essentials of good business and official correspondence, various forms of correspondence.		
Unit No. 4	**Company Meetings and Communication**	**Lectures : 15**
Meaning and types of meeting; Secretarial practices relating to holding of meetings with special reference to notice, agenda, quorum, motions, resolutions, sense of meeting, adjournment of meeting and minutes, Minutes writing types of minutes, minutes book, contents of minute, drafting or writing of minutes. Office Communication- Various mean of communication- Their use, merits and limitations, Selection of means of communication, Correspondence through Internet.		

Suggested Readings:

1. Office Management - Chopra & Chopra
2. Office Organization and Management - Sharma & Gupta
3. Office Management - Krishana Murthi
4. Modern Business Organization & Management Systems Approach -Sherlekar & Sherlekar
5. Business Organization -Y.K. Bhusan

Semester Fourth

HCT 4.1: Business Finance - II

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	Marketing of Securities	Lectures : 15
Meaning, Methods of Marketing – Primary Market, Secondary Market, Public issue, Right issue, Private placement. Underwriting – Meaning, types or forms of underwriting, Importance of underwriting. The Securities and Exchange Board of India (SEBI) – Emergence, Need, Functions, critical evaluation.		
Unit No. 2	**Stock Exchange**	**Lectures : 15**
Meaning, Membership, organization, governing Body – Functions and services. Trading mechanism –listing of shares and other instruments, working of BSE and NSE. Over The Counter Exchange of India (OTCEI) – Emergence and working, Trading on OTC. A Brief introduction of – the National Association of Securities, Dealers Automated Quotation System (Nasdaq) Nasdaq small Cap market.		
Unit No. 3	**New Dimensions in Business Finance**	**Lectures : 15**
Scrip less Trading (Dematerialization and Re-materialization) – Meaning, Need and Advantages , E-Broking – Meaning and operations, Port folio Management – Meaning, functions and Advantages, Venture capital – Meaning, Features and Significance. Forms of venture capital. Lease financing – Meaning, definition and types of leases, advantages and disadvantages of leasing, Lease v/s Buy Decision.		
Unit No. 4	**Credit Rating**	**Lectures : 15**
Meaning, Need, Types of credit rating, Benefits of credit rating, Methodology, credit rating agencies in India.		

Suggested Readings:

1. Stock Exchange trading in India – Gupta C. L.
2. Corporation Finance, Principles and Problems – S. C. Kuchal.
3. Corporate Finance – Brealey, Richard and Steward C Myers.
4. Elements of Finance – B. L. Mathur.
5. Investments – Bodie, Alex Kane, Alen J. Marcus, Pitabas Mohanty.

HCT 4.2 : Management Accounting-II

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Marginal Costing and Profit Planning**	**Lecture: 15**
Introduction, CVP Assumptions and Uses, Break-Even Point and Margin of Safety Equation Method, Graphical Representation of CVP Relationship, Marginal Costing Techniques.		
Unit No. 2	**Standard Costing**	**Lecture: 15**
Introduction, Meaning of Standard Cost And Standard Costing, Steps involved in Standard Costing, Standard Costing Vs. Budgetary Control, Standard Costs and Estimated Costs, Advantages of Standard Costing, Limitations of Standard Costing , Preliminaries for Establishing Standard Costing System, Analysis of Variances –Material , Labour and Overheads variances, Accounting Treatment of Variances.		
Unit No. 3	**Budgetary Control**	**Lecture: 15**
Definition of Budget, Objectives of Budgetary Control, Scope and Techniques of Budgetary Control, Requisites for Effective Budgetary Control, Organization for Budgetary Control, Advantages and Limitations of Budgetary Control, Types of Budgets-Production, Sales, Cash, fixed and flexible budget, Capital budget.		
Unit No. 4	**Management Information System and Reporting to Management**	**Lecture: 15**
Introduction, Elements of MIS, Meaning and Definition of Report, Objectives of Report Preparation, Management Reporting, Methods of Reporting, Requisites of A Good Report, Kinds of Reports, Level of Management And Reporting, Reporting System, Principles of A Good Reporting System, Process of Report Writing		

Suggested Readings:

1. Ashish K. Bhattacharya, Principles and Practices of Cost Accounting (3rd.), New Delhi: Prentice Hall of India Private Limited, 2004.

2. Charles T. Horngren, Cost Accounting, A Managerial Emphasis, Prentice Hall Inc., 1973.
3. D. T. Decoster and E. L. Schafer, Management Accounting, New York: John Willey and Sons, 1979.
4. John G. Blocker and Wettmer W. Keith, Cost Accounting, New Delhi: Tata Mc Grw Publishing Co. Ltd., 1976.
5. R. K. Sharma and Shashi K. Gupta, Management Accounting- Principles and Practice (7th.), New Delhi: Kalyani Publishers, 1996.
6. Jain and Khan: Management Accounting, TMH, Delhi.
7. Pandey, I.M.: Financial Management, Vikas Publishing House, Delhi.
8. Periasamy, P.: Financial, Cost and Management Accounting, HPH, Delhi.
9. Maheshwari, S.N.: Accounting for Management and Control, Sultan Chand and Sons, Delhi.
10. Van Horne: Financial Management and Analysis, Pearson Publication, Delhi.
11. Horngren & Sundem, Introduction to Management Accounting, Prentice Hall of India, N.Delhi.
12. Anthony R.N. and Reece J.S., Management Accounting Principles, 6th ed., Homewood, Illinois, Richard D.Irwin, 1995.
13. Hansen & Mowen, Management Accounting, Thomson Learning, Bombay.
14. Mittal, S.N., Management Accounting and Financial Management, Shree Mahavir Book Depot, N.Delhi.

HCT 4.3: International Business

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Introduction**	**Lecture : 15**
International Business - Importance, nature and scope; Globalization; Drivers of Globalization. Basic Entry Decisions; Modes of entry into international business, selecting an Entry Strategy; IT and international business, India's involvement in International Business.		
Unit No. 2	**International Business Environment**	**Lecture : 10**
Political, Legal, Economic, and Cultural environment and associated risks; Framework for analyzing international business environment.		
Unit No. 3	**International Trade**	**Lecture : 20**
Reasons for international trade; Theories of international trade; Foreign trade multiplier; World trading environment – Pattern and structure of world trade in goods and services; Government intervention in International Trade: Arguments for Government intervention; Instruments of Commercial Policy: Tariffs, quotas and other measures and their effects. World Trade and Protectionism: GATT, The Uruguay Round, WTO, Evaluation of WTO, Important Agreements of WTO – Agriculture Agreements; SPS, TBT, GATS, TRIPS; WTO and Developing Countries, WTO and India.		
Unit No. 4	**Balance of Payment Account**	**Lecture : 15**
Components of BOP: Current Account, Capital Account, Official Reserve Account; Disequilibrium in BOP; Correction of Disequilibrium. **Contemporary Issues in International Business:** Environmental and Labour issues in International Business.		

Suggested Readings:

1. Daniels, John D., Radebaugh, Lee H., Sullivan, Daniel P. and Salwan, P., International Business: Environment and Operations.
2. Griffin, Ricky W. and Pustay, Michael W, International Business: A Managerial Perspective , Prentice Hall.
3. Hill, Charles, W.L., International Business, McGraw Hill Company, New York.
4. Cherunilam, F., International Business Text and Cases, PHI.

5. Bhasin, N., Foreign Direct Investment in India: Policies, Conditions and Procedures, New Century Publications.

6. Ball, Donald, Wendall H. McCulloch, Miachel Geringer, Michael S. Minor and Jeanne M. McNett, International Business: The Challenge of Global Competition, McGraw Hill Co.

SCT 4.1: Advanced Accountancy – IV

(Research Methodology)

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Research**	**Lecture: 15**
Meaning, Objectives, Types of research, Methods of research- Survey Method and case study method.		
Unit No. 2	**Planning research project**	**Lecture: 15**
Identifying Research problems, selection of problem – formulation of a problems - Research Design: Meaning and Objectives, Characteristics of good research design, components of the research design & steps in scientific research process		
Unit No. 3	**Data Collection**	**Lecture: 15**
Meaning, Methods and Tools of Data Collection, Hypothesis Sampling, Data Processing, Analysis and Interpretation of Data.		
Unit No. 4	**Report Writing**	**Lecture: 15**
Elements, Characteristics of a good report, Contents, Steps in drafting report, Editing and preparing final draft.		

Suggested Readings:

1. N. Thanuligom - Research Methodology - 2003 Himalaya Publishing House.
2. Baily K.D,1982, Methods of Social Research Free Research free press , NEW YORK.
3. Bajpai S.R.1969. Social Survey and Research. Kanpur : kitab dhar.
4. Barnes , john A , 1979, who Should know what ? social science, privacy and ethics, harmondsworth penguin .
5. Bleicher M . 1988. The hermeneutic imagination , London. Routlcdege and Kegan paul

6. Bose . pradip kumar , 1995: Research Methodology , NEW DELHI , ICSSR.
7. Bryman ,Alan , 1988, Quality and quantity in Social Research , LONDON : Unwin Hyman.
8. Elhance , D.N (1962), Fundamentals of statistics, kitad Mahal , Allahabad.
9. Fayerabad , Paul ,1975, Against Method : outline of an Anarchistis Theory of Knowledge LONDON , humanities Press.

SCT 4.2: Advanced Banking – IV

(Research Methodology)

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Research**	**Lecture: 15**
Meaning, Objectives, Types of research, Methods of research- Survey Method and case study method.		
Unit No. 2	**Planning research project**	**Lecture: 15**
Identifying Research problems, selection of problem – formulation of a problems - Research Design: Meaning and Objectives, Characteristics of good research design, components of the research design & steps in scientific research process		
Unit No. 3	**Data Collection**	**Lecture: 15**
Meaning, Methods and Tools of Data Collection, Hypothesis Sampling, Data Processing, Analysis and Interpretation of Data.		
Unit No. 4	**Report Writing**	**Lecture: 15**
Elements, Characteristics of a good report, Contents, Steps in drafting report, Editing and preparing final draft.		

Suggested Readings:

1. N. Thanuligom - Research Methodology - 2003 Himalaya Publishing House.
2. Baily K.D,1982, Methods of Social Research Free Research free press , NEW YORK.
3. Bajpai S.R.1969. Social Survey and Research. Kanpur : kitab dhar.
4. Barnes , john A , 1979, who Should know what ? social science, privacy and ethics, harmondsworth penguin .

5. Bleicher M . 1988. The hermeneutic imagination , London. Routlcdege and Kegan paul
6. Bose . pradip kumar , 1995: Research Methodology , NEW DELHI , ICSSR.
7. Bryman ,Alan , 1988, Quality and quantity in Social Research , LONDON : Unwin Hyman.
8. Elhance , D.N (1962), Fundamentals of statistics, kitad Mahal , Allahabad.
9. Fayerabad , Paul ,1975, Against Method : outline of an Anarchistis Theory of Knowledge LONDON , humanities Press.

OET 3.1: Final Account

Max. Mark: 70 **Total Lectures: 60 hrs**

Unit No. 1	**Bank Reconciliation Statement**	**Lecture: 15**
Meaning and need of bank reconciliation statement- Illustrations		
Unit No. 2	**Trial Balance**	**Lecture: 15**
Definition – Objectives – Advantages – Methods – Format – Sundry debtors and creditors – Limitations – Errors in accounting, Steps to locate the errors, Suspense account, Rectification of errors.		
Unit No. 3	**Profit and Loss Account**	**Lecture: 15**
Format of Trading account and P & L account, Preparation of Trading Account and Preparation of Profit and Loss Account, Illustrations		
Unit No. 4	**Final Accounts**	**Lecture: 15**
Format of Balance sheet – Preparation of Final Accounts, Illustrations		

Suggested Readings:

1. Narayan Vaish – Book-keeping and Accounts.
2. 14. Jain & Narang – Financial Accounting.
3. 15. R.L.Gupta, Radha Swamy – Financial Accounting.
4. R.K.Gupta, V.K.Gupta – Financial Accounting.
5. Basu Das – Practice in Accountancy.
6. S.Kr.Paul – Practical Accounts Vol. I.
7. M.C.Shukla – Advanced Accountancy.

Solapur University, Solapur
Faculty Of Commerce
Choice Based Credit System(CBCS)
(w.e.f - June 2016)
Structure for PGDCA(Post Graduate Diploma In Computer Applications)

Introduction :

The name of the program shall be Post Graduate Diploma in Computer Applications (P.G.D.C.A.)

Course Objectives :

There are three major objectives of this diploma course.

1. To prepare a Computer Operator and Accounting operator various office packages effectively with some analytical approach and who can be directly employed by many organizations.
2. To prepare a person who can work as Web Programmer , Assistant Programer in an Organization & to train students to a level where they can readily compete for a seats for lateral entry to advance degree courses like M.C.A.,M.C.M., M. Sc. (C.S.) etc.
3. To introduce students with programming

The course has been designed keeping in mind the desirable characteristics of a component professional. We have identified these characteristics to be the following.

1. Good knowledge and skill base of the following form the core field
   - Office Application Packages
   - Web designing
   - Programming methodology and techniques.
   - LAN and Internet.
   - Database user.

2. Ability to work in team
   - Course Duration : One year (TWO SEMESTERS)
   - Intake Capacity :60
   - Number of Computers : 15.
   - Eligibility :

1. Graduate of any discipline (under 10+2+3) pattern from any recognized university
2. Student who is perusing any post graduate course of Solapur University can be admitted to P.G.D.C.A. course i.e. student may be allowed to do Simultaneously two courses.
3. Students who are doing the post graduate degree in external mode in any University other than Solapur University, can do PGDCA Course

Structure of the Course

Sem - I

Subject /Core Course	Name and Type of The Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Paper No. & Name							
Class:->	**PGDCA(Post Graduate Diploma In Computer Applications)Sem -I**								
	Ability Enhancement Courses(AECC)	1. Communication Skills	4	4	100	70	28	30	12
	Core	2. Fundamentals Of Computer And Information Technology	4	4	100	70	28	30	12
	Core	3. Introduction to Accounting Package And MS-Office	4	4	100	70	28	30	12
	Core	4. Software Engineering With 'C' Programming	4	4	100	70	28	30	12
	Core	5. Web Programming With PHP	4	4	100	70	28	30	12
	Core	6. (i) Lab Course 1 Based On Paper No. 2,3,4 (ii) Mini Project Based On Paper No. 5	2 3	4	50 50	- -	- -	50 50	20 20
		Total	25	24	600	350	--	250	--

Sem -II

Subject /Core Course	Name and Type of The Paper		L	Credits	Total Marks Per Paper	UA		CA	
	Type	Paper No. & Name							
Class:->	**PGDCA(Post Graduate Diploma In Computer Applications)Sem –II**								
	Core	7. DBMS And RDBMS Using Oracle	4	4	100	70	28	30	12
	Core	8. ASP.Net Using C #	4	4	100	70	28	30	12
	Core	9. Java Programming	4	4	100	70	28	30	12
	Core	10. Lab Course 2 Based On Paper No. 7, 8 ,9	3	4	100	-	-	100	40
	Core	11. Major Project & Viva Voce	3	8	200	100	40	100	40
		Total	18	24	600	310	--	290	--

Project Work :-
The project report can be prepare by group of three or four students. The project report will be assessed by internal guide for 100 marks and there will be Viva for 100 marks conducted by the Panel Examiner appointed by University.

Standard of Passing:-
To pass the examination in Post Graduate Diploma in Computer Applications, a candidate must obtain a minimum of 40% of marks in each head of passing and also in aggregate. Subject to the condition of clearing in all heads a candidate will be awarded class of distinction.

If aggregate percentage is :-

Greater than or equal to 40% but less than 49.99% - Pass Class.

Greater than or equal to 50% but less than 59.99% -Second Class.

Greater than or equal to 60% but less than 69.99% -First Class.

Greater than or equal to 70% -First Class with Distinction.

Lab Work Load -Size of the practical batch should be 15 students.
Staff Pattern - One full time Assistant Professor.

One full time Instructor.

Visiting faculty as per requirement.

Nature of Examination –

University examination shall be 2.30 hours durations for 70 marks paper.

The question paper pattern will be flexible. Examiner may set the objective, short

20% objectives, 40% short and 40%long

Internal Marks

The division of 30 marks are as follows—

Internal Marks

1. Attendance 05 Marks
2. 2 Class & 2 Home Assignments 10 Marks
3. Seminar/ Group Exercise 10 Marks
4. Mid Test 05 Marks

Total 30 Marks

Qualifications for Assistant Professor and Instructor :

- **Assistant Professor :**- A candidate with M.C.A., M.C.M. B. E. (I. T. / CSE), M. Sc.(CS) qualifications eligible to teach P.G.D.C.A. course.
- **Instructor**: Graduate with one year diploma in Computer recognized by the University.

Free Structure

Tuition Fee	12000
Computer Lab Charge	1500
Library Fee	1000
Caution Money	500
Total	15000

The Repeater PGDCA students may be given additional two chances.

Equivalence of the subjects

PGDCA Sem I

Old Syllabus w.e.f. 2013		New Syllabus(CBCS)w.e.f. June 2016	
Paper No.	Subject	Paper No.	Subject
1	Fundamentals Of Computer and Information Technology	1	Fundamentals Of Computer and Information Technology
2	Introduction to A/C Package and MS-Office	2	Introduction to Accounting Package and MS-Office
3	System Analysis and Design with C Programming	3	Software Engineering with 'C' Programming
4	Web Programming with PHP	4	Web Programming with PHP
5	Lab Course I based on paper no. 1 , 2,3,4	5	Lab Course I based on paper no. 2,3,4
6	Mini Project Based on Paper No.4	6	Mini Project Based on Paper No. 5

PGDCA Sem II

Old Syllabus w.e.f. 2013		New Syllabus w.e.f. June 2016	
Paper No.	Subject	Paper No.	Subject
7	Dbms & Rdbms Using Oracle	7	DBMS & RDBMS Using Oracle
8	ASP.NET using C #	8	ASP.NET using C #
9	Java Programming	9	Java Programming
10	Lab Course II Based on P.No. 7, 8 ,9	10	Lab Course Based on P.No. 7, 8 ,9
11	Major Project and Viva Voce	11	Major Project and Viva Voce

Solapur University , Solapur

PGDCA – Semester I
(Paper No.1)
Communication Skills

Max. Marks: 100
External Assessment: 70
Internal Assessment: 30

Unit 1: Nature of Communications: [16]

Definition of communication, Significance of Good Communication, Objective of Communication, Communication Process, Type of Communication, Nonverbal communication aspects of body language and Principles of Communication.

Unit 2: Communication in organization: [14]

Nature, scope and limitations of communication, Barriers to communication, Overcoming the barriers, Downward communication, Upward Communication, Horizontal communication, Grapevine communication.

Written communication:

- The process of formal written communication – The 'you' attitude, classify, conciseness, preciseness, style, flow Accuracy and readability
- Mechanism of writing – Abbreviations, Numerals, Capitalization, Spelling, Punctuation.

Unit 3: business Correspondence: [14]

Business Correspondence in organization, Essential, The layout, Planning the letter. Letter related to –purchase, Sales, Business related inquiries, Claims and adjustment, Job application and resume.

Unit 4: Foundation of Effective **Writing :(AIDS) [16]**

- Meeting- Kinds of meetings, the agenda, Minute of the meetings, Paper work for regular meetings
- Report – Common features, Routing reports and non-routine reports, Steps in writing report
- Modern Office Communication – Electronic communication, Telephone EPBAX, Teleconferencing, Answering machine, E-mail, Voicemail, Fax, Internet, Video conferencing
- Notes – The General approach will be to give broad idea of business communication, Practical work will consist of Letter writing, Report writing, Arranging meetings and Seminars, Every student will have to deliver minimum two prepared speeches and one extempore speech.

Books Recommended:

1) Essentials of Business Communication- Rajendra Pal & L.S.
2) Business Communications- U.S.Rai& S.M. Rai.
3) Communication skill – P. C. Pardesi
4) Business Communication, AshaKaul, PHI
5) Business Communication, M. Balasubramanyam
6) Business correspondence and report writing, Sharma, K. Mohan, Tata Mc-Graw Hill

Solapur University ,Solapur

PGDCA – Semester I

(Paper No.2)

Fundamentals of Computer and Information Technology

Max. Marks: 100
External Assessment: 70
Internal Assessment: 30

Topic : 1 **(15)**

Introduction to Computer and Information Technology :

Characteristics of Computer, Concept of Hardware and Software, Evaluation of computer and Generations, Classification and types of computer, Block Diagram of computer system, Motherboard, Number System – Binary, Decimal, Octal and Hexadecimal.

Topic : 2 **(15)**

Input and Output Devices :

Input Devices- Keyboard, Mouse, Light pen, Joystick, Scanner, MICR, OMR, Bar code reader.

Output Devices- Monitor-LCD,LED, Projector, Printer- Types.

Topic : 3 **(10)**

Computer Memory:

Memory concept, Semiconductor Memory- RAM, ROM, Secondary Storage Devices- Magnetic Tape, Hard Disk, Pen Drive, Optical Memory - CD, DVD

Topic :4 **(10)**

Introduction to Operating Systems:

,Operating System- Concept, Types, Functions . Introduction to Windows , Linux, Computer Languages

Topic :5 **(10)**

Computer Networks and Security of Data:

Concepts of network, Network Topologies, LAN, MAN, WAN. Introduction to Internet, E-Mail .Computer Viruses, Antivirus Software's, IT Applications.

Books :

1) Computer Fundamental - P.K. Sinha
2) Computer Today - Basundara
3) Computer Fundamental - V. Rajaraman
4) Computer Today - Donald N. Sanders.

Solapur University ,Solapur

PGDCA- Semester - I

PAPER NO. : 3

Introduction to Accounting Package & MS-Office

Max. Marks : 100
External Assessment : 70
Internal Assessment : 30

UNIT -1 **(10)**

Accounting Concepts : Concepts of Accounting, Manual Vs Computerized Accounting, Golden Rule, Accounting Equation etc.

Introduction to Tally : Introduction, Creation of Company, Introduction to Gateway of Tally, Menu, Company Info menu.

UNIT – 2 **(15)**

Accounts Configuration &Classification : Features & Configuration options for company maintaining accounts, Planning about organization of Chart of Accounts, Group and Ledgers Account Masters and Vouchers :

Working with Account Masters, viz, Group, Ledger, Cost Centre and Category, Currency, Entry of Accounts Vouchers with Examples of Bill wise, Interest Computation, Printing of Vouchers, Creation and Alteration of Vouchers types and Vouchers Classes. Final Accounts : Viewing Balance Sheet, P& L Account, Trial balance.

UNIT– 3 **(10)**

MS Word 2013 Basics: Introduction to MS Office; Introduction to MSWord; Features & area of use. Working with MS Word.; Menus & Commands; Toolbars & Buttons; Shortcut Menus, Wizards & Templates; Creating a

New Document; Different Page Views and layouts; Applying various Text Enhancements; Working with –Styles, Text Attributes; Paragraph and Page Formatting; Text Editing using various features ; Bullets, Numbering, Auto formatting, Printing & various print options

UNIT – 4 **(10)**

MS Excel 2013: Introduction and area of use; Working with MS Excel.; concepts of Workbook & Worksheets; Using Wizards; Various Data Types; Removing & Resizing of Columns & Rows; Working with Data & Ranges; Different Views of Worksheets; Column Freezing, Labels, Hiding, Splitting etc.; Using different features with Data and Text; Use of Formulas, Calculations & Functions; Cell Formatting including Borders & Shading; Working with Different Chart Types; Printing of Workbook & Worksheets with various options.

UNIT –5 **(15)**

MS PowerPoint 2013: Introduction & area of use; Working with MS PowerPoint; Creating a New Presentation; Working with Presentation; Using Wizards; Slides & its different views; Inserting, Deleting and Copying of Slides; Working with Notes, Handouts, Columns &Lists; Adding Graphics, Sounds and Movies to a Slide; Working with PowerPoint Objects; Designing & Presentation of a Slide Show; Printing Presentations, Notes, Handouts with print options.

Reference Books:

1. Implementing Tally 6.3 by A.K.Nadhani, K.K. Nadhani, BPB Pub.
2.. Accounting by Tally (Illustrated) by L.B. Singh & V.P.Singh, Asian Pub.
3. Computerised Financial accounting using tally- Rajan Chougule.
4. Windows XP Complete Reference. BPB Publications
5. MS Office XP complete BPB publication6
6. MS Windows XP Home edition complete, BPB Publications
7. I.T. Tools and Applications, A. Mansoor, Pragya Publications
8. Tally.ERP 9 By Asok K Nadhani BPB Pub.

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PGDCA- Semester - I

(Paper No.4)

Software Engineering With 'C' Programming

Max. Marks: 100
External Assessment: 70
Internal Assessment: 30

Unit 1: System concepts, Software Engineering & Development life cycle (10)

Definition, Element of system, system, system concepts, Types of system, System Analysis. Role of System Analyst.

Software Engineering- Definition, Characteristics of software, Qualities of software

System Development life cycle- System Development life cycle, classical model, Spiral model, Waterfall model, Prototyping.

Unit 2: Requirement Analysis & Fact finding techniques (10)

Requirement Anticipation, Requirement investigation, requirement specifications, feasibility study.

Fact finding techniques- interviews, Questionnaire, Record reviews, Observation, study of physical system, identifying the data used, identifying the controls. User transaction Requirements, User design requirements, Organization dependent requirements.

Unit 3: Software Testing, Implementation and maintenance (10)

Need of Testing, White Box, Black Box testing, Changeover, Pilot, Parallel
Case studies- Ray Roll, library System, Inventory Control, College Admission System.

Unit 4 : Getting Started With C (10)

History, Character set, Keywords, Identifiers variables, constants, symbolic constants. Data types Operators: Arithmetic relational and logical operators, assignment, precedence and associatively, mixed mode expression conditional expression. Input, Output Functions.

Unit 5 :Control Structures **(10)**

If-else, switch, loops - while, for, do-while, Break, continue exit statements, go to, and labels blocks. ,Functions in C

Unit. 6: Arrays , Pointers& File Handling: **(10)**

Arrays, single and multidimensional arrays, string operations .Introduction to pointers pass by reference, pointer to pointer Structures :- passing structure to function, array of structure, File Handling – File Types, File Opening Modes.

References:

1. Basic system analysis and design- alan denial &donYeats
2. System analysis and design-davisw.s.
3. System analysis and design-edwards p.
4. System analysis and design-award e.h.
5. Let Us C - Y.C.Kanetkar.
6 The C programming Language - Ritchie and Kernighan.
7. C in depth II Edition By S..K Srivastav

Solapur University ,Solapur
PGDCA- Semester - I
(Paper No.5)
Web Programming With PHP

Max. Marks: 100
External Assessment: 70
Internal Assessment: 30

Unit 1: **(10)**

PHP/HTML Introduction:
Need of Open Sources – Advantages of Open Sources – Applications – Commercial aspects of Open Source movement A Brief History of PHP - Installing PHP - A Walk Through PHP - Installing and Configuring PHP on Windows.

Language Basics:
Lexical Structure -Data Types -Variables -Expressions and Operators – Constants - Flow-Control Statements -Including Code -Embedding PHP in Web Pages
HTML Basics: Structure of HTML Document, Types of Html Tags, Basic HTML Tags

Unit 2: Functions: **(10)**
Calling a Function - Defining a Function - Variable Scope -Function Parameters - Return Values -Variable Functions - Anonymous Functions.

Unit 3: Arrays : **(10)**
Indexed Versus Associative Arrays - Identifying Elements of an Array - Storing Data in Arrays - Multidimensional Arrays - Extracting Multiple Values - Converting Between Arrays and Variables - Traversing Arrays - Sorting - Acting on Entire Arrays

Unit 4: Web Server: **(05)**
Apache Web Server – Working with Web Server – Configuring and using apache web services.

Open source software tools: Browsers – Processors – Compilers – Model driven architecture tools.

Unit 5: Databases: **(10)**
Using PHP to Access a Database - Relational Databases and SQL - Advanced Database Techniques - Sample Applications.

My SQL: Introduction – What is My SQL? - My SQL Data Types - Primary Keys and Auto Increment Fields – Queries - Download My SQL Database - Facts About My SQL database - Connecting to a My SQL Database - writing your own SQL programs - Closing a Connection.

Unit 6 :PHP My SQL Create Database and Tables: (10)

Create a Database - Create a Table - Insert Data Into a Database Table - Insert Data From a Form into a Database. Record Selection Technology: Select Data From a Database Table - Display the Result in an HTML Table - The WHERE clause - The ORDER BY Keyword – Working with Strings – Date and Time – Working with metadata.

Unit 7 : Database ODBC: (05)

Create an ODBC Connection – Connecting to an ODBC – Retrieving records – Retrieving Fields from a Record – Closing an ODBC Connection.

Reference Books :

1. My SQL Bible Steve Suchring John Wiley sons, 2002
2. Programming PHP Rasmus Lerdorf and Levin Tatroe O'Reilly Publications, 2002
3. PHP: The Complete Reference by Steven Holzner ,Tata Mcgraw Hill,2007
4. Beginning PHP and My Sql :From Novice To Professional by W. Jason Gilmore, Apress,2010

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PGDCA- Semester - I

Paper No. 6

(I) Lab Course - 1 (Max Marks : 50)

Based on Paper No. 2, 3,4

Practicals Based on Paper No. 2

1) How to start computer?
2) How to shut down computer?
3) Linking of various peripherals.
4) Operation of all keys as key Board.
5) Mouse operation.
6) VDU - Various adjustment.
7) Printer and various options and its operations.
8) Searching of virus and removing of virus.

Practicals Based on Paper No. 3

Windows7 :- Starting Windows-Browsing Start Menu,
Manipulating Windows - Moving, Resizing, Closing, Windows, Minimizing and Maximizing Windows, Working With Multiple Windows Using Windows Application: Using Word- Pad to create a document, entering text and saving the work. Using my computer - Changing the icon arrangement, To view the floppy disk. To manage files, selecting one or more files, copying a file, delete a file, Drag and drop to move a file.

2. File Management using Windows Explorer :- To Copy, move and delete files, using copy and paste, using drag and drop, creating a folder. Creating a file to a folder, copying and moving the files between drives, renaming files and folders, find Program- To search by file name, by date, by type, by specific text.
3. Control Panel: - Changing date and time, changing display, choosing a background, placing folder on desktop. Adding shortcuts to folder and creating shortcut.
4. Computer Application Through Accounting Package Tally: - Creation of firm/company, group, ledger accounts, Feeding of accounting data- Receipt, Payment, Purchase, Sale, Contra, Journal, Credit Note, Debit Note.
5. Inventory Information: - Groups, items, Valuation
6. Reports and Final Accounts Generations -Display and print.
7. Students should use MS-word package for Letters and Reports.
8. Students should acquire the basics of MS-Excel, i.e. functions, formulae, charts etc.
9. Student has to present one seminar with the help of transparencies. Student should use MS - Power-Point package for presentation.

Practicals Based on Paper No. 4

1. The distance between two cities (10 Km.) is input through the keyboard. Write a program to convert and print this distance in meters, feet, inches and centimeters.
2. Write a program to convert the temperature in centigrade degree to Farenheit degrees.
3. Check given number is even or odd.
4. Write program to check give number is prime or not.
5. Write program to displayfibnoccie series.
6. Write a function to input 5 digit integer and calculate sum of digits.
7. Write recursive function to find factorial of given number.
8. Write program to check given string is palindrome or not.
9. Write program to do matrix manipulations.
10. Write program to accept students information through arry of structure and calculate average marks, also decide grade and display it.
11. Write program to generate paysheet using employees information through array of structures.
12. Write a program to do string manipulation, write separate functions for each operation.
13. Write program to find number of vowels in given string.
14. Write program to find number of words in given text file.
15. Write program to display marksheet of students using data from stud.dat file (the structure of information of students is Roll No., Name, Marks1,
Marks2, Marks3, Marks4, Marks5).

(ii) Mini Project (Max. Marks 50)

Practicals :

1. Write a simple PHP page that will display some information onto web page.
2. Write a PHP program to find given number is Armstrong or not
3. Write a PHP program to find largest among 3 Numbers
4. Write a PHP program to check whether the given number is prime or not
5. Write a PHP program to create an array and try with all array functions.
6. Create a registration form which contains fields name, Roll No, Gender and a submit button

A mini project based on the HTML/PHP Language.

Solapur University ,Solapur
PGDCA –Semester II
(Paper No.7)
DBMS and RDBMS using Oracle

Max. Marks: 100
External Assessment: 70
Internal Assessment: 30

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1. DBMS & RDBMS :- **(10)**

Concept of DBMS & RDBMS, Difference between DBMS and RDBMS, Features of RDBMS, Introduction of Oracle, Historical Development of Oracle, Role & responsibilities of Oracle DBA, Codd's Rules, Functional Dependencies, Normalization.

2. Introduction to SQL :- **(15)**

Features of SQL, Starting up Database, Logging on to SQL*Plus, Data types, Classification of SQL commands.

SQL table creation, Integrity Constraints, Insertion of Records, Select statement, Alter Commands, Drop Table.

SQL Operators- Transaction Processing, Where Clause, Like Operator, Between Operator, Order by Clause, GROUP BY clause, Having clause,
SQL Functions - Arithmetic functions, Conversion Functions, Miscellaneous functions.

3. Sub queries :- **(10)**

Sub queries, Multiple sub queries, Nesting of sub queries, sub queries in DML commands, comparison operators.

4. Introduction of PL/SQL :- **(10)**

Difference between SQL and PL/SQL, Block definition Structure, Block. Functions - % type, & Row type, % record type, IF ELSE statement, FOR loop, While loop, GOTO Statement.

5. Concept of Cursors :- **(10)**

Types, Implicit, Explicit open, Close cursor. Introduction to Triggers-Block level, Field level triggers.

6. User Crate Granting : **(05)**

Privilege - Object System, User, GRANT, REVOKE.

Books :-

1. Commercial Application Development Using Developer 2000 - Ivan Bayross
2. SQL - Scott Urman
3. Structured Query Language - Osborne
4. Teach yourself ORACLE 8 - Ed. Whalen
5. PL/SQL Programming - Ivan Bayross

Solapur University ,Solapur

PGDCA – Semester II

(Paper No.8)

ASP.NET Using C #

Max. Marks: 100
External Assessment: 70
Internal Assessment: 30

Unit No.1. Introduction to ASP.NET [10]

- What is .NET?
- ASP.NET and its uses
- Common Language Runtime
- Internet Information Server
- Installation of ASP.NET
- Namespaces
- .Net Framework Classes
- The Visual Studio IDE

Unit No.2 . C# Fundamentals [10]

- Programming Basics
- Variable &Data types
- Operators
- Arrays
- Conditional Statements
- Looping
- Functions
- OOPs Concepts
- Classes & Objects

Unit No.3 .Web Forms and Controls [10]

- Web Control Class
- Creating Web Forms Application
- Handling Images
- Navigating between Pages
- Managing Server Controls
- Server Control Events
- Using HTML Controls
- Using Data Controls

Unit No.4 .Master Pages [10]

- Simple Master Page , Nested Master Page
- Introduction to CSS
- Applying Style sheet

Unit No. 5. State Management [10]

- Preserving State in Web Applications
- Using Cookies to Preserve State
- ASP.NET Session State
- Application State

Unit No. 6 ADO.NET (Working with Database) [10]

- Overview of ADO.NET
- Connection Object
- Command Object
- Data Readers
- Data Sets & Data Adapters
- Using SQL Data Source

Reference Books -

1. Mastering ASP.Net - BPB Publication
2 ASP.net – The Complete Reference- Tata McGraw Hill
3. ASP.NET Programming – Murach
4. The C# Programming Language - Anders Hejlsberg, MadsTorgersen, Scott Wiltamuth
5. ASP.Net Programming with C# & SQL Server - Don Gosselin
6. Sams Teach Yourself Ado.Net in 21 Days - Dan Fox ,Sams Pulishing7. ASP.Net 3.5 Using C #.Net 2008 – Prof. Rajendra Salokhe Aruta Pub.

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PGDCA – Semester II

(Paper No.9)

Java Programming

Max. Marks: 100
External Assessment:70
Internal Assessment:30

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1. Java Fundamentals **(8)**

Features of Java , OOPs concepts , Java virtual machine ,Reflection byte codes ,Byte code interpretation ,Data types, variable, arrays, expressions, operators, and control structures Objects and classes

2. Java Classes **(8)**

Abstract classes ,Static classes ,Inner classes ,Packages ,Wrapper classes Interfaces ,This ,Super ,Access control

3. Exception handling **(8)**

Exception as objects ,Exception hierarchy ,Try catch finally ,Throw, throws

4. IO package **(8)**

Input streams ,Output streams ,Object serialization ,Deserialization, Sample programs on IO files Filter and pipe streams

5. Multi threading **(8)**

Thread Life cycle ,Multi threading advantages and issues Simple thread program ,Thread synchronization

6. GUI **(10)**

Introduction to AWT programming Layout and component managers Event handling ,Applet class ,Applet life-cycle ,Passing parameters embedding in HTML ,Swing components - JApplet, JButton, JFrame, etc. Sample swing programs

7. Database Connectivity **(10)**

JDBC architecture ,Establishing connectivity and working with connection interface Working with statements

References:

1. Programming with Java A Primer, E.Balaguruswamy Tata McGraw Hill Companies
2. Java Programming John P. Flynt Thomson 2nd
3. Java Programming Language Ken Arnold Pearson
4. The complete reference JAVA2, Herbert schildt. TMH
5. Big Java, Cay Horstmann 2nd edition, Wiley India Edition
6. Core Java, Dietel and Dietel
7. Java - Balaguruswamy
8. Java server programming, Ivan Bayross SPD

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PAPER NO - 10

Lab Course 2 Based on Paper No. 7, 8 & 9

Max. Marks: 100

Paper No .7 :

1. SQL;-create table .Insert rows
2. Create Table, Insert rows and update.
3. Alter existing table structure (ALTER-ADD, MODIFY, DELETE).
4. Simple queries based on single table to view rows.
5. Simple queries based on multi table.
6. Complex queries based on single and multi table.
7. Practical by making use of IF..ELSE.
8. Practical by making use of FOR-LOOP.
9. Practical by using WHILE-LOOP.
10. Practical by making use of PL / SQL Block.
11. Practical by using cursors.
12. Practical by making use of - (% type, & row type)
13. Practical by making use to triggers.

Paper No. 8

1. Write a program using different control structures like While , For etc.
2 Create a Web site of Your college using ASP.Net and C#
3 Create a Master Pages
4. Create a Master Page with CSS to manage application state.
5.Program to manage session state
6. Create a program for Database Conectivity

Paper No. 9

JAVA PROGRAMMING LAB

1. Programs using constructor and destructor
2. Creation of classes and use of different types of functions
3. Count the number of objects created for a class using static member function
4. Write programs on interfaces
5. Write programs on packages
6. Write programs using function overloading
7. Programs using inheritance
8. Programs using IO streams
9. Programs using files
10. Write a program using exception handling mechanism
11. Programs using AWT
12. Programs on swing
13. Programs using JDBC

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Major Project : Paper No. 11

Maximum Marks : 100

A Major Project based on the Java ,ASP.NET using C# Language.