

Syllabus
for
B.C.A – R17

**B.C.A Under CBCS with effect from Academic Year 2016-2017
(Revised in April, 2016)**



VIKRAMA SIMHAPURI UNIVERSITY :: Nellore

**GUIDELINES & COURSE STRUCTURE FOR
Bachelor of Computer Applications (B.C.A) / M.C.A.(Dual
Degree/Integrated)**

**(Under CBCS with effect from the academic year 2016-2017 course of
study)**

SYLLABUS OF

**BACHELOR OF COMPUTER APPLICATIONS
(B.C.A)**

**B.C.A Under CBCS with effect from Academic Year 2016-2017
(Revised in April, 2016)**

VIKRAMA SIMHAPURI UNIVERSITY
BCA Under CBCS with effect from the academic year 2016-2017 course of
study Table-1: B.C.A. SEMESTER – I

Sno	Course	Total Marks	Mid Sem Exam*	Sem End Exam	Teaching Hours	Credits
1	First Language English	100	25	75	4	3
2	<i>Foundation Course</i> HVPE (Human Values & Professional Ethics)	50	0	50	2	2
3	<i>Foundation course</i> Environmental Studies	50	0	50	2	2
4	Elementary Mathematics	100	25	75	4	3
5	Elementary Mathematics Lab	100	25	75	2	2
6	Computer Fundamentals & MS office	100	25	75	4	3
7	MS OFFICE LAB	100	25	75	2	2
8	Programming Using "C"	100	25	75	4	3
9	Programming Using "C" Lab	100	25	75	2	2
10	Photoshop Lab	100	25	75	2	2
Total		900	200	700	28	24

B.C.A Under CBCS with effect from Academic Year 2016-2017 (Revised in April, 2016)

VIKRAMA SIMHAPURI UNIVERSITY
BCA Under CBCS with effect from the academic year 2016-2017 course of study

Table-2: B.C.A. SEMESTER – II

Sno	Course	Total Marks	Mid Sem Exam*	Sem End Exam	Teaching Hours	Credits
1	First Language English	100	25	75	4	3
2	<i>Foundation course</i> Communication & Soft Skills-1	50	0	50	2	2
4	Statistical Methods and their Applications	100	25	75	4	3
5	Statistical Methods and their Applications Lab	100	25	75	2	2
6	Operating Systems	100	25	75	4	3
7	Operating Systems Lab	100	25	75	2	2
8	Object Oriented Programming Using "C++"	100	25	75	4	3
9	Object Oriented Programming Using "C++" Lab	100	25	75	2	2
10	Adobe In Design Lab	100	25	75	2	2
11	Comprehensive Viva-voce	50	0	50	2	2
Total		900	200	700	28	24

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Table-3: B.C.A. SEMESTER – III

Sno	Course	Total Marks	Mid Sem Exam*	Sem End Exam	Teaching Hours	Credits
1	First Language English	100	25	75	4	3
2	<i>Foundation Course Entrepreneurship</i>	50	0	50	2	2
3	<i>Foundation course Communication & Soft Skills -2</i>	50	0	50	2	2
4	Fundamentals of Accounting	100	25	75	6	5
5	DBMS	100	25	75	4	3
6	DBMS Lab	100	25	75	2	2
7	Programming with JAVA	100	25	75	4	3
8	JAVA LAB	100	25	75	2	2
9	Tally Software Lab	100	25	75	2	2
Total		800	175	625	28	24

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Table-4: B.C.A. SEMESTER – IV

Sno	Course	Total Marks	Mid Sem Exam*	Sem End Exam	Teaching Hours	Credits
1	<i>Foundation Course</i> Communication & Soft Skills -3	50	0	50	2	2
2	<i>Foundation Course</i> Analytical Skills	50	0	50	2	2
3	Computer Networks	100	25	75	4	3
4	Computer Networks Lab	100	25	75	2	2
5	Data Structures	100	25	75	4	3
6	Data Structures Lab	100	25	75	2	2
7	Web Programming	100	25	75	4	3
8	Web Programming Lab	100	25	75	2	2
9	Seminar & Group Discussion	50	0	50	2	2
10	Comprehensive Viva-voce	50	0	50	2	2
Total		800	150	650	26	23

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Table-4: B.C.A. SEMESTER – V

Sno	Course	Total Marks	Mid Sem Exam*	Sem End Exam	Teaching Hours	Credits
1	Software Engineering	100	25	75	4	3
2	Software Engineering Lab	100	25	75	2	2
3	OOAD	100	25	75	4	3
4	OOAD Lab	100	25	75	2	2
Elective – 1						
5.1	Data Mining	100	25	75	4	3
5.2	Unix					
5.3	Computer Aided Modeling					
Elective – 2						
6.1	Android Basics	100	25	75	4	3
6.2	Principles of Animation					
6.3	Computer Organization					
Elective – 1 (LAB)						
7.1	Data Mining Lab	100	25	75	2	2
7.2	Computer Networks Lab					
7.3	Computer Aided Modeling Lab					
Elective – 2 (Lab)						
8.1	Android Basics Lab	100	25	75	2	2
8.2	Computer Animation Lab					
8.3	Computer Organization Lab					
9	Minor Project	100	25	75	2	2
10	Project Seminar	100	25	75	2	2
Total		1000	250	750	28	24

B.C.A Under CBCS with effect from Academic Year 2016-2017 (Revised in April, 2016)

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BCA Under CBCS with effect from the academic year 2016-2017 course of study

Table-6: B.C.A. SEMESTER – VI

Sno	Course	Total Marks	Mid Sem Exam*	Sem End Exam	Teaching Hours	Credits
1	Ecommerce	100	25	75	4	3
2	Ecommerce Lab	100	25	75	2	2
Elective – 1						
3.1	Hadoop & R Language	100	25	75	4	3
3.2	Visual programming					
3.3	Cyber Laws					
4	Elective – 1 Lab	100	25	75	2	2
Elective – 2						
5.1	Advanced Android	100	25	75	4	3
5.2	Design of Video Games					
5.3	Software Testing					
6	Elective – 2 Lab	100	25	75	2	2
7	Comprehensive Study on Current Technologies	100	25	75	2	4
Project Lab						
8	Project Mid-Seminar	100	25	75	2	3
9	Major Project	200	50	150	4	8
Total		1000	250	750	28	30

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE
General English Syllabus for B.A/ B.A. (OL)/B.Com/B.Sc/BBA/BCA Courses under
CBCS w.e.f. 2015-16 (Revised in April-2016)

SEMESTER – I

1. Every unit shall state the objectives and expected deliverables.
2. Every lesson shall have
 - i) Questions on subject comprehension, paragraph, short note, single sentence answer types
 - ii) Exercises on vocabulary, syntax, and pronunciation
 - iii) Language exercises shall include exercises in paraphrasing, note-making and report writing wherever possible
 - iv) Pre -reading and post- reading activities.

Unit – I

PROSE

1. A.P. J. Abdul Kalam: The Knowledge Society (from *Ignited Minds*)
2. NgugiWaThiong'o: The Language of African Literature (from *Decolonizing the Mind*)

Unit – II

POETRY

1. Robert Frost: The Road Not Taken
2. Nissim Ezekiel: Night of the Scorpion

Unit – III

SHORT STORY

1. Mulk Raj Anand : The Lost Child
2. Henry Lawson: The Loaded Dog

Unit – IV

ONE - ACT PLAY

William Shakespeare: The Merchant of Venice (Court Scene – Act IV Scene -1)

Unit – V

LANGUAGE ACTIVITY

1. Classroom and Laboratory Activities
 - i. Single Sentence Answer Questions on Vocabulary (spelling), sound(pronunciation), sense (meaning), and syntax (usage)
2. Classroom Activity
 - i. Exercises in Articles and Prepositions
 - ii. Exercises in Tenses, Interrogatives and Question tags

Note: In classroom instruction it may be ensured that the theoretical and practical components of CSS-I complement the language activity in this semester.

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VIKRAMA SIMHAPURI UNIVERSITY :: KAKUTUR

General English

(Common to FIRST YEAR – FIRST SEMESTER B.A., B.A. (OL), B.Com., B.Sc., BBA, BCA)

(A. P. Common Core Syllabus (CBCS) for I year Effective from 2015-16) (Revised in April, 2016)

Model Question Paper (2017-18)

Time: 3 Hours

Max. Marks: 75

1. Answer any TWO of the following questions. 2x5 = 10
 - a. What are the problems India would face in making Abdul Kalam's dream into a reality?
 - b. Describe the author's experiences about language and literature in "The Language of African Literature".
 - c. Describe how changes in society through technology can lead to wealth generation in a country like India according to Kalam.
2. Answer any TWO of the following questions. 2x5 = 10
 - a. 'And that has made all the difference.' Explain it with reference to the poem 'The Road Not Taken'.
 - b. Narrate all the activities presented in the poem 'Night of the Scorpion'.
 - c. Pick out the comparisons in the poem 'Night of the Scorpion' and explain how they enhance the beauty of the poem.
3. Answer any TWO of the following questions. 2x5 = 10
 - a. Describe the different feelings of the child in the story 'The Lost Child'.
 - b. Bring out the humorous elements described in 'The Loaded Dog'.
 - c. Do you think that all parents behave the same way as the child's parents in the story 'The Lost Child'? Discuss.
4. Answer any ONE of the following questions. 1x5 = 5
 - a. Describe the role of Portia in deciding the case of Antonio in the court of justice.
 - b. How does Portia turn the tables on Shylock?
5. Read the following passage and answer the questions that follow. (From Prose) 5x1 = 5

Knowledge has many forms and it is available at many places. It is acquired through education, information, intelligence and experience. It is available in academic institutions with teachers, in libraries, in research papers, seminar proceedings and in various organizations and workplaces with workers, managers, in drawings, in process sheets and on the shop floors. Knowledge, though closely linked to education, comes equally from learning skills such as those possessed by our artists, craftsmen, hakims, vaidyas, philosophers and saints, as also our housewives. Knowledge plays a very important role in their performance and output too. Our heritage and history, the rituals, epics and traditions that form part of our consciousness are also vast resources of knowledge as are our libraries and universities. There is an abundance of unorthodox, earthy wisdom in our villages.

 - a. How is knowledge acquired?
 - b. Where is knowledge available?
 - c. In whose performance and output does knowledge play a very important role?
 - d. Where is an abundance of wisdom?
 - e. What is the antonym of 'unorthodox'?
6. Identify the Correct spelling in each group. 5x1 = 5

a. i. Hight	ii. Height	iii. Hieght
b. i. Available	ii. Available	iii. Avialable
c. i. Incomplete	ii. Incompleate	iii. Incomplet
d. i. Acheivement	ii. Achievement	iii. Achievement
e. i. Campain	ii. Campaign	iii. Campain
7. Write the English spelling of the words given in phonemic transcription. 5x1 = 5

a. /fa:st/	b. / meIk/	c. /mandei/	d. /zu:/	e. / mæn
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8. Fill in the blanks with suitable Articles. 5x1 = 5

a. The Nile is ___ longest river.	b. My friend came late by ___ hour.
c. Honesty is ___ best policy.	d. I saw ___ one-eyed man.
e. My friend is ___ honest man.	

9. Fill in the blanks with suitable Prepositions. 5x1 = 5
- a. I prefer milk ___ coffee.
 - b. He has been staying here ___ 2 pm.
 - c. My brother is suffering ___ fever.
 - d. There is an exception ___ every rule.
 - e. He is senior ___ me.

10. Fill in the blanks with the correct forms of the verbs given in brackets. 5x1 = 5
- a. I ___ (buy) a house last year.
 - b. She ___ (read) a book at 2 pm yesterday.
 - c. It ___ (rain) for the last two hours.
 - d. They ___ (work) in that office from 2010 to 2015.
 - e. The thief ___ (escape) before I opened the door.

11. Convert the following sentences into questions. 5x1 = 5
- a. They are students.
 - b. She is writing a letter.
 - c. You know him.
 - d. It is a book.
 - e. He met her last week.

12. Add a question tag to each of the following sentences. 5x1 = 5
- a. I am a student.
 - b. He doesn't drink liquor.
 - c. They won't come.
 - d. The film is not good.
 - e. You are impatient.

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VIKRAMA SIMHAPURI UNIVERSITY

NELLORE - 524 001

PART-I (B) SANSKRIT

CBCS SEMESTER WISE SYLLABUS

1ST SEMESTER

PAPER - I POETRY, PROSE AND GRAMMAR-I

Unit-I	Old Poetry	1. Abhijnaanam Ramayanam - Kishkindhaa Kaanda - 6th Canto 1-27 Slokas 2. Aatithyam Bhaagavatam - IX Skandha - 21st Adhyaaya - 2-17 Slokas
Unit-II	Modern Poetry	1. Unnatihi From Bharatee Bhushanam by Dr. D.N. Deekshit-Page No.66-68 2. Vivikta Pushpa Karandaha By Dr. Rani Sadasiva Murthy, Selected Stanzas-14
Unit-III	Prose	Moorkhataa Apareekshitakaarakam of Pancharantram - 3rd & 4th Stories - Murkha Brahmana Katha & Murkha Pandita Katha - Page 734-743 - Pub. Krishnadas Academy, Varanasi.
Unit-IV	Grammar	1. Declensions Nouns ending in vowels, Deva, Kavi, Bhanu, Dhatri, Pitru, Go, Ramaa, Mati. 2. Conjugations 1st Conjugation - Bhoo, Gam, Shtha, Drusir, Labh, Mud 2nd Conjugation - AS 10th Conjugation - Bhaash
Unit-V	Grammar	1. Sandhi Swara Sandhi : Sarvana deergha, Ayovayava, Guna, Vruddhi, Yana desa. Halsandhi : Scutva, Stutva, Anunasika 2. Samasa - Dwandwa, Tatpurusha, Karmadharaya, Dwigu.

VIKRAMA SIMHAPURI UNIVERSITY

NELLORE - 524 001

SANSKRIT

CBCS SEMESTER WISE SYLLABUS

1ST SEMESTER

PATRON OF THE QUESTION PAPER

Max Marks : 75

Time : 3hrs

I.	Essay	1 out of 2	1 x 10	10M
	One from each lesson - Abhignanam and Antharyam			
II.	Essay	1 out of 2	1 x 8	08M
	One from each Lesson : Unnati and Viviktapushpa Karandah.			
III.	Essay	1 out of 2	1 x 10	10M
	One from each Lesson : Murkhabrahmana Katha and Murkha Pandita Katha			
IV.	Short Answers	4 out of 8	4 x 2	08M
	Three from, Abhignanam and Athityam			
	Two from Murkha Brahmana Katha			
V.	Annotations	4 out of 8	4 x 3	12 M
	Two from each lesson			
	Abhignanam, Athidhyam, Murkhabrahmana Katha, Murkha Pandita Katha			
VI.	Full form of Sabda	2 out of 4	2 x 4	08M
	Three from Pullinga and one from Srilinga			
VII.	Full form of a Lakara of a given Dhatu	2 out of 4	2x3 = 6	
	Two from each Parshmaipada and Athmanepada			
VIII.	A. Simple Joining Words	3 out of 6	3x1=3	
	one from each Sandhi			
	B) Division of Words	3 out of 6	3x1=3	
	One from each Sandhi.			
IX.	Simple Writing of Vighravakya	3 out of 6	3x1=3	
	One from Each Samasa			
X.	Filling the Sloka and Writing the Meaning	2 out of 4	2x2=4	
	Two from Abhignanam and two from Adityam			

Note : Question Paper should be Sanskrit Only. English Translation should not be there.

Andhra Pradesh State Council of Higher Education
General Telugu Syllabus for B.A/ B.Com/B.Sc., Courses Under CBCS
W.e.f. 2015-16 (Revised in April - 2016)

SEMESTER - I

I. ప్రాచీన కవిత్వం:

- (అ) నన్నయ - గంగాశంతనుల కథ
ఆంధ్రమహాభారతం-ఆదిపర్వం-నాల్గవ అశ్వాసం (120-165)
“నరవరుడగు శంతనునకు” నుండి “దివ్య భూషణాలంకృత” వరకు
- (ఆ) తిక్కన - ద్రౌపది పరిదేవనం - ఆంధ్రమహాభారతం - ఉద్యోగపర్వం -
తృతీయ అశ్వాసం - (100-125)
“ధర్మనందను పలుకులు” నుండి “అని యూఱడిలగ బలికిన” వరకు

II ఆధునిక కవిత్వం

- (అ) గురజాడ - కన్యక
(ఆ) శ్రీశ్రీ - దేశచరిత్రలు

III కథానికలు

- (అ) పాపినేని శివశంకర్ - చింతల తోపు
(ఆ) బండి నారాయణస్వామి - సావుకూడు

IV వ్యాకరణం

- (అ) సంధులు - సవర్ణదీర్ఘ, గుణ, వృద్ధి, యణాదేశ, త్రిక, గ.స.డ.ద.వాదేశ, రుగాగమ, టుగాగమ, ఆమ్రేడిత, అత్వ, ఇత్వ, ఉత్వ, సంధులు.
(ఆ) సమాసాలు - తత్పురుష, కర్మధారయ, ద్వంద్వ, ద్విగు, బహువ్రీహి.
(ఇ) అక్షర దోషాలు - దోషాలు సరిదిద్ది సాధు రూపాలు రాయాలి.

విద్యార్థి కృత్యాలు:

1. శ్రీశ్రీ కవిత దేశ చరిత్రలకు సంబంధించిన పేరడీలు సేకరించండి.
2. ముత్యాల సరాలు ఛందస్సులో రచనలు చేసే ప్రయత్నం చేయండి.
3. ఆనాటి ద్రౌపది పరిస్థితిని ప్రస్తుత సమాజ పరిస్థితికి అన్వయించండి.

(పైన సూచించిన విద్యార్థి కృత్యాలు కొన్ని ఉదాహరణలు మాత్రమే. ఇటువంటివి మరిన్ని ప్రయత్నించగలరు.)

Andhra Pradesh State Council of Higher Education : Hyderabad
Foundation Courses under CBCS; Revised Syllabi
For All Degree Programmes
w.e.f. 2015-16 (Revised in May 2016)

As a part of curriculum upgradation, Semester and CBCS systems were introduced in all affiliated colleges in Andhra Pradesh from 2015-16. As an effective part of the overall curriculum, Foundation Courses were introduced with an aim to prepare students in the required basic skills and values in diverse areas. Hence, courses covering a broad spectrum were introduced. The following are the revised syllabi of the ten Foundation Courses, each with 30 teaching hours per semester and worth 2 credits. They were spread in the first four semesters.

Sno	Foundation Course	Sem	Hrs/ Week	Total Hrs	Credits	Marks
1	Human Values and Professional Ethics	I	2	30	2	50
2	Environmental Studies	I	2	30	2	50
3	Information and Communication Technology (ICT) – 1	II	2	30	2	50
4	Communication and Soft Skills (CSS)-1	II	2	30	2	50
5	Information and Communication Technology (ICT) – 2	III	2	30	2	50
6	Communication and Soft Skills (CSS)-2	III	2	30	2	50
7	Communication and Soft Skills (CSS)-3	IV	2	30	2	50
8	Analytical Skills	IV	2	30	2	50
9	Entrepreneurship	IV	2	30	2	50
10	Leadership Education	IV	2	30	2	50

The objective of the foundation courses is to create awareness among students and train them in the skills of the course concerned. Hence, teaching learning may be focused, and limited to the hours prescribed.

Foundation Course - 1

I. HUMAN VALUES AND PROFESSIONAL ETHICS **Common for BA/BCom/BSc/BBA/BCA Programmes** **I Semester (Total 30 Hrs)**

Unit-I : Introduction to Value Education

1. Value Education, Definition, Concept and Need for Value Education
2. The Content and Process of Value Education
3. Self-Exploration as a means of Value Education
4. Happiness and Prosperity as parts of Value Education

Unit-II : Harmony in the Human Being

1. Human Being is more than just the Body
2. Harmony of the Self ('I') with the Body
3. Understanding Myself as Co-existence of the Self and the Body
4. Understanding Needs of the Self and the Needs of the Body

Unit-III : Harmony in the Family and Society and Harmony in the Nature

1. Family as a basic unit of Human Interaction and Values in Relationships
2. The Basics for respect and today's Crisis : Affection, Care, Guidance, Reverence, Glory, Gratitude and Love
3. Comprehensive Human Goal : The Five dimensions of Human Endeavour

Unit-IV : Social Ethics

1. The Basics for Ethical Human conduct
2. Defects in Ethical Human Conduct
3. Holistic Alternative and Universal order
4. Universal Human Order and Ethical Conduct

Unit-V : Professional Ethics

1. Value Based Life and Profession
2. Professional Ethics and Right Understanding
3. Competence in Professional Ethics
4. Issues in Professional Ethics - The Current scenario
5. Vision for Holistic Technologies, Production System and Management Models

Reference Books :

1. A.N.Tripathy, Human Values, New Age International Publishers, 2003
2. Bajpai.B.L., Indian Ethos and Modern Management, New Royal Book Co., Lucknow, Reprinted, 2004
3. Bertrand Russell, Human Society in Ethics and Politics
4. Corliss Lamont, Philosophy of Humanism
5. Gaur.R.R., Sangal.R, Bagaria.G.P., A Foundation Course in Value Education, Excel Books, 2009
6. Gaur.R.R., Sangal.R, Bagaria.G.P., Teacher's Manual, Excel Books, 2009
7. I.C.Sharma, Ethical Philosophy of India, Nagin & Co., Julundhar
8. Mortimer.J.Adler, What Man has Made of Man
9. R.Subramanian, Professional Ethics, Oxford University Press
10. Text Book for Intermediate Ethics and Human Values, Board of Intermediate Education & Telugu Academy, Hyderabad
11. William Lilly, Introduction to Ethics, Allied Publishers

Foundation Course – 2
ENVIRONMENTAL STUDIES
Common for BA/BCom/BSc/BBA/BCA Programmes
Semester – I (Total 30 Hours)

Unit-I : Natural Resources:

6 Hrs

Definition, scope and importance. Need for public awareness.

Brief description of;

- Forest resources: Use and over-exploitation. Deforestation; timber extraction, mining, dams. Effect of deforestation environment and tribal people
- Water resources: Use and over-utilization. Effects of over utilisation of surface and ground water. Floods, drought.
- Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.
- Food resources: World food problems, Effects of modern agriculture; fertilizer-pesticide, salinity problems.
- Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources.
- Land resources: Land as resources, land degradation, man induced landslides, soil erosion and desertification

Unit-II : Ecosystems, Biodiversity and its conservation

6 Hrs

- | Concept of an ecosystem
- | Structure and function of an ecosystem
- | Producers, consumers and decomposers

- Food chains, food webs and ecological pyramids
- Characteristic features of the following ecosystems:-
Forest ecosystem, Desert ecosystem, Aquatic ecosystem.

- Value of biodiversity: Consumptive use, productive use. Biodiversity in India.
- | Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts.
- | Endangered and endemic species of India
- | Conservation of biodiversity

Unit-III : Environmental Pollution

6 Hrs

- Definition
- Causes, effects and control measures of :-
 - a. Air pollution
 - b. Water pollution
 - c. Soil pollution
 - d. Noise pollution
- Solid waste management; Measures for safe urban and industrial waste disposal
- | Role of individual in prevention of pollution
- | Disaster management: Drought, floods and cyclones

Unit-IV : Social Issues and the Environment

6 Hrs

- From Unsustainable to Sustainable development
- Water conservation, rain water harvesting, watershed management.
- Climate change, global warming, ozone layer depletion,
- Environment protection Act
- Wildlife Protection Act, Forest Conservation Act

Unit-V : Human Population and the Environment

6 Hrs

- Population explosion, impact on environment.
- Family welfare Programme
- Environment and human health
- Role of Information Technology in Environment and humanhealth.

Reference Books :

1. Environmental Studies by Dr.M.Satyanarayana, Dr.M.V.R.K.Narasimhacharyulu, Dr.G. Rambabu and Dr.V.VivekaVardhani, Published by Telugu Academy, Hyderabad.
2. Environmental Studies by R.C.Sharma, Gurbir Sangha, published by Kalyani Publishers.
3. Environmental Studies by Purnima Smarath, published by Kalyani Publishers.

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE.

FIRST YEAR : SEMESTER - I

SUBJECT : (FOUNDATION COURSE-2)

Common for BA/BCom/BSc/BBA/BCA Programmes

ENVIRONMENTAL STUDIES

Time : 2 hours

Max marks : 50

Answer any FIVE of the following questions.

5 X 5 = 25M

1. Define Environment and Explain Multidisciplinary Nature of the environmental science?
పర్యావరణాన్ని నిర్వచించి, పర్యావరణశాస్త్రం యొక్క బహుముఖపాఠాలను వివరించండి?
2. Write about Renewable and Non-Renewable Energy Resources?
పునరుద్ధరించగల పునరుద్ధరించలేనిశక్తి వనరులను వివరించండి?
3. Explain the structure and Functions of Ecosystem?
ఆవరణవ్యవస్థ యొక్క నిర్మాణము మరియు విధులను తెల్పండి?
4. Define Biodiversity and Explain India as a mega – Biodiversity Nation?
జీవవైవిధ్యాన్ని నిర్వచించి, భారతదేశాన్ని జీవవైవిధ్య ప్రాంతంగా వివరింపుము?
5. Write about Air pollution?
గాలి కాలుష్యాన్ని వివరించండి?
6. Describe the solid waste Management Methods?
వ్యర్థఘనపదార్థాల తరలింపు విధానాలను తెల్పండి?
7. Explain the global warming and Acid rains?
గ్లోబల్ వార్మింగ్ మరియు ఆమ్లవర్షాలను వివరించండి?
8. Describe about rain water harvesting and watershed Management?
వర్షపునీరు ప్రోధి, నిలుపుదల మరియు నీటిగట్ల యాజమాన్యపద్ధతులు వివరించండి?
9. Write about women & Child welfare programme?
స్త్రీ, శిశుసంక్షేమంను వివరించండి?
10. Explain population-unemployment?
జనాభాపెరుగుదల, నిరుద్యోగులను తెల్పండి?

Instruction to Paper Setter :

Two questions must be given from each unit.

BCA I year I semester
ELEMENTARY MATHEMATICS

No. of Hours per week : 4
Credits : 3

Max. Marks : 100
External : 75
Internal : 25

Unit-I: Matrix Algebra :

Matrix Algebra: Types of matrices -Matrix addition and subtraction - Matrix multiplication- Transpose of a matrix, row matrix, column matrix, Symmetric and skew symmetric matrices.

Unit-II: Linear Equations :

Ad joint of a square matrix- Inverse of square matrix by using Adj A 3 order only.

Solution of Linear Equations.

- (i) Cramer's Rule
- (ii) Matrix Inverse method

Unit-III: Maxima and Minima :

Maxima and Minima: Introduction- Increasing and decreasing functions -Maxima and Minima Values of a Function in one variable only.

Numerical Integration :

1. Trapezoidal rule
2. Simpson's 1/3 rule
3. Simpson's 3/8 rule

UNIT – IV : Set Theory :

Set, Subset, Types of Sets – Operations on sets – Demerger's Laws – statements only.

Unit-V: Finite Differences and interpolation :

Finite Differences - Forward Differences - Backward differences.

Newton's forward interpolation formula - Newton's backward interpolation formula

Note: 1. Concentration on numerical problems Only.

2. Proofs of theorems and Derivations of expressions are omitted.

Text Books :

1. Mathematical Methods by Dr.T.K.V. Ivengar, Dr.B.Krishna Gandhi, Dr. S.Ranganatham, and Dr.M.V.S.S.N. Prasad by S.Chand publications 6th revised edition 2011.
2. Quantitative Techniques by C.Satyadevi by S.chand Company

Reference book :

1. Higher Engineering Mathematics by Dr.B.S.Grewal by Karna publisher's 34th edition.

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

BCA I year I semester

COMPUTER FUNDAMENTALS AND MS OFFICE

Course Objectives

The objective of the course is to introduce the concepts of computer fundamental & their applications for the efficient use of office technology in a business environment.

Course Outcomes

1. Demonstrate the basic technicalities of creating Word documents for office use.
2. Create and design a spreadsheet for general office
3. Demonstrate the basic technicalities of creating a PowerPoint presentation.
4. Demonstrate the practices in data & files management

UNIT-I

Introduction to computers, characteristics and limitations of computer, Block diagram of computer, types of computers, uses of computers, computer generations, Input and output devices: Keyboard and mouse, inputting data in other ways

UNIT-II

Types of Software: system software, Application software, commercial, open source, domain and free ware software, Memories: primary, secondary and cache memory

UNIT III

MS Word: Getting Started Working with Microsoft Office 2007. Understanding Word Basics Editing and Formatting Text. Formatting Documents, Working with Graphic Objects

UNIT IV

Microsoft Excel: Understanding Excel Basics. Formatting and Editing the Worksheet, Using Formulas and Functions, Working with Charts.

UNIT V

Microsoft PowerPoint: Understanding PowerPoint Basics. Formatting and Modifying Presentations, Enhancing the Presentation

TEXT BOOK

1. Fundamentals Of Computers ” by REEMA THAREJA from OXFORD UNIVERSITY PRESS (UNIT I, UNIT II)
2. Microsoft Office 2007 Fundamentals, 1st Edition By Laura Story, Dawna Walls (UNIT III, UNIT IV, UNIT V)

REFERENCE BOOK

3. “Computer Fundamentals and Programming in C” by REEMA THAREJA from OXFORD UNIVERSITY PRESS
4. PC SOFTWARE UNDER WINDOWS by Puneet Kumar And Sushil Bhardwaj From Kalyani Publishers

Student Activity:

1. Identify the parts of your computer/laptop
2. Load trial version of recent MS office suit in your system
3. Prepare your profile in MS PP using animations and sound effects

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

COMPUTER FUNDAMENTALS AND MS OFFICE LAB

1. Prepare your class time table using different Text formatting"s in a table.
2. Prepare a Call Letter for All Applicants to Inform Interview Details
3. Prepare a document to design a visiting card
4. Create Water Marking
5. Create Backup file
6. Create a short film with animation and sound effects
7. Create a payslip with details of employee salary
8. Calculate student grades using his internal and external marks details
9. Draw different types of charts for weather analysis of 5 successive years
10. Prepare an excel sheet for posting attendance of students in various subjects and create a formula for promoting students having 75% minimum attendance
11. Prepare an excel sheet for conducting objective entrance test having multiple choice answers.
12. Prepare an excel sheet for student details and create formulas for accessing student addresses, category etc.
13. Prepare a presentation about your college
14. Prepare an excel sheet for creating a pie chart for budget analysis
15. Prepare an excel sheet to illustrate various functions

BCA I year I semester

PROGRAMMING USING C

Objectives:

1. Learn how to solve common types of computing problems.
2. Learn data types and control structures of C
3. Learn to map problems to programming features of C.
4. Learn to write good portable C programs.

Outcomes:

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

1. Appreciate and understand the working of a digital computer
2. Analyze a given problem and develop an algorithm to solve the problem
3. Improve upon a solution to a problem
4. Use the 'C' language constructs in the right way
5. Design, develop and test programs written in 'C'

UNIT I

Introduction to C: Introduction – Structure of C Program – Writing the first C Program – File used in C Program – Compiling and Executing C Programs – Using Comments – Keywords – Identifiers – Basic Data Types in C – Variables – Constants – Operators in C

UNIT II

I/O Statements in C: Formatted input and output functions: scanf(), printf()

Decision Control and Looping Statements: Introduction to Decision Control Statements – Conditional Branching Statements – Iterative Statements – Nested Loops – Break and Continue Statement – Goto Statement.

UNIT III

Functions: Introduction – using functions – Function declaration/ prototype – Function definition – function call – return statement – Passing parameters – Scope of variables – Storage Classes – Recursive Functions

UNIT IV

Arrays: Introduction – Declaration of Arrays – Accessing elements of the Array – Storing Values in Array – Calculating the length of the Array – one dimensional array for inter-function communication – Two dimensional Arrays – two dimensional arrays for inter-function communication

Strings: Introduction - String Operations – String and Character functions.

UNIT V

Pointers: Understanding Computer Memory – Introduction to Pointers – declaring Pointer Variables – Passing Arguments to Functions using Pointer – Pointer and Arrays – Passing Array to Function – Dynamic Memory Allocation

Structure, Union Data Types: Introduction – Nested Structures – Arrays of Structures– Self referential Structures – Union

TEXT BOOK

1. Computer Fundamentals and Programming in C by REEMA THAREJA from OXFORD UNIVERSITY PRESS

REFERENCE BOOKS

2. E Balagurusamy: —COMPUTING FUNDAMENTALS & C PROGRAMMINGII – Tata McGraw-Hill, Second Reprint 2008, ISBN 978-0-07-066909-3.
3. Ashok N Kamthane: Programming with ANSI and Turbo C, Pearson Edition Publ, 2002.
4. 2. Henry Mullish & Huubert L.Cooper: The Sprit of C, Jaico Pub. House,1996.
5. Teach your C Skills-Kanithker

Student Activity:

1. Create time table using faculty workload, subjects etc.
2. Prepare a complete note on recursion and its types
3. Prepare a complete note types of files and file formats for different inputdata

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

PROGRAMMING USING C LAB

1. Write a C program to calculate the expression: $((a*b)/c)+(a+b-c)$
2. Write a C program to calculate $(a+b+c)^3$.
3. Program to convert temperature from Celsius to Fahrenheit.
4. Write a C program to calculate the Compound Interest.
5. Program to convert Hours into seconds.
6. Write a C program to Find Biggest of Three numbers.
7. Write a C program to read student marks in five subjects and calculate the Total, Average and Grade according to the following conditions:
 - i. If average ≥ 75 grade is A.
 - ii. If average ≥ 60 and < 75 grade is B.
 - iii. If average ≥ 50 and < 60 grade is C.
 - iv. Otherwise grade is D.
 - v. Check that marks in each subject ≥ 35 .
8. Program to display number of days in given month using Switch – -Case.
9. Write a C program to check whether the given number is Prime or Not.
10. Write a program to Check whether given number is Palindrome or Not.
11. Program to check whether a given number is Armstrong or Not
12. Write a C program to print Fibonacci Series.
13. Write a C program to perform Matrix Addition.
14. Write a C program to perform Matrix Multiplication.
15. Program to display Student Details using Structures.

BCA / Year I Semester

Photo Shop Lab

Create following items using different options in photo shop

1. Visiting card
2. Cover page of a book
3. Paper add for calling tenders
4. Passport photo design
5. Pamphlet
6. Broacher designing
7. Titles designing
8. Custom shapes creation
9. Web template design
10. Black & white and color photo conversion
11. Image size modification
12. Wedding album designing
13. Background changes
14. Box package cover designing
15. Texture and patterns designing

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE
GENERAL ENGLISH SYLLABUS
FIRST YEAR - SEMESTER – II

Unit – I

PROSE

1. J. B.S Haldane: The Scientific Point of View
2. A.G. Gardiner : On Shaking Hands

Unit - II

POETRY

1. John Keats: Ode to Autumn
2. KishwarNaheed : I am not that Woman

(from *An Anthology of Commonwealth Poetry* edited by C.D. Narasimhaiah)

Unit –III

SHORT STORY

1. Ruskin Bond : The Boy Who Broke the Bank
2. R. K. Narayan : Half a Rupee Worth

Unit – IV

ONE ACT PLAY

Anton Chekhov: The Proposal

Unit – V

LANGUAGE ACTIVITY

1. Transformation of Sentences: (a) Voice and (b) Speech
2. Degrees of Comparison
3. Paragraph writing using the Hints.
4. Dialogue writing in a given situation.
5. Dialogue writing using the Hints.
6. Reading Comprehension (a) From Prose and (b) Unknown

VIKRAMA SIMHAPURI UNIVERSITY :: KAKUTUR

General English

(Common to FIRST YEAR – SECOND SEMESTER B.A., B.A. (OL), B.Com., B.Sc., BCA, BBA)
(A. P. Common Core Syllabus (CBCS) for I year Effective from 2015-16) (Revised in April, 2016)

Model Question Paper (2017-18)

Time: 3 Hours

Max. Marks: 75

1. Answer any TWO of the following questions. 2x5 = 10
 - a. 'Scientific point of view is morally equivalent of war.' Do you agree? Give Reasons.
 - b. What are the modes of greetings of different countries mentioned by A.G. Gardiner?
 - c. 'It is the happy mean between the Oriental's formal salaam and the Russian's enormous hug.' Elaborate this statement with reference to "On Shaking Hands".
2. Answer any TWO of the following questions. 2x5 = 10
 - a. 'Season of mists and mellow fruitfulness.' Why does Keats feel about autumn like that? Describe?
 - b. Why does the poet compare herself with a commodity in the poem 'I am not that Woman'?
 - c. How does Keats describe the autumn season in the poem 'Ode to Autumn'?
3. Answer any TWO of the following questions. 2x5 = 10
 - a. How did Subbaiah meet his tragic end in 'Half a Rupee Worth'?
 - b. Sketch the character of Nathu in 'The Boy who Broke the Bank'.
 - c. Give a brief description of the story 'Half a Rupee Worth'.
4. Answer any ONE of the following questions. 1x5 = 5
 - a. Why did Lomov want to marry his neighbour, Natalya?
 - b. What are the causes of the arguments in the play 'The Proposal'?
5. Rewrite the following sentences as directed. 5x1 = 5
 - a. He reads a story. (into Passive Voice)
 - b. The letters have been posted by him. (into Active Voice)
 - c. She invited him to the party. (into Passive Voice)
 - d. Nothing can be gained by us without effort. (into Active Voice)
 - e. We posted most of the invitation cards. (into Passive Voice)
6. Rewrite the following sentences as directed. 5x1 = 5
 - a. He said, "I have posted the letter." (into Indirect Speech)
 - b. She said to me, "Are you a student?" (into Indirect Speech)
 - c. Savitha said, "I sang a song." (into Indirect Speech)
 - d. My father said to me, "I am happy because you have got good marks." (into Indirect Speech)
 - e. "Don't make a noise" said the mother to her son. (into Indirect Speech)
7. Rewrite the following sentences as directed. 5x1 = 5
 - a. He is taller than any other boy in the class. (into Superlative Degree)
 - b. Akbar was greater than most other rulers. (into Positive Degree)
 - c. His brother is at least as tall as he. (into Comparative Degree)
 - d. A foolish friend can be more dangerous than a wise enemy. (into Positive Degree)
 - e. My pen is not so good as yours. (into Comparative Degree)

8. Write a paragraph using the hints given below. 1x5 = 5
Reading hobby – good and bad books – of the hour and forever – books as best companions – they entertain, educate and enlighten – make one forget one’s loneliness – guide and make one’s life richer – good book, a life blood of master’s spirit – Carlyle’s concept of true university, a collection of books.

9. Write a dialogue between Venu and Rajesh about their college anniversary. 1x5 = 5

10. Fill in the blanks in the following Dialogue writing. 1x5 = 5

A: Hello, who _____?

B: This is Ram.

A: Oh, hello, Ram. How _____?

B: Fine, not so bad.

A: Is Mohan at home?

B: No, he has _____ out.

A: When is he expected?

B: In about an hour, I guess.

A: Could you _____ a message to him? Ask him to call me back.

B: Sure. I’ll do that.

A: _____, Ram.

11. Reading Comprehension.

a) Read the following passage and answer the questions that follow. (From Prose) 5x1 = 5

If there is one custom that might be assumed to be beyond criticism it is the custom of shaking hands; but it seems that even this innocent and amiable practice is upon its trial. A heavy indictment has been directed against it in the Press on hygienic grounds, and we are urged to adopt some healthier mode of expressing our mutual emotion when we meet or part. I think it would need a pretty stiff Act of Parliament and a heavy code of penalties to break us of so ingrained a habit. Of course, there are many people in the world who go through life without ever shaking hands. Probably, most people in the world manage to do so. The Japanese bows, and the Indian salaams, and the Chinese makes a grave motion of the hand, and the Arab touches the breast of his friend at parting with the tips of his fingers.

- a. Which custom might be assumed to be beyond criticism?
- b. Why has a heavy indictment been directed against shaking hands in the press?
- c. What is needed to control the custom of shaking hands?
- d. What is meant by ‘ingrained’?
- e. How does the Arab greet?

b) Read the following passage and answer the questions that follow. (Unknown) 5x1 = 5

Just as Mrs. Richards was entering the dining-room, there was a knock on the front door. She knew that it must be the baker. She had told him to come straight in if ever she failed to open the door and to leave the bread on the kitchen table. Not wanting to frighten the poor man, Mrs. Richards quickly hid in the small store-room under the stairs. She heard the front door open and heavy footsteps in the hall. Suddenly the door of the store-room was opened and a man entered. Mrs. Richards realized that it must be the man from the Electricity Board who had come to read the meter. She tried to explain the situation, saying ‘It’s only me’, but it was too late. The man let out a cry and jumped back several paces.

- a. Where did Mrs. Richards hide when she heard a knock on the door?
- b. What does it mean by ‘realize’ in the above paragraph?
- c. In the sentence ‘It’s only me,’ whom does the word ‘me’ refer to?
- d. When did Mrs. Richards hear a knock on the front door?
- e. Who did enter when the door of the store-room was opened suddenly?

VIKRAMA SIMHAPURI UNIVERSITY

NELLORE - 524 001

PART-II SANSKRIT

CBCS SEMESTER WISE SYLLABUS

2ND SEMESTER

PAPER - II POETRY, PROSE & GRAMMAR

Unit-I	Poetry	Vasishthasramagamanam Raghuvamsam - 1st Canto (35-54 Slokas)
Unit-II	Poetry-1	Gangavataranam Bhoja's Champu Ramayanam - Balakanda (Except Kumaropathi)
Unit-III	Prose	1) Pushpodbhava Charitam Dasakumara Charitam - Purvapeethika 4th Chapter 2) Krshiphalam Kaalaaya Tasmai Namah 20th Chapter - Written by Ogeti Parikshit Sarma Page : 273-277
Unit-IV	Grammar	1. Declensions Nouns ending in vowels : Nadee, Vadhoo, Mathru, Phala, Vari and Madhu Conjugations : III Conjugation Yudh IV Ish VIII Likh X Kath, Ram, Vand
Unit-V	Grammar :	1) Sandhi A) Halsandhi : Latva, Jastva B) Visarga Sandhi 1) Utva, 2) Visargalopa, 3) Rephadesa, 4) Ooshram 2) Samasa A) Avyayibhava, B) Bahuvrihi.

VIKRAMA SIMHAPURI UNIVERSITY

NELLORE - 524 001

SANSKRIT

CBCS SEMESTER WISE SYLLABUS

2ND SEMESTER

PATRON OF THE QUESTION PAPER

Time : 3hrs

Max Marks : 75

- | | | | | |
|---|--|------------|--------|---------|
| I. | Essay | 1 out of 2 | 1 x 10 | 10M |
| | from the Lesson : Vasathasramagamanam | | | |
| II. | Essay | 1 out of 2 | 1 x 8 | 08M |
| | from the Lesson : Gangavataranam of Bhoja | | | |
| III. | Essay | 1 out of 2 | 1 x 10 | 10M |
| | One from each Lesson : 1) Pushpodbhava Charitham of Dandi, 2) Krishi Palam of Ogiti Parishth Sarma | | | |
| IV. | Short Answers | 4 out of 8 | 4 x 2 | 08M |
| | Two from Each Lesson : Vasathasramagamanam, Gangavataranam, Pushpodbhava Charitham and Krishi Palam | | | |
| V. | Annotations | 4 out of 8 | 4 x 3 | 12 M |
| | Two from each lesson | | | |
| VI. | Full form of Sabdas | 2 out of 4 | 2 x 4 | 08M |
| VII. | Full form of a Lakara of a given Dhatu | 2 out of 4 | | 2x3 = 6 |
| | Two from each Parshmaipada and Athmanepada | | | |
| VIII. | Combination of Words | 3 out of 6 | | 3x1=3 |
| | B) Division of Words | 3 out of 6 | | 3x1=3 |
| Note : All Questions should be given from Textual grammer part only. Not from the lesson as given in the Text Book. | | | | |
| Latva, Jestva and Visarga. | | | | |
| IX. | Simple Writing of Vighravakya | 3 out of 6 | | 3x1=3 |
| | All Questions should be given from Textual grammer part only. Not from the lesson as given in the Text Book. | | | |
| X. | Filling the Sloka and Writing the Meaning | 2 out of 4 | | 2x2=4 |
| | Two from Abhignanam and two from All from Vasisthasramagamanam only. | | | |

Andhra Pradesh State Council of Higher Education
General Telugu Syllabus for B.A/ B.Com/B.Sc., Courses Under CBCS
W.e.f. 2015-16 (Revised in April - 2016)

SEMESTER - II

I. ప్రాచీన కవిత్వం:

- (అ) ధూర్జటి - సాయుజ్యము
శ్రీకాళహస్తి మహాత్మ్యము - ద్వితీయాశ్వాసం (109-139)
త్రేతాంబుననొక్క నుండి పన్నగంబు వరకు
- (ఆ) చేమకూర వేంకటకవి- సుభద్రా పరిణయం
విజయ విలాసం - 3వ ఆశ్వాసం - (93-139)
“తనయుని పెండ్లికేగ వలె ధాత్రికి”నుండి
“తేరెక్కి దంపతులరుగ” వరకు.

II ఆధునిక కవిత్వం

- (అ) జాషువా - పిరదొసి లేఖ
“ఆ సుల్తాను” ... నుండి “అనుచు లిఖించె” వరకు)
- (ఆ) గెడ్డాపు సత్యం - ‘చెట్టు’ ఖండిక 1 నుండి 25 పద్యాలు
“శ్రీనిధానం” నుండి “మహిమ నీది” పద్యం వరకు)
(కవితా వైజయంతి పద్య సంకలనం నుండి)

III కథానికలు

- (అ) కేతు విశ్వనాథ రెడ్డి - నమ్ముకున్న నేల
(ఆ) ముప్పాళ్ళ రంగనాయకమ్మ- అమ్మకు ఆదివారం లేదా?

IV నవల

- డా॥ వి.ఆర్. రాసాని - బతుకాట

విద్యార్థి కృత్యాలు:

1. సుభద్ర వివాహ ఆచారాలు - ఈనాటి వివాహ ఆచారాలు తులనాత్మకంగా పరిశీలించండి.
2. మీకు నచ్చిన ఒక చెట్టుకు సంబంధించిన పూర్తి సమాచారాన్ని సేకరించండి.
3. మీ ఇంటి నేపథ్యంలో అమ్మలకు ఆదివారం ఉండో లేదో ఒక సంఘటన ఆధారంగా కథ రాయండి.
4. నమ్ముకున్న నేల కథలోని రైతుల గాధలను చిత్రాలతో దినపత్రికల ఆధారంగా సేకరించండి.

VIKRAMA SIMHAPURI UNIVERSITY::NELLORE

Foundation Course

INFORMATION & COMMUNICATION TECHNOLOGY –1 (ICT-1)

Computer Fundamentals and Office Tools

Common for BA/BCOM/BSC/BBA

FIRST YEAR SEMESTER - II

Unit-I:

Basics of Computers :Definition of a Computer - Characteristics and Applications of Computers – Block Diagram of a Digital Computer – Classification of Computers based on size and working – Central Processing Unit – I/O Devices.

Unit-II:

Primary, Auxiliary and Cache Memory – Memory Devices. Software, Hardware, Firmware and People ware – Definition and Types of Operating System – Functions of an Operating System – MS-DOS – MS Windows – Desktop, Computer, Documents, Pictures, Music, Videos, Recycle Bin, Task Bar – Control Pane.

Unit-III:

MS-Word

Features of MS-Word – MS-Word Window Components – Creating, Editing, Formatting and Printing of Documents – Headers and Footers – Insert/Draw Tables, Table Auto format – Page Borders and Shading – Inserting Symbols, Shapes, Word Art, Page Numbers, Equations – Spelling and Grammar – Thesaurus – Mail Merge

Unit-IV: MS-

PowerPoint

Features of PowerPoint – Creating a Blank Presentation - Creating a Presentation using a Template - Inserting and Deleting Slides in a Presentation – Adding Clip Art/Pictures - Inserting Other Objects, Audio, Video - Resizing and Scaling of an Object – Slide Transition – Custom Animation

Unit-V: MS-

Excel

Overview of Excel features – Creating a new worksheet, Selecting cells, Entering and editing Text, Numbers, Formulae, Referencing cells – Inserting Rows/Columns – Changing column widths and row heights, auto format, changing font sizes, colors, shading.

Reference Books:

1. Fundamentals of Computers by ReemaThareja, Publishers : Oxford University Press, India
2. Fundamentals of Computers by V.Raja Raman, Publishers : PHI
3. Microsoft Office 2010 Bible by John Walkenbach, Herb Tyson, Michael R.Groh and FaitheWempen, Publishers : Wiley

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE

Foundation Course
INFORMATION & COMMUNICATION TECHNOLOGY –1 (ICT-1)
Computer Fundamentals and Office Tools
Common for BA/BCOM/BSC/BBA
FIRST YEAR – SEMESTER-II

MODEL QUESTION PAPER

Time: 2 Hours

Max. Marks : 50

Answer any FIVE questions from the following **5x10=50**

1. Explain Block diagram of a digital Computer.
2. Explain about Input devices
3. Write about primary memory in detail.
4. Define operating system. Explain about functions of operating system.
5. Explain about features of MS-Word.
6. Write about Mail Merge Concept in MS-Word
7. How to create a presentation in MS-Power point?
8. How to add animation affects to a slide in MS-Power point?
9. What is worksheet? Explain features of MS-Excel.
10. Explain editing and formatting a Work Sheet

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE.
Foundation Course - 4
COMMUNICATION SKILLS AND SOFT SKILLS-1 (CSS -1)
(FOR ALL DEGREE PROGRAMMES)
I YEAR - II Semester
COURSE CONTENT (30 hours)

UNIT-1

VOCABULARY

- (a) Analogy
- (b) One-Word Substitutes
- (c) Words often confused
- (d) (I) Synonyms and (II) Antonyms

UNIT-2

GRAMMAR

- (a) Correction of sentences
- (b) Tenses

UNIT-3

GRAMMAR

- (a) Articles
- (b) Prepositions

UNIT-4

LISTENING SKILLS

- (a) The Importance of listening
- (b) Barriers / Obstacles of Effective Listening
- (c) Strategies of effective listening.

UNIT-5

READING SKILLS

- (a) Skimming
- (b) Scanning
- (c) Intensive and Extensive Reading
- (d) Reading Comprehension

* * *

Vikrama Simhapuri University :: Kakatur

Communication and Soft Skills (CSS) - 1

(Common to FIRST YEAR - SECOND SEMESTER B.A., B.A (O.L) B. Com., B.Sc.,BCA,BBA)
(A. P. Common Core Syllabus (CBCS) for I year Effective from 2015-16) (Revised in May 2016)
Model Question Paper (2017-18)

Time: 2 Hours

Max. Marks: 50

I. Answer any TWO of the following questions.

2x5=10

1. Choose the right word that has the same relationship as the original pair of words.
 - a. Honesty: Deception:: Kindness: _____ . (Compassion, Cruelty, Pity)
 - b. Fox: Cunning :: Ant: _____ . (Lazy / Industrious/Playful).
 - c. Player: Team :: Judge: _____ . (Justice/ Jury/ Committee)
 - d. Hill: Mountain :: Sea: _____ . (River/ Ocean/ Bay)
 - e. Poet: Poetess:: Lord : _____ . (Lady / Count/ Gentleman)

2. Replace the underlined part of the sentence with one of the options given below the sentence.
 - a. The police arrested him for trying to kill himself.
i) death ii) suicide iii) murder
 - b. The library has undertaken a project to digitalize all the hand written matter.
i) tape-scripts ii) manuscripts iii) palm leaf scripts
 - c. She is planning to write her own life history.
i) biography ii) biodata iii) autobiography
 - d. The guest is presented with a bunch of flowers.
i) bouquet ii) branch iii) garland
 - e. It is very difficult to get water that is fit to drink in this area.
i) usable ii) potable iii) bottled

3. Fill in the blanks with either of the two words with the help of the context in each sentence.
 - a. I'm sorry I can't _____ (accept / except) your proposal.
 - b. The extreme weather conditions have _____ (affected/ effected) the food grain production.
 - c. The contestants in the run are allowed to use only _____ (canvas/ canvass) shoes.
 - d. Most of the special festival meals are concluded with a _____ (desert /dessert).
 - e. The _____ (poles/ polls) are scheduled for a week by the election commission.

4. Answer the following.
 - a. Write the Synonyms of the following words.
i) Handsome ii) Polite
 - b. Write the Antonyms of the following words.
iii) Friend iv) Ancient v) Crazy

II. Answer the following Questions

2x5=10

1. Correct the following sentences and rewrite them.
 - a. I am going to college every day.
 - b. They have waited for the mail since four weeks.
 - c. Look! The two boys quarrel.
 - d. The movie started before I went into the theatre.
 - e. When I saw, they are all in a group.

2. Fill in the blanks by choosing the suitable verb forms.
 - a. I _____ (go/goes) to Hyderabad every week.
 - b. His family _____ (is/are) at Hyderabad.
 - c. One of the best students _____ (is/are) selected for the position of president of the Club.
 - d. My friends and I _____ (am/are) going to the party.
 - e. Last night a group of youngsters _____ (was/were) addressed by the Minister.

III. Answer the Following Questions.

2x5=10

1. Fill in the blanks with suitable Articles.
 - a. I talked to ___ European.
 - b. My brother came early by ___ hour.
 - c. Honesty is _____ best policy.
 - d. I met ___ one-legged man.
 - e. My teacher is _____ honest man.
2. Fill in the blanks with suitable Prepositions.
 - a. Secret of success lies ___ hard work.
 - b. She has been sleeping ___ 9 pm.
 - c. My father is suffering ___ severe fever.
 - d. There is an exception ___ every rule.
 - e. I congratulated him ___ his success.

IV. Answer any TWO of the following in 75 words each.

2x5=10

1. Describe a few barriers to listening.
2. Give some strategies for effective listening.
3. Why is listening Important?
4. What are the types of listening?

V. Answer any TWO of the following questions.

2x5=10

1. How can we become good readers? What are the qualities of good readers?
2. Write about skimming.
3. What do you know about Intensive reading and extensive reading?
4. Read the following passage and answer the questions that follow.

Beware of those who use the truth to deceive. When someone tells you something that is true, but leaves out important information that should be included, he can create a false impression. For example, someone might say, "I just won one lakh rupees on the lottery. It was great. I took that one thousand rupee ticket back to the store and turned it in for one lakh rupees!" This guy's a winner, right? Maybe, maybe not. We then discover that he bought two hundred tickets, and only one was a winner. He's really a big loser! He deliberately omitted important information. That's called a half-truth. Half-truths are just dishonest. Untrustworthy candidates in political campaigns often use this tactic. Let's say that during the last term of a Chief Minister of one of the states, that state lost one lakh jobs and gained three lakh jobs. Then he/she contests election for another term. One of his/her opponents canvasses in the public saying, "During his/ her term as the C.M, the state lost one lakh jobs!" That's true. However an honest statement would have been, "During his/her term, the state had a net gain of two lakh jobs." Advertisers will sometimes use half-truths. An ad might boast, "Nine out of ten doctors recommend 'Danta' toothpaste to cure bleeding gums." It fails to mention that they only asked ten doctors and nine of them work for the 'Danta' Corporation.

- a. As per the writer of the passage how do people create false impression?
- b. Pick out the word from the passage that means to fool or cheat people.
- c. How can you say that the person who won the lottery ticket is actually hiding full truth?
- d. Is the C.M mentioned in the passage actually responsible for a fall or growth in the number of jobs? Support your answer.
- e. As per the passage, name the two fields where people use half truths.

BCA I Year II Semester
STATISTICAL METHODS AND THEIR APPLICATIONS

Unit-I :

Introduction measures of central tendency, computation of Arithmetic mean, Median and Mode only for ungrouped data and grouped data. (Numerical Applications Only)

Unit-II :

Measures of Dispersion, Computation of Range – Coefficient of Range – Quartile Deviation – Coefficient of Quartile Deviation – Mean Deviation – Coefficient of Mean Deviation. (Numerical Applications Only)

Unit-III :

Measures of Dispersion, Variance standard Deviation – Coefficient of Variation for grouped and ungrouped data. (Numerical Applications Only)

Unit-IV :

Concept of Skewness, Karl-pearsons coefficient of skewness, Bowley's coefficient of skewness. (Numerical Applications Only)

Unit-V :

Meaning of Correlation, Types of correlation Karl-pear sons coefficient of correlation (for individual series only) Spearman's Rank correlation.

NOTE : 1. Concentration on numerical problems Only.
2. Proofs of theorems and Derivations of expressions are omitted.

Text Books :

1. Statistical Methods – Dr. S.P. Gupta – Chand & Sons.
2. Quantitative Techniques by C. Sathyadevi – S. Chand.

Reference Books :

1. Statistical Methods – Snedecor G.W. & Cochran W.G. Oxford & + DII.
2. Elements of Statistics – Mode. E.B. - Prentice Hall.

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

BCA I Year II Semester

OPERATING SYSTEMS

Course Objectives

1. To understand the services provided by and the design of an operating system.
2. To understand the structure and organization of the file system.
3. To understand what a process is and how processes are synchronized and scheduled.
4. To understand different approaches to memory management.
5. Students should be able to use system calls for managing processes, memory and the file system.
6. Students should understand the data structures and algorithms used to implement an OS.

Course Outcomes

1. Analyze the concepts of processes in operating system and illustration of the scheduling of processor for a given problem instance.
2. Identify the dead lock situation and provide appropriate solution so that protection and security of the operating system is also maintained.
3. Analyze memory management techniques, concepts of virtual memory and disk scheduling.
4. Understand the implementation of file systems and directories along with the interfacing of IO devices with the operating system.

UNIT - I

Operating System Introduction: Operating Systems Objectives and functions, Computer System Architecture, OS Structure, Evolution of Operating Systems (Simple Batch, Multi programmed, Distributed Systems, Real-Time Systems), Operating System services.

UNIT - II

Process and CPU Scheduling - Process concepts - The Process, Process State, Process Control Block, Threads, Process Scheduling - Schedulers, Preemptive Scheduling algorithms (FCFS, SJF, RR)

UNIT - III

Memory Management and Virtual Memory - Logical & physical Address Space, Swapping, Contiguous Allocation, Paging, Structure of Page Table. Segmentation, Segmentation with Paging

UNIT - IV

File System Interface - The Concept of a File, Access methods, Directory Structure, File Sharing, Protection, File System Structure

Mass Storage Structure - Overview of Mass Storage Structure, Disk Structure, Disk Attachment

UNIT - V

Deadlocks - System Model, Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection and Recovery from Deadlock.

TEXT BOOK

1. Operating systems - Internals and Design Principles, W. Stallings, 6th Edition, Pearson.

REFERENCES BOOKS:

2. Operating System Principles, Abraham Silberchatz, Peter B. Galvin, Greg Gagne 8th Edition, Wiley Student Edition.
3. Principles of Operating Systems by Naresh Chauhan, OXFORD University Press
4. Operating systems - Internals and Design Principles, W. Stallings, 6th Edition, Pearson.
5. Modern Operating Systems, Andrew S Tanenbaum 3rd Edition PHI.
6. Operating Systems A concept - based Approach, 2nd Edition, D. M. Dhamdhare, TMH.
7. Principles of Operating Systems, B. L. Stuart, Cengage learning, India Edition.
8. Operating Systems, A. S. Godbole, 2nd Edition, TMH

Student Activity:

1. Load any new operating system into your computer.
2. Partition the memory in your system
3. Create a semaphore for process synchronization

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

Operating Systems Lab

1. Given the list of processes, their CPU burst times and arrival times, display/print the Gantt chart for FCFS and SJF. For each of the scheduling policies, compute and print the average waiting time and average turnaround time.
2. Developing applications using Inter Process Communication (using shared memory)
3. Implement any two memory management schemes
4. Implement file allocation techniques (Linked)
5. Implement Deadlock prevention algorithm.
6. Given the list of processes, their CPU burst times and arrival times, display/print the Gantt chart for Round robin. Compute and print the average waiting time and average turnaround time.
7. Implement file allocation techniques (Indexed)
8. Implement file allocation techniques (Contiguous)
9. Developing applications using Inter Process Communication (pipes)
10. Developing applications using Inter Process Communication (message queues)
11. Implement Deadlock detection algorithm.
12. Implement Deadlock avoidance algorithm.

BCA I Year II Semester

OBJECT ORIENTED PROGRAMMING USING C++

Course Objectives

This course covers object-oriented programming principles and techniques using C++. Topics include pointers, classes, overloading, data abstraction, information hiding, encapsulation, inheritance, polymorphism, file processing, templates, exceptions, container classes, and low-level language features. This course also covers basic concepts for software design and reuse.

Course Outcomes

1. Understand concepts of objects and their significance in real world
2. Investigate software problem in terms of objects and entities
3. Learn to co-relate relationship among different entities involved in a system
4. Find dependency and roles in an environment
5. Develop software in terms of objects, associations, and integrity constraints
6. Generalize and aggregate business entities and transform behavior into functions
7. Identify, understand and analyze various sample development models

UNIT I

Principles of OOP: Software Crisis. Software Evolution- Programming Paradigms. Object Oriented Technology- Basic concepts and benefits of OOP – Application of OOP, OOP languages

UNIT II

Introduction to C++: History of C++, Structure of C++, Application of C++, tokens, keywords, identifiers, basic data types, derived data types, dynamic initialization, scope resolution operator, type modifiers, type casting operators and control statements, input and output statements in C++

UNIT III

Classes and Objects: Class specification, Member function definition – nested member function, access qualifiers, static data members and, member functions. Instance creation - Array of objects - Dynamic objects - Static Objects – Objects as arguments -Returning objects
Constructors and Destructors: Constructors- Parameterized constructors, Overloaded Constructors, Constructors with default arguments, copy constructors, Destructors.

UNIT IV

Polymorphism: Types of polymorphism, function overloading, operator overloading
Inheritance: Defining derived classes. Single Inheritance - Multiple Inheritances - Multi Level Inheritance - Hierarchical Inheritance. Hybrid Inheritance - Multi path Inheritance

UNIT-V

Functions in C++: Generic Programming with Templates. Introduction, function templates or generic functions, overloaded function templates, user defined templates arguments, class templates or generic classes, Inheritance of class templates.

TEXT BOOK

1. The Complete Reference C++, Herb Schildt, Tata McGraw-Hill, Fourth Edition.

REFERENCE BOOKS:

1. Object Oriented Programming with C++ by Reema Thareja, OXFORD University Press
2. Robert Lafore, "Object Oriented Programming in C++", Galgotia Publication Pvt. Ltd, 4th edition, New Delhi, 2002
3. Ashok N Kamathane, "Object Oriented Programming with ANSI & Turbo C++", Pearson Education, New Delhi, 2003.
4. Bjarne Stroustrup, "C++ Programming language", Pearson Education, New Delhi, 2001.
5. Venugopal K R, Rajkumar Buyya and Ravishankar T, "Mastering C++", TMH, ND, 2006

Student Activity:

1. Create a class diagram for academic process in your college
2. Write a program to implement "Vikuntapali" game

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

OBJECT ORIENTED PROGRAMMING USING C++ LAB

1. Write a C++ program to find the sum of individual digits of a positive integer.
2. A Fibonacci sequence is defined as follows: the first and second terms in the sequence are 0 and 1. Subsequent terms are found by adding the preceding two terms in the sequence. Write a C++ program to generate the first n terms of the sequence.
3. Write a C++ program to generate all the prime numbers between 1 and n , where n is a value supplied by the user.
4. Write a C++ program to find the factorial of a given integer
5. Write a C++ program to find the GCD of two given integers
6. Write a C++ program that uses a recursive function for solving Towers of Hanoi problem.
7. Write a C++ program to implement call by value and call by reference parameters passing
8. Write a C++ program to implement function templates
9. Write a program to implement Overloading and Overriding
10. Write a C++ program to implement the matrix ADT using a class reading and printing a matrix.
11. Write a C++ program to implement the matrix ADT using a class addition of matrices
12. Write a C++ program to implement the matrix ADT using a class multiplication of matrices
13. Write C++ programs that illustrate how the Single inheritance, Multiple inheritance Multi level inheritance and Hierarchical inheritance forms of inheritance are supported
14. Write a C++ program that illustrates the order of execution of constructors and destructors when new class is derived from more than one base class
15. Write a C++ program that illustrates how run time polymorphism is achieved using virtual functions

Adobe in Design LAB

Implement the following tasks using ADOBE

- 1. Resume designing**
- 2. Paragraph setting**
- 3. Text column wise designing**
- 4. Text base paper add**
- 5. Create college Logo**
- 6. Table creation**
- 7. Student marks list**
- 8. Book work**
- 9. Picture insertion**
- 10. Application form**
- 11. Text based Visiting card**
- 12. Notice designing**
- 13. Typographic alignment styles**
- 14. Wedding card designing**
- 15. Letter models**

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE
General English Syllabus for B.A/ B.A. (OL)/B.Com/B.Sc/BBA/BCA Courses under
CBCS w.e.f. 2015-16 (Revised in April-2016)

SEMESTER –III

Unit – I

PROSE

1. M.K. Gandhi: Shyness My Shield (from *The Story of My Experiments with Truth*)
2. Alexis C. Madrigal: Why People Really Love Technology: An Interview with Genevieve Bell

Unit – II

POETRY

1. Gabriel Okara: Once upon a Time
2. Seamus Heaney: Digging

Unit – III

SHORT STORY

1. JhumpaLahiri: The Interpreter of Maladies
2. Shashi Deshpande: The Beloved Charioteer

Unit – IV

ONE ACT PLAY

GurajadaAppa Rao: *Kanyasulkam*, translated by C. Vijayasree& T. VijayaKumar (Acts I & II)

Unit – V

LANGUAGE ACTIVITY

1. Classroom and Laboratory Activities
 - i. JAM Session
 - ii. Expansion of an idea
2. Classroom Activity
 - i. Transformation of sentences (Simple-Complex-Compound Sentences)
 - ii. Note Making
 - iii. Report Writing (Letter Format and paragraph Format)
 - iv. Reading Comprehension (From Prose)

Note: *In classroom instruction it may be ensured that the theoretical and practical components of CSS-II complement the language activity in this semester.*

* * *

VIKRAMA SIMHAPURI UNIVERSITY :: KAKUTUR

General English

(Common to SECOND YEAR – THIRD SEMESTER B.A., B.A. (OL), B.Com., B.Sc.,BBA,BCA)
(A. P. Common Core Syllabus (CBCS) for I year Effective from 2015-16) (Revised in April, 2016)

Model Question Paper (2017-18)

Time: 3 Hours

Max. Marks: 75

1. Answer any TWO of the following questions. 2X5 = 10
 - a. Summarize the main ideas of the essay 'Shyness, My Shield'.
 - b. What are the ideas of Genevieve Bell about gadget adoption and ubiquitous computing?
 - c. Describe the instances of Gandhi's shyness during his stay in England.
2. Answer any TWO of the following questions. 2X5 = 10
 - a. What does the father tell his son in the poem 'Once upon a Time'?
 - b. 'Between my finger and my thumb the squat pen rests. I'll dig with it'. Explain it with reference to the poem 'Digging'.
 - c. What assumptions can you make about the kind of life that the poet of the poem 'Once upon a Time' has lived? How is it different now?
3. Answer any TWO of the following questions. 2X5 = 10
 - a. Discuss the title of the story 'The Interpreter of Maladies'.
 - b. What feelings does the child have towards her mother in 'The Beloved Charioteer'?
 - c. What cultural differences do you notice among the characters in 'The Interpreter of Maladies'?
4. Answer any ONE of the following questions. 1X5 = 5
 - a. How is 'Kanyasulkam' a critique of society?
 - b. Write a note on the comic elements in the play 'Kanyasulkam'.
5. Prepare notes for JAM on ONE of the following. 1X5 = 5
 - a. My Career Choice
 - b. My Childhood
 - c. Smart Phone
6. Write a report to the news paper on your college day celebrations highlighting the important events. 1X5=5
7. Write about any TWO of the following. 2X5 = 10
 - a. Prevention is better than cure.
 - b. Where there is a will, there is a way.
 - c. Necessity is the mother of invention.
 - d. My Hobbies
 - e. The uses of Internet
8. Rewrite the following sentences as directed: 5x1 = 5
 - a. He is poor but he is honest. (into Simple Sentence)
 - b. As he was ill, he was absent. (into Compound Sentence)
 - c. The thief saw the police and he ran away. (into Simple Sentence)
 - d. He ran away in order to escape arrest. (into Compound Sentence)
 - e. You must work hard, and then you will pass. (into Complex Sentence)

9. Read the following passage and make notes of it.

1x5 = 5

There are different forms of environmental pollution. Air pollution is caused by the burning of coal and oil. It can damage the earth's vegetation and cause respiratory problems in humans. A second type of pollution is noise pollution. It is the result of the noise of aircraft and heavy traffic. Further, loud music is also a cause of noise pollution, which has been seen to affect people's hearing and give them severe headaches and high blood pressure. Another source of pollution is radioactivity, which occurs when there is a leak from a nuclear power station. Radioactivity is a deadly pollutant, which kills and causes irreparable harm to those exposed to it. Land and water pollution is caused by the careless disposal of huge quantities of rubbish, sewage and chemical wastes. Pollution of river and seas kills fishes and other marine life and also becomes the cause of water-borne diseases. Land pollution, on the other hand, poisons the soil, making the food grown in it unfit for consumption.

10. Write a Report on ragging in the educational institutions. (Paragraph Format).

1x5 = 5

11. Read the following passage and answer the questions that follow. (From Prose)

5x1 = 5

There were in the Committee others also who shared my view, but I felt myself personally called upon to express my own. How to do it was the question. I had not the courage to speak and I therefore decided to set down my thoughts in writing. I went to the meeting with the document in my pocket. So far I recollect, I did not find myself equal even to reading it, and the President had it read by someone else. Dr. Allinson lost the day. Thus in the very first battle of the kind I found myself siding with the losing party. But I had comfort in the thought that cause was right. I have a faint recollection that, after this incident, I resigned from the Committee.

- a. Who is 'I' in the given passage?
- b. What did the author do as he had not the courage to speak?
- c. How did he go to the meeting?
- d. When the author failed to read the document, what did the President do?
- e. When did the author resign from the Committee?

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VIKRAMA SIMHAPURI UNIVERSITY

NELLORE - 524 001

PART-II SANSKRIT

CBCS SEMESTER WISE SYLLABUS

3RD SEMESTER

PAPER - III DRAMA, UPANISHAD, ALANKARAS, PARTICIPLES & SABDAS

2ND DEGREE (2ND B.A., B.SC., B.COM)

Unit-I	Old Drama	Dootavakyam One act play by Bhasa
Unit-II	Modern Drama	Asani Niraasam By Kavisamrat Viswanatha Satyanarayana, Pub. in 1954
Unit-III	Upanishad	Sishyaanusaasanam - Sikshavalli of Taittireeyupanishat
Unit-IV	Alankaras	1) Upama, 2) Ananvaya, 3) Utpreksha, 4) Deepakam, 5) Aprastuta Prasamsa, 6) Drushtanta.
Unit-V	Participles Krtpratyayas	1) Ktvaa, 2) Lyap, 3) Tuman, 4) Tavya.
	Sabdhas :	
	1) Halanta	1) Vach, 2) Marut, 3) Bhavat, 4) Rajan, 5) Vidwas, 6) Manas
	2) Sarvanama	1) Asmad, 2) Yushmad

History of Sanskrit Literature :

- 1) पाणिनिः, 2) कौटिल्यः, 3) भरतमुनिः, 4) भारविः, 5) माधः, 6) भवभूतिः.

VIKRAMA SIMHAPURI UNIVERSITY

NELLORE - 524 001

SANSKRIT

CBCS SEMESTER WISE SYLLABUS

3RD SEMESTER

PATRON OF THE QUESTION PAPER

Time : 3hrs

Max Marks : 75

- | | | | | |
|-------|--|------------|------------|---------|
| I. | Essay | 1 out of 2 | 1 x 10 | 10M |
| | from the Lesson : Dutavakyam of Bhasa | | | |
| II. | Essay | 1 out of 2 | 1 x 10 | 10M |
| | from the Lesson : Asaninirasam | | | |
| III. | Essay | 1 out of 2 | 1 x 8 | 08M |
| | One from each Lesson : 1) Shisyanusasanam | | | |
| IV. | Short Answers | 4 out of 6 | 4 x 2 | 08M |
| | Two from Each Lesson : | | | |
| V. | Annotations | 4 out of 6 | 4 x 3 | 12 M |
| | Two from each lesson | | | |
| VI. | Full form of Sabdas | 2 out of 4 | 2 x 3 | 06M |
| | One from each Gender and one from Sarvanama. | | | |
| VII. | Participles | 3 out of 6 | | 3x1 = 3 |
| | Two from each Participle | | | |
| VIII. | Alankaras | 2 out of 4 | | 2x5=10 |
| | Eleborate explanation should be given. | | | |
| IX. | History of Sanskrit Literature | | 2 out of 4 | 2x4=8 |
| | A Brief explanation of a Poet should be given. | | | |

Note : Question Paper should be Sanskrit Only. English Translation should not be there.

Andhra Pradesh State Council of Higher Education
General Telugu Syllabus for B.A/ B.Com/B.Sc., Courses Under CBCS
W.e.f. 2015-16 (Revised in April - 2016)

SEMESTER - III

I. ప్రాచీన కవిత్వం:

- (అ) పోతన - వామనావతారం
ఆంధ్రమహాభాగవతం - ఎనిమిదవ స్కంధం (582-621)
("కులమున్ రాజ్యము" నుండి "రవిబింబంబుపమింప" వరకు)
- (ఆ) కొఱవిగోపరాజు - శాలివాహన విజయం
సింహాసన ద్వాత్రింశిక - ఒకటవ ఆశ్వాసం (115-165)
("సజ్జిత దానధర్మ" నుండి "ఇట్లు విక్రమార్కుడీల్గిన" వరకు)

II ఆధునిక కవిత్వం

- (అ) కుసుమ ధర్మన్న - హరిజన శతకము (1-20)
"శ్రీహరిసుత నీదు" నుండి "నీకులంబువారు" వరకు
- (ఆ) రాయప్రోలు సుబ్బారావు - సంక్రాంతి సంబరము - మిశ్రమంజరిలోంచి - "అయిదు
లక్షల అరవదేడులు" నుండి "మంగళము సంక్రాంతి సామికి" వరకు

III గద్యభాగం (వ్యాస సంపుటి)

- (అ) ఆచార్య గుజ్జర్లమూడి కృపాచారి - తెలుగు భాష
(ఆ) ఆచార్య రాచపాళెం చంద్రశేఖర రెడ్డి - వ్యక్తిత్వ వికాసం

IV ఛందస్సు - అలంకారాలు

- (అ) ఛందస్సు - ఉత్పలమాల, చంపకమాల, శార్దూలం, మత్తేభం, కందం, తేటగీతి,
ఆటవెలది
- (ఆ) అలంకారాలు - ఉపమ, రూపక, ఉత్పేక్ష, స్వభావోక్తి, అతిశయోక్తి, అర్థాంతరన్యాస,
దృష్టాంతం, శబ్దాలంకారాలు.

విద్యార్థి కృత్యాలు:

1. తెలుగు వారాలు, తిథులు, నక్షత్రాలు, సంవత్సరాల పేర్లు నేర్చుకోండి.
2. మీ వ్యక్తిత్వాన్ని మీరు ఏ విధంగా మెరుగుపరుచుకుంటున్నారో వ్యాసం రాయండి.
3. అంత్యానుప్రాసాలంకారంలో ఒక కవిత సొంతంగా రాయండి.

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE.
THREE YEAR (CBCS) DEGREE EXAMINATION
BACHELOR OF COMPUTER APPLICATIONS
(FOUNDATION COURSE)
BCA – II-YEAR - SEMESTER – III
ENTREPRENEURSHIP

UNIT-I :

ENTREPRENEUR: MEANING – Characteristics of an Entrepreneur – Classification of Entrepreneur – Role of Entrepreneur in Economic Development – Difference between Entrepreneur and Intrepeneur.

UNIT-II :

ENTREPRENURSHIP: Characteristics of Entrepreneurship – Entrepreneur Vs Entrepreneurship – Stages of Entrepreneurship – Factors influencing an Entrepreneurship.

UNIT-III :

PROJECT FORMULATION AND APPRAISAL: Contents of Project Report – Guidelines for Report preparation – Project Appraisal techniques.

UNIT-IV :

ENTREPRENEURIAL DEVELOPMENT PROGRAMMES (EDP's): Objectives of EDP – Stages of EDP's – Who requires EDP's – EDP Training.

UNIT-V :

INSTITUTIONS SUPPORTING TO ENTREPRENEURS: Central level Institutions: NABARD; SIDBI, NIESBUD Only. State level Institutions – DICs- SFC- SIDC Only.

REFERENCE BOOKS :

1. Arya Kumar, Entrepreneurship, Pearson, Delhi, 2012.
2. Poornima M.CH., Entrepreneurship Development –Small Business Enterprises, Pearson, Delhi,2009
3. Michael H. Morris, ET. al., Entrepreneurship and Innovation, Cen gage Learning, New Delhi, 2011
4. KanishkaBedi, Management and Entrepreneurship, Oxford University Press, Delhi, 2009
5. Anil Kumar, S., ET.al., Entrepreneurship Development, New Age International Publishers, New Delhi, 2011
6. Khanka, SS, Entrepreneurship Development, S. Chand, New Delhi.
7. Peter F. Drucker, Innovation and Entrepreneurship.
8. A.Sahay, M. S. Chhikara, New Vistas of Entrepreneurship: Challenges & Opportunities.

Instruction to Paper Setter :

2 Questions must be given from each unit.

Foundation Course - 5

INFORMATION & COMMUNICATION TECHNOLOGY –2 (ICT-2)

Internet Fundamentals and Web Tools

Common for BA / BCom / B Sc / BBA Programmes

III Semester

(30 Hours of Teaching Learning including Lab)

Unit-I :

Fundamentals of Internet : Networking Concepts, Data Communication – Types of Networking, Internet and its Services, Internet Addressing – Internet Applications – Computer Viruses and its types – Browser –Types of Browsers.

Unit-II:

Internet applications: Using Internet Explorer, Standard Internet Explorer Buttons, Entering a Web Site Address, Searching the Internet – Introduction to Social Networking: twitter, tumblr, LinkedIn, facebook, flickr, skype, yelp, vimeo, yahoo!, google+, youtube, WhatsApp, etc.

Unit-III :

E-mail :Definition of E-mail - Advantages and Disadvantages – UserIds, Passwords, Email Addresses, Domain Names, Mailers, Message Components, Message Composition, Mail Management, Email Inner Workings.

Unit IV:

WWW- Web Applications, Web Terminologies, Web Browsers, URL – Components of URL, Searching WWW – Search Engines and Examples

Unit-III :

Basic HTML: Basic HTML – Web Terminology – Structure of a HTML Document – HTML, Head and Body tags – Semantic and Syntactic Tags – HR, Heading, Font, Image and Anchor Tags – Different types of Lists using tags – Table Tags, Image formats – Creation of simple HTML Documents.

Reference Books :

1. In-line/On-line : Fundamentals of the Internet and the World Wide Web, 2/e - by Raymond Greenlaw and Ellen Hepp, Publishers : TMH

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE
FOUNDATION COURSE
INFORMATION & COMMUNICATION TECHNOLOGY -2 (ICT-2)
Internet Fundamentals and Web Tools
Common for BA / BCom / B Sc / BBA Programmes

SEMESTER-III (MODEL QUESTION PAPER)

Time: 2 Hours

Max. Marks : 50

Answer any FIVE of the following Questions: (5 x 10 = 50 Marks)

1. What is Network? Explain types of networks
2. Write about Internet applications.
3. Briefly explain features of Internet Explorer
4. Explain about any two Social networking sites
5. What is E-mail? Write advantages of E-mail.
6. Write about message components.
7. Define WWW. Write about web browsers.
8. What is Search engine? Explain search engines used on Internet.
9. Explain the structure of HTML document.
10. Explain list tags used in HTML

Instruction to Paper Setter:

TWO questions must be given from each unit

Foundation Course - 6
COMMUNICATION SKILLS AND SOFT SKILLS-2 (CSS -2)
Common for BA/BCom/BSc/BBA/BCA Programmes

III Semester
COURSE CONTENT (30 hours)

Unit I: Pronunciation - 1

The Sounds of English

Unit II: Pronunciation – 2

1. Word Accent
2. Intonation

Unit III: Speaking Skills -1

1. Conversation Skills
2. Interview Skills
3. Presentation Skills
4. Public Speaking

Unit IV: Speaking Skills -2

1. Role Play
2. Debate
3. Group Discussion

Unit V: Writing Skills

1. Spelling
2. Punctuation
3. Information Transfer
4. Tables
5. Bar Diagrams
6. Line Graphs
7. Pie Diagrams
8. Flow Charts
9. Tree Diagrams
10. Pictures

* * *

VIKRAMA SIMHAPURI UNIVERSITY :: KAKUTUR

Communication and Soft Skills (CSS) - 2

(Common to SECOND YEAR - THIRD SEMESTER B.A., B.A (O.L) B.Com., B.Sc.,BBA,BCA)
(A. P. Common Core Syllabus (CBCS) for I year Effective from 2015-16) (Revised in May 2016)

Model Question Paper (2017-18)

Time: 2 Hours

Max. Marks: 50

I. Answer the following questions.

2X5=10

1. Write English spelling for the words given in phonemic transcription.

i) /a:tɪst/ ii) /kɑɪndnəs/ iii) /pəzɪfən/ iv) /θɔ:n/ v) ba:bə/

2. Choose correct transcription for each word.

i) Apple a) /a:pl/ b) /a:pɪl/ c) /æpl/

ii) Album a) / ʌlbəm/ b) /a:lbəm/ c) /ælbəm/

iii) College a) /ka:le:dʒ/ b) / ca:lɪdʒ/ c) /kɒlɪdʒ/

iv) Museum a) /mjuzi:əm/ b) / mju:siəm/ c) /mu:sium/

v) Summer a) / samə/ b) / sʌmə/ c) / sʌmmə/

II. Answer the following questions.

2X5=10

1. Mark the stress on the appropriate syllable in the following words.

a) Particular b) Canteen c) Police d) Traditional e) Propriety

2. Choose correct tone (Falling/ Rising) for each of the following sentences.

- Ravi Kumar is a good doctor.
- Have you taken breakfast?
- Where are you going?
- What's your name? (Warmth and affection).
- Shut the door, please.

III. Answer any TWO of the following questions.

2X5=10

- What are the dos and don'ts during an interview?
- How do you develop your presentation skills?
- When you are asked to address a gathering, what are the tips to be followed?

IV. Answer any TWO of the following questions.

2X5=10

- Write a dialogue between two friends about an accident that took place in their town.
- 'Using social media is a waste of time.' Prepare five debate points.
- What are the dos and don'ts in a group discussion?

V. Answer the following questions.

2X5=10

1. Present the given information in the form of a tree diagram.

There are three main types of geometrical figures. They are circle, triangle and quadrilateral. Equilateral, isosceles and scalene are the triangle forms that are used. The circle has no such sub forms. Quadrilateral can be represented by square, rectangle, rhombus and Parallelogram.

2. Identify the Correct spelling in each group.

- | | | |
|------------------|---------------|-----------------|
| a. i. Monotonos | ii. Monotonus | iii. Monotonous |
| b. i. Syllable | ii. Syllabel | iii. Syllabul |
| c. i. Vocabulary | ii. Vocablary | iii. Vocabulary |
| d. i. Grammer | ii. Grammar | iii. Grammor |
| e. i. Receive | ii. Recieve | iii. Receave |

* * *

**BCA II Year III Semester
FUNDAMENTALS OF ACCOUNTING**

Unit-I – Introduction to Accounting

Need for Accounting – Definition – Objectives, Advantages – Book keeping and Accounting– Accounting concepts and conventions - Accounting Cycle - Classification of Accounts and its rules - Double Entry Book-keeping - Journalization - Posting to Ledgers, Balancing of ledger Accounts (problems).

Unit –II: Subsidiary Books:

Types of Subsidiary Books –purchases Book- Purchase returns Book-Sales Book- Sales returns Book-- Cash Book- Simple Cash Book - Two Columnar Cash Book- Three-column Cash Book- Petty cash Book (Problems).

Unit-III- Bank Reconciliation Statement:

Need for bank reconciliation - Reasons for difference between Cash Book and Pass Book Balances- Preparation of Bank Reconciliation Statement- Problems on both favorable and unfavorable balances.

Unit -IV: Depreciation :

Depreciation – Meaning – Causes – Accounting treatment – methods of providing – depreciation – straight line method – diminishing Balance Method only – Simple problems.

Unit -V: Trail Balance and Final Accounts:

Meaning objectives - Methods of preparation of trial balance –Totals method –Balances Method

Preparation of Final Accounts: Trading account – Profit and Loss account – Balance Sheet – with adjustments- Bad debts- Provision for bad debts (Simple Problems).

Reference Books

1. T.S.Reddy & A. Murthy, Financial Accounting , Margham Publications
2. R L Gupta & V. K Gupta, Principles and Practice of Accounting, Sultan Chand & Sons
3. S.P. Jain & K.L Narang, Accountancy-I, Kalyani Publishers
4. Tulasian, Accountancy -I, Tata McGraw Hill Co.
5. V.K.Goyal, Financial Accounting, Excel Books
6. K. Arunjothi, Fundamentals of Accounting; Maruthi Publications

Instruction to Paper Setter:

Two questions must be given from each unit in Section-A and Section-B

BCA II Year III Semester

DATABASE MANAGEMENT SYSTEMS

Course Objectives

The objective of the course is to enable students to understand and use a relational database system. Introduction to Databases, Conceptual design using ERD, Functional dependencies and Normalization, Relational Algebra is covered in detail. Students learn how to design and create a good database and use various SQL operations. The course concludes with an overview of transaction management and introduction to advanced and non-relational databases.

Course Outcomes

1. Able to master the basic concepts and understand the applications of database systems.
2. Able to construct an Entity-Relationship (E-R) model from specifications and to transform to relational model.
3. Able to construct unary/binary/set/aggregate queries in Relational Algebra.
4. Understand and apply database normalization principles.
5. Able to construct SQL queries to perform CRUD operations on database. (Create, Retrieve, Update, Delete)
6. Understand principles of database transaction management, database recovery, security.

Unit-1

Database Systems: Introducing the database and DBMS, Files and File Systems, Problems with File System and advantages of Database Management systems

Unit-II

The Relational Database Model: Integrity Rules, Relational Set Operators, Relationships within the Relational Database, Codd"s relational database rules.

Entity Relationship Model: The ER Model, ER model components, entities, attributes, and relationships

Unit-III

Introduction to SQL: SQL data types, SQL operators, Data Definition Commands, Data Manipulation Commands, Select queries, Advanced Data Definition Commands, Advanced Select queries

Unit-IV

Advanced SQL: Relational Set Operators, Subqueries and correlated queries, Joining Database Tables, SQL Functions, Data Control Language commands

Unit-V

Transaction Management and Concurrency Control: What is transaction, Concurrency control, Concurrency control with locking Methods, Concurrency control with time stamping methods, database recovery management.

TEXT BOOK

1. Peter Rob, Carlos Coronel, Database Systems Design, Implementation and Management, Seventh Edition, Thomson (2007)

Reference Books:

2. Elimasri / Navathe, Fundamentals of Database Systems, Fifth Edition, Pearson Addison Wesley (2007).
3. Raman A Mata – Toledo/Panline K Cushman, Database Management Systems, Schaum"s Outlibe series, Tata McGraw Hill (2007).
4. C.J.Date, A.Kannan, S.Swamynathan, An Introduction to Database Systems, Eight Edition, Pearson Education (2006).
5. Atul Kahate, Introduction to Database Management Systems, Pearson Education (2006).

Student Activity:

1. Create student database of your college for placement purpose
2. Create student database of your college for fees reimbursement, ADHAAR as primary key

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

BCA II Year III Semester

DATABASE MANAGEMENT SYSTEMS LAB

1. Order Tracking Database

The Order Tracking Database consists of the following defined six relation schemas.

Employees(eno,ename,zip,hdate)

Parts(pno,pname,qoh,price,level) (hint: qoh: quality on hand)
Customers(cno,cname,street,zip,phone)

Orders(ono,cno,eno,received date,shipped date)

Odetails(ono,pno,qty)

Zipcodes(zip,city)

Solve the following queries

1. Get all pairs of customer numbers for customers based on same zip code.
2. Get part numbers for parts that have been ordered by at least two different customers.
3. For each odetail row, get ono,pno,pname,qty and price values along with the total price for the item. (total price=price*qty)
4. Get customer name and employee pairs such that the customer with name has placed an order through the employee
5. Get customer names living in fort dodge or liberal.
6. Get cname values of customers who have ordered a product with pno 10506.
7. Get pname values of parts with the lowest price.
8. Get cname values of customers who have placed at least one order through the employee with number 1000.
9. Get the cities in which customers or employees are located.
10. Get the total sales in dollars on all orders.
11. Get part name values that cost more than the average cost of all parts.
12. Get part names of parts ordered by at least two different Customers.
13. Get for each part get pno,pname and total sales

14. For each part, get pno,pname, total sales, whose total sales exceeds 1000
15. Get pno, part names of parts ordered by at least two different customers.
16. Get cname values of customers who have ordered parts from any one employee based in wichita or liberal.

2.Shipment database

An enterprise wishes to maintain the details about his suppliers and other corresponding details. For that it uses the following tables

Table s(sid,sname,address) primary key : sid

Table p(pid,pname,color) primary key : pid

Table cat(sid,pid,cost) primary key : sid+pid

reference key : sid references

s.sid pid references p.pid

Solve the following queries

1. Find the pnames of parts for which there is some supplier
2. Find the snames of suppliers who supply every part.
3. Find the snames of suppliers who supply every red part.
4. Find the pnames of parts supplied by london supplier and by no one else
5. Find the sids of suppliers who charge more for some part other than the average cost of that part
6. Using group by with having clause get the part numbers for all the parts supplied by more than one supplier.
7. Get the names of the suppliers, who do not supply part p2.
8. Find the sids of suppliers who supply a red and a green part
9. Find the sids of suppliers who supply a red or a green part
10. find the total amount has to pay for that supplier by part located from london

3.Employee database

An enterprise wishes to maintain a database to automate its operations. Enterprise divided into to certain departments and each department consists of employees. The following two tables describes the automation schemas

Dept (deptno, dname, loc)

Emp (empno,ename,job,mgr,hiredate,sal,comm,deptno)

1. Create a view, which contain employee names and their manager names working in sales department.
2. Determine the names of employee, who earn more than their managers.
3. Determine the names of employees, who take highest salary in their departments.
3. Determine the employees, who located at the same place.

B.C.A Under CBCS with effect from Academic Year 2016-2017 (Revised in April, 2016)

4. Determine the employees, whose total salary is like the minimum salary of any department.
5. Update the employee salary by 25%, whose experience is greater than 10 years
6. Delete the employees, who completed 32 years of service.
7. Determine the minimum salary of an employee and his details, who join on the same date.
8. Determine the count of employees, who are taking commission and not taking Commission.
9. Determine the department does not contain any employees.
10. Find out the details of top 5 earner of company.
11. Display those managers name whose salary is more than average salary of his employees
12. Display those employees who joined the company before 15th of the month?
13. Display the manager who is having maximum number of employees working under him?
14. Print a list of employees displaying „less salary“ if less than 1500 if exactly 1500 display as „exact salary“ and if greater than 1500 display „more salary“?
15. Display those employees whose first 2 characters from hire date-last 2 characters of salary?
16. Display those employees whose 10% of salary is equal to the year of joining?
17. In which year did most people join the company? Display the year and number of employees.
18. Display the half of the enames in upper case and remaining lower case
19. Display ename, dname even if there no employees working in a particular department(use outer join).

BCA II Year III Semester

Object Oriented Programming Using JAVA

Course Objectives

As the business environment becomes more sophisticated, the software development (software engineering is about managing complexity) is becoming increasingly complex. As of the best programming paradigm which helps to eliminate complexity of large projects, Object Oriented Programming (OOP) has become the predominant technique for writing software in the past decade. Many other important software development techniques are based upon the fundamental ideas captured by object-oriented programming.

Course Outcomes

At the end of this course student will:

1. Understand the concept and underlying principles of Object-Oriented Programming
2. Understand how object-oriented concepts are incorporated into the Java programming language
3. Develop problem-solving and programming skills using OOP concept
4. Understand the benefits of a well structured program
5. Develop the ability to solve real-world problems through software development in high-level programming language like Java
6. Develop efficient Java applets and applications using OOP concept
7. Become familiar with the fundamentals and acquire programming skills in the Java language.

UNIT-1

FUNDAMENTALS OF OBJECT – ORIENTED PROGRAMMING :Introduction, Object Oriented paradigm, Basic Concepts of OOP, Benefits of OOP, Applications of OOP, Java features: **OVERVIEW OF JAVA LANGUAGE**: Introduction, Simple Java program structure, Java tokens, Java Statements, Implementing a Java Program, Java Virtual Machine, Command line arguments.

UNIT-II

CONSTANTS, VARIABLES & DATA TYPES: Introduction, Constants, Variables, Data Types, Declaration of Variables, Giving Value to Variables, Scope of variables, Type casting, **OPERATORS**

CLASSES, OBJECTS & METHODS: Introduction, Defining a class, Adding variables, Adding methods, Creating objects, Accessing class members, Constructors, Method overloading, Static members, Nesting of methods;

UNIT-III

INHERITANCE: Extending a class, Overloading methods, Final variables and methods, Final classes, Abstract methods and classes;

ARRAYS, STRINGS AND VECTORS: Arrays, One-dimensional arrays, Creating an array, Two – dimensional arrays, Strings, Vectors, Wrapper classes;

INTERFACES: MULTIPLE INHERITANCE: Introduction, Defining interfaces, Extending interfaces, Implementing interfaces, Assessing interface variables;

UNIT-IV

MULTITHREADED PROGRAMMING: Introduction, Creating Threads, Extending the Threads, Stopping and Blocking a Thread, Lifecycle of a Thread

MANAGING ERRORS AND EXCEPTIONS: Types of errors : Compile-time errors, Run-time errors, Exceptions, Exception handling, Multiple Catch Statements, Using finally statement,

UNIT-V

APPLET PROGRAMMING: local and remote applets, Applets and Applications, Building Applet code, Applet Life cycle: Initialization state, Running state, Idle or stopped state, Dead state, Display state.

PACKAGES: Introduction, Java API Packages, Using System Packages, Naming conventions, Creating Packages, Accessing a Package, using a Package.

TEXT BOOK

E.Balaguruswamy, Programming with JAVA, A primer, 3e, TATA McGraw-Hill Company

Reference Books:

1. Programming in Java by Sachin Malhotra, OXFORD University Press
2. John R. Hubbard, Programming with Java, Second Edition, Schaum"s outline Series, TATA McGraw-Hill Company.
3. Deitel &Deitel. Java TM: How to Program, PHI (2007)
4. Java Programming: From Problem Analysis to Program Design- D.S Mallik
5. Object Oriented Programming Through Java by P. Radha Krishna, Universities Press (2008)

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

OBJECT ORIENTED PROGRAMMING USING JAVA LAB

1. Java program to demonstrate the use of Harmonic Series.
2. Java program to display a number of even, odd and sum of even, odd program.
3. Java program to find a sub string in the given string.
4. Java program to arrange the given strings in Alphabetic Order.
5. Java program to implements Addition and multiplication of two Matrices.
6. Java program to demonstrate the use of Constructor.
7. Java program to display a use of method overloading.
8. Java program to demonstrate the use of overriding Method.
9. Java program for single Inheritance.
10. Java program for implementing Interface.
11. Java program on Multiple Inheritance.
12. Java program for to implement Thread
13. Java program to demonstrate Exception handling.
14. Java program to demonstrate Applet program.
15. Java Program to search an element using arrays

TALLY LAB

1) Kiran started a business with the following transactions

- i) Kiran started business with Rs. 1,00,000/-
- ii) Kiran purchased goods with Rs. 20,000/-
- iii) Kiran sold products for Rs. 40,000/-
- iv) And he spent Rs. 5,000/- towards for salaries.

I. Practical exercise for the above transactions are

- a) Creating Company Transactions
- b) Creation of Ledgers.
- c) Record of Vouchers.
- d) Preparation of Balance Sheet.
- e) Preparation of Profit and Loss Account
- f) Trial Balance
- g) Day Book

2) **Create the above records for any organization and get certified by them with comments**

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE

Foundation Course -7 SEMESTER-IV

COMMUNICATION SKILLS AND SOFT SKILLS-3 (CSS -3)

Common for BA/BCom/BSc/BBA/BCA Programmes

COURSE CONTENT (30 hours)

Unit – I

SOFT SKILLS

- I. Positive Attitude
- II. Body language
- III. SWOT / SWOC Analysis
- IV. Emotional Intelligence
- V. Netiquette

Unit - II

PARAGRAPH WRITING

1. Paragraph Structure
2. Development of Ideas

Unit – III

PARAPHRASING AND SUMMARISING

1. Elements of Effective Paraphrasing
2. Techniques of Paraphrasing
3. What makes a Good Summary
4. Stages of Summarising

Unit – IV

LETTER WRITING

1. Letter Writing (Formal and Informal)
2. E-Correspondence

Unit – V

RESUME AND CV

1. Resume and Curriculum Vitae
2. Cover Letters

* * *

Reference Books:

Commissionerate of Collegiate Education, Government of Andhra Pradesh (2015)

JKC -Communication Skills and Soft Skills: Student's Book

Sethi, J., and P.V. Dhamija (1999) *A Course in Phonetics and Spoken English*

New Delhi: Prentice-Hall of India

Daniel Jones (2011) *English Pronouncing Dictionary* (18th Edition) Ed. Peter Roach, Jane Setter, and John Esling

Quirk, Randolph and Sydney Greenbaum (1973) *A University Grammar of English*. Harlow: Longman. Chapters 2, 3, and 7

White, Goodith (2010) *Listening (Resource Book for Teachers)*. Oxford University Press Nageshwar

Rao and Rajendra P. Das (2009) *Communication Skills*. Mumbai: Himalaya Publishing House

Burton, S.H. (1983) *Mastering English Language*. The Macmillan Press Limited Chapter 3:

Comprehension

Grellet, Françoise (2007) *Developing Reading Skills*. Cambridge University Press

Roberts, Rachael, Joanne Gakonga, and Andrew Preshous (2004) *IELTS Foundation: Student's Book*.

Oxford: Macmillan Education

Roberts, Rachael, Joanne Gakonga, and Andrew Preshous (2004) *IELTS Foundation: Study Skills*.

Oxford: Macmillan Education.

VIKRAMA SIMHAPURI UNIVERSITY :: KAKUTUR

COMMUNICATION AND SOFT SKILLS (CSS) - 3

(Common to SECOND YEAR - FOURTH SEMESTER B.A., B.A (O.L) B.Com., B.Sc.,BCA,BBA)
(A. P. Common Core Syllabus (CBCS) for I year Effective from 2015-16) (Revised in May 2016)

Model Question Paper (2017-18)

Time: 2 Hours

Max. Marks: 50

1. Answer any **TWO** of the following questions.

2 X 5 = 10

1. Write a few suggestions for building positive attitude.
2. Mention a few tips for improving one's good body language.
3. What is SWOT/ SWOC analysis? Why is it useful for students?
4. What is emotional intelligence? What is its importance?
5. What do you know about Netiquette? Write a few general netiquettes.

2. Answer any **TWO** of the following questions.

2 X 5 = 10

1. What is a paragraph? Write about the types of paragraphs.
2. What are the general rules for writing a good paragraph?
3. Write a paragraph on a Rainy Day.
4. Write a paragraph on Death Penalty for Criminals
5. Write about the parts of a good paragraph.

3. Answer any **TWO** of the following questions.

2 X 5 = 10

1. What is paraphrasing? What are features of a paraphrase?
2. Write a few guidelines for paraphrasing.
3. Write about good summary.
4. Write a short note on stages of summarizing.
5. Write a summary of the story given below.

There was a villager. He was illiterate. He did not know how to read and write. He often saw people wearing spectacles for reading books or papers. He thought, "If I have spectacles, I can also read like these people. I must go to town and buy a pair of spectacles for myself." So one day he went to a town. He entered a spectacles shop He asked the shopkeeper for a pair of spectacles for reading. The shopkeeper gave him various pairs of spectacles and a book. The villager tried all the spectacles one by one. But he could not read anything. He told the shopkeeper that all those spectacles were useless for him. The shopkeeper gave him a doubtful look. Then he looked at the book. It was upside down! The shopkeeper said, "Perhaps you don't know how to read." The villager said, "No, I don't. I want to buy spectacles so that I can read like others. But I can't read with any of these spectacles." The shopkeeper controlled his laughter with great difficulty when he learnt the real problem of his illiterate customer. He explained to the villager, "My dear friend, you are very ignorant. Spectacles don't help to read or write. They only help you to see better. First of all you must learn to read and write."

4. Answer any **TWO** of the following questions.

2 X 5 = 10

1. Write a letter to the MRO requesting him/her for the issue of Income Certificate.
2. Write a letter to your father asking him to send you money for paying your hostel fee.
3. Write a letter to a bookshop ordering the books you want.
4. One of your friends has recently left for the USA for doing MS. You miss him very much.
5. Write an e-mail to your friend Ravi.
- 6.

5. Answer any **TWO** of the following questions.

2 X 5 = 10

1. Prepare Resume of your own for the post of accountant in a reputed company.
2. Prepare a resume for the post of computer operator in a Public School.
3. Write a covering letter to accompany your Resume for the post of accountant.
4. Write a covering letter to accompany your Resume for the post of computer operator.

* * *

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE.

Foundation Course - 8

ANALYTICAL SKILLS

Syllabus, For all Degree Programmes.

w.e.f. 2015-16 (Revised in April, 2016)

Semester – IV

(Total 30 Hrs)

UNIT – 1

Data Analysis:-The data given in a Table, Graph, Bar Diagram, Pie Chart.

UNIT – 2

Sequence and Series:- Analogies of numbers and alphabets completion of blank spaces following the pattern in A:b::C: d relationship odd thing out; Missing number in a sequence or a series.

UNIT - 3

Arithmetic ability:-Algebraic operations BODMAS, Fractions, Divisibility rules, LCM&GCD (HCF).

UNIT - 4

Quantitative aptitude:- Calendar Problems, Clock Problems, Ratios and proportion.

UNIT – 5

Business computations:- Averages, Percentages, Profit & Loss.

Reference Books:

1. Quantitative Aptitude for Competitive Examination by R S Agrawal, S.Chand publications.
2. Quantitative Aptitude and Reasoning by R V Praveen, PHI publishers.
3. Quantitative Aptitude : Numerical Ability (Fully Solved) Objective Questions, Kiran Prakashan, Pratogitaprakasan, Kic X, Kiran Prakasan publishers
4. Quantitative Aptitude for Competitive Examination by Abhijit Guha, Tata Mc Graw hill publications.
5. Old question Paper of the exams conducted by (Wipro, TCS, Infosys, Etc) at their recruitment process, source-Internet.

Note : The teachers/students are expected to teach /learn the contents by not converting them to the problems of algebra at the maximum possible extent, but to use analytical thinking to solve the exercises related to those topics. This is the main aim of the course.

1. 3
2. 1
3. 11. 12
4. 11
5-711

VIKRAMA SIMHAPURI UNIVERSITY :: NELLORE.
FOUNDATION COURSE-8
SEMESTER-IV
ANALYTICAL SKILLS
Model Question Paper

Time : 2 Hours

Max. Marks : 50

Answer any 25 Questions. All question carry equal marks.

25 X 2 = 50M

UNIT-I

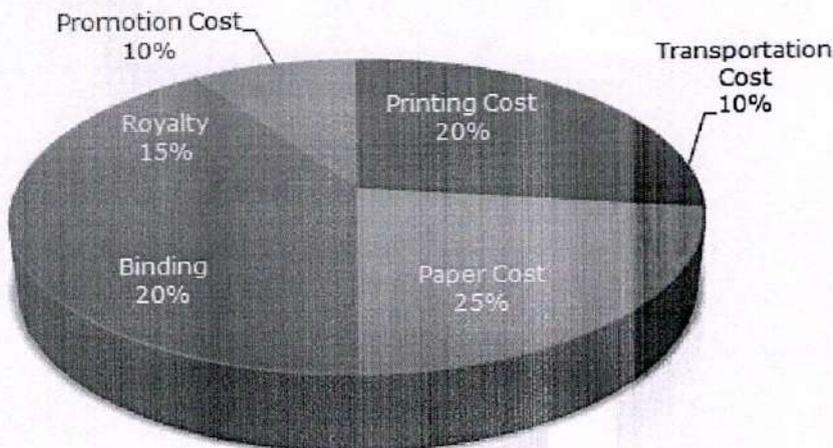
Study the following table and answer the question based on it.

Expenditures of company (in Lakh Rupees) per annum over the given year.

Year	Item of Expenditure				
	Salary	Fuel	Bonus	Interest	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

- What is the average amount of interest per year company had to pay?
 A) 32.43 Lakhs B) 33.72 Lakhs
 C) 34.18 Lakhs D) 36.66 Laksh
- The total amount of bonus during these period is approximately what percent of the total salary during the period
 A) 0.1% B) 0.5% C) 1% D) 1.25%
- Total expenditure on all these items in 1998 was approximately what percent of total expenditure in 2002
 A) 62% B) 66% C) 69% D) 71%
- Total expenditure of the company over these items during 2000 is?
 A) 544.44 Lakhs B) 501.11 Lakshs C) 446.46 Lakhs D) 478.87 Lakhs
- The ratio between total expenditure on taxes of all years and total expenditure on fuel respectively?
 A) 4:7 B) 10:13 C) 15:18 D) 5:8

Study the following Pi-Chart and answer the following questions
 Various expenditures (in percentage) incurred in publishing a book



- 3 percent
- 10 percent
- 15 percent
- 20 percent
- 25 percent

37. A Particular Sum Was Divided Among A, B and C in the Ratio 2: 6: 7 Respectively. If The Amount Received By A Was 4000 Then Total Amount
 A.30000 B.20000 C.25000 D.29000
38. Divided 672 In The Ratio 5: 3 Then The First Part (5) Value?
 A. 420 B.252 C. 410 D. 240
39. If $0.75 : X :: 5 : 8$ Then : X Is -----
 A. $\frac{6}{5}$ B. $\frac{5}{6}$ C. $\frac{7}{5}$ D. $\frac{5}{7}$
40. $4 : 9 : 12 : X ?$ -----
 A. 27 B. 27 C. 29 D. 30

UNIT-V

41. Find the Average Of All Prime Numbers Between 30 And 50?
 A. 35 B.39.8 C.40.2 D. 41.4
42. Find the Average Of First Five Natural Numbers
 A. 15 B.20 C. 16 D.18
43. Average Of 76, 65, 82, 67, 85 Is
 A. 65 B.69 C.75 D. 76
44. X And Y Are Two Values Then Is The Percentage Of X In Y
 A. $\frac{x}{y} \times 100$ B. $\frac{y}{x} \times 100$ C. $x \times 100$ D. $y \times 100$
45. What Is The Value (80% Of 400)+ (30% Of 200)
 A. 380 B.390 C.4850 D.4880
46. 4598 Is 95% Of -----?
 A. 4800 B.4840 C.4850 D.4880
47. Cost Price Is X, Selling Price Is Y($Y > X$) Then What Is the Profit Percentage
 A. $\frac{y-x}{x} \times 100$ B. $\frac{x-y}{y} \times 100$ C. $\frac{x}{y} \times 100$ D. $\frac{y}{x} \times 100$
48. Find The Cost Price When Selling Price Is 40 And Gain Percentage 33.33
 A.30 B.35 C.40 D.45
49. If the Cost Price of 12 Pens Equal To The Selling Price Of 8 Pens The Gain Percentage Is?
 A.50% B.70% C.60% D.80%
50. Some Articles Were Bought For 5000 And Sell for 4500 Then Loss Percentage
 A.10% B.20% C.30% D.40%

1. 30000
 2. ~~420~~
 3. 11. 4000
 4. 3000
 5-7100

BCA II Year IV Semester

COMPUTER NETWORKS

Course Objectives

1. To provide an introduction to the fundamental concepts on data communication and the design of computer networks.
2. To get familiarized with the basic protocols of computer networks.

Course Outcomes

After this course, the student will be able to

1. Identify the different components in a Communication System and their respective roles.
2. Describe the technical issues related to the local Area Networks
3. Identify the common technologies available in establishing LAN infrastructure.

UNIT I :

Definition, Advantages of Networks, Network topologies, Types of Networks, Network models – Internet model, OSI model.

Physical Layer: Digital Transmission – Coding, Sampling, Analog Transmission - Modulation of digital and analog signals, Guided media

UNIT II :

Data Link Layer: Error detection and correction, Data link Protocols - Stop and wait, Go-back-n, Selective repeat.

Wired LANS – Traditional Ethernet, Fast Ethernet, Gigabit Ethernet, Wireless LAN"s

UNIT III:

Network Layer: Inter-networks, Addressing, Network layer Protocols – ARP, IPv4, IPv6,

UNIT IV:

Transport Layer: Process- to- Process delivery, Congestion and Control, Quality of service (QOS) and techniques to improve QOS.

Security: Introduction, Symmetric- key cryptography, Public key cryptography.

UNIT V:

Domain Name System-domain name space, distribution of name space, DNS in Internet Electronic mail, SMTP, File Transfer, FTP, HTTP, World Wide Web.

Text book:

Data communication and Computer Networks by Forozoun 3rd edition.

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

REFERENCE BOOKS:

1. Andrew S. Tanenbaum, "Computer Networks", Fourth Edition, 2003
2. Computer Networks by Bhushan Trivedi, Oxford University Press
3. James F. Kuross, Keith W. Ross, "Computer Networking, A Top-Down Approach Featuring the Internet", Third Edition, Addison Wesley, 2004.
4. Nader F. Mir, "Computer and Communication Networks", Pearson Education, 2007
5. Comer, "Computer Networks and Internets with Internet Applications", Fourth Edition, Pearson Education, 2003.
6. William Stallings, "Data and Computer Communication", Sixth Edition, Pearson VI, 2000

Student Activity:

1. Learn the functioning of various network devices used in your college network
2. Compare 2G,3G,4G and 5G networks
3. Prepare LAN deployment diagram of your organization

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

DATA STRUCTURES

Course Objectives

To introduce the fundamental concept of data structures and to emphasize the importance of data structures in developing and implementing efficient algorithms. In addition, another objective of the course is to develop effective software engineering practice, emphasizing such principles as decomposition, procedural abstraction, and software reuse.

Course Outcomes

After completing this course satisfactorily, a student will be able to:

1. Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory and used by algorithms.
2. Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs.
3. Write programs that use arrays, records, linked structures, stacks, queues, trees, and graphs
4. Demonstrate different methods for traversing trees
5. Compare alternative implementations of data structures with respect to performance
6. Compare and contrast the benefits of dynamic and static data structures implementations
7. Describe the concept of recursion, give examples of its use, describe how it can be implemented using a stack .
8. Discuss the computational efficiency of the principal algorithms for sorting, searching

UNIT I

Concept of Abstract Data Types (ADTs)- Data Types, Data Structures, Storage Structures, and File Structures, Primitive and Non-primitive Data Structures, Linear and Non-linear Structures.

Linear Lists - ADT, Array and Linked representations (Single and Double Linked lists), pointers

UNIT II

Stacks: Definition, ADT, Array and Linked representations, Implementations and Applications. **Queues:** Definition, ADT, Array and Linked representations, Circular Queues, Dequeues, Priority Queues and Applications.

UNIT III

Trees: Binary Tree, Definition, Properties, ADT, Array and Linked representations, Implementations and Applications

Binary Search Trees (BST) - Definition, ADT, Operations and Implementations

UNIT IV

Graphs – Graph and its Representation, Graph Traversals, Connected Components, Basic Searching Techniques, Minimal Spanning Trees.

UNIT- V

Sorting and Searching: Selection, Insertion, Bubble, Merge, Quick sort, Sequential and Binary Searching.

TEXT BOOK

1. SamanthaD, Classic Data Structures, Prentice-Hall of India, 2001

REFERENCE BOOKS

1. Sahani S, Data Structures, Algorithms and Applications in C++, McGraw-Hill, 2002.
2. D S Malik, Data Structures Using C++, Thomson, India Edition 2006
3. Heilman G I,. Data Structures, Algorithms and Object-Oriented Programming, Tata McGraw-Hill. 2002. (Chapters 1 and 14).
4. Tremblay .1 P, and Sorenson P G, Introduction to Data Structures and Applications, Tata McGraw-Hill,
5. Drozdek A, Data Structures and Algorithms in C++), 2nd edition, Vikas Publishing House, 2002.
6. Kanetkar Y P, Data Structures through C ++, BPB Publications. 2003.
7. Data Structures by Allen Weiss

Student Activity:

1. Create Visual Stack using graphics
2. Create Visual Queue using graphics

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

DATA STRUCTURES LAB

1. Write Programs to implement the Stack operations using an array.
2. Write Programs to implement the Queue operations using an array.
3. Write Programs to implement the Stack operations using Pointers.
4. Write Programs to implement the Queue operations using Pointers.
5. Write a program for arithmetic expression evaluation.
6. Write a program for Binary search Tree Traversals
7. Write a program to implement dequeue using a doubly linked list.
8. Write a program to search an item in a given list using Linear Search
9. Write a program to search an item in a given list using Binary Search
10. Write a program for Bubble Sort
11. Write a program for Quick Sort
12. Write a program for Merge Sort
13. Write a program for polynomial addition using SLL
14. Write a program for implementing binary search tree
15. Write a program for implementing graph using BFS

BCA II Year IV Semester
WEB PROGRAMMING

Course Objective

To provide knowledge on web architecture, web services, client side and server side scripting technologies to focus on the development of web-based information systems and web services.

To provide skills to design interactive and dynamic web sites.

Course Outcome

1. To understand the web architecture and web services.
2. To practice latest web technologies and tools by conducting experiments.
3. To design interactive web pages using HTML and Style sheets.
4. To study the framework and building blocks of Integrated Development Environment.
5. To provide solutions by identifying and formulating IT related problems.

UNIT -1

Introduction to Internet : Definition of Internet – History of Internet – Advantages & disadvantages of Internet – Tools of internet - How internet works. Introduction to WWW: Definition of WWW –WWW tools - Web Terminology –web browser – web server

UNIT-2

E-Mail : Definition of e-mail – advantages & disadvantages of e-mail – how to work with e-mail accounts – e-mail inner working : Store and forward method & Central mail spool method– message components – message composition – features of e-mail. Protocols: TCP/IP - HTTP

UNIT -3

Introduction to HTML: Basic HTML – HTML document structure – HTML tags – Basefont tag – title tag – body tag – Text formatting tags – Character tags - Character entities
HTML Lists : Ordered List , Unordered List & Definition List – Using colors – Using Images

UNIT – 4

Horizontal Rule Tag - HTML Tables – Nested Tables - Hyperlinks: Textual, Graphical Links to sections – Multimedia Objects – Frames – Nested Frames – Forms – Form Controls : textbox, password, checkbox, radio button, select, text area - Processing of forms

UNIT – 5

Advanced HTML : Cascading Style Sheets: Introduction – Using Styles: As an attribute, tag & external file – Defining Your own styles – Properties and values : properties related to Fonts , Backgrounds & colors, text , boxes & borders - Formatting blocks of information : Classes - Divisions – Spans - Layers with suitable examples.

PRESCRIBED BOOKS:

1. Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley.
2. Deitel & Deitel , Goldberg “Internet and world wide web – How to program”, pearson educations Asia

Reference Books:

1. Paul S.Wang Sanda S. Katila, An Introduction to Web Design Plus Programming,Thomson.
2. Robert W.Sebesta, Programming the World Wide Web, Third Edition, Pearson Education.
3. Joel Sklar, Principles of Web Design, Thomson.
4. Raj Kamal, Internet and Web Technologies, Tata McGraw Hill.
5. Gopalan & Akilandeswari, Web Technology: A Developer"s Perspective, PHI.

Student Activity:

1. Design a website for your college
2. Design your personal web site

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

BCA II Year IV Semester

WEB PROGRAMMING LAB

1. Create a simple HTML page which demonstrates all types of lists.
2. Create a letter head of your college using following styles
 - i. image as background
 - ii. use header tags to format college name and address
3. Create a web page, which contains hyper links like fruits, flowers, animals. When you click on hyper links, it must take you to related web page; these web pages must contain with related images.
4. Create a hyperlink to move around within a single page rather than to load another page.
5. Create a leave letter using different text formatting tags.
6. Create a table format given bellow using row span and colspan.

RNO	NAME	MARKS				
		M1	M2	M3	M4	M5

Insert 5 records.

7. Create a table with different formats as given bellow.
 - i. Give different background and font colors to table header, footer and body.
 - ii. Use table caption tag.
8. Divide a web page vertically and horizontally with scroll bars, name them as shown bellow decorate it with some items.

F1	F2
	F3

9. Create a student Bio-Data, using forms.
10. Create a web page using following style sheets
 - i. Inline style sheets.
 - ii. Embedded style sheets.
 - iii. External style sheets

**BCA III Year V Semester
Software Engineering**

UNIT – I

Introduction to Software Engineering: - The Evolving Role of Software – Software and its characteristics – Software Myths – Software Engineering – Components of Software Engineering – Software Engineering – A Layered Technology.

Software Risk Management: - Reactive Vs Proactive Risk Strategies – types of Software Risks – Risk Management process

UNIT – II

Software Process Models: - Prescriptive Models – The waterfall Model – Incremental Process Models: The Incremental Model, The RAD Model

Evolutionary Process Model: Prototyping Model, The spiral Model

UNIT – III

Requirements Engineering: - Requirements Engineering Tasks, Initiating the Requirement Engineering Process.

Building the Analysis Model: Requirements Analysis, Analysis Modeling Approaches, Data Modeling Concepts, Flow – oriented Modeling: Creating a Data Flow Model.

UNIT – IV

Design Engineering: Design Process & Design Quality – Design concepts – Architectural styles & Patterns.

Quality Management: Quality Concepts – Software Quality Assurance

UNIT – V

Software Project Management (SPM): Introduction – SPM basics – Project Management – Project Integration Management – Project Life Cycle.

Testing for Software Quality: Functional Testing – System Testing – User satisfaction Testing – Test Cases – Test plans.

Prescribed Book: -

Software Engineering – Roger S.Pressman, 6th edition, TMG Publications.

REFERENCE BOOKS:

1. Software Engineering Principles and Practice by Deepak Jain, Oxford University Press
2. Sommerville, "Software Engineering", Eighth Edition, Pearson Education, 2007
3. Pfleeger, "Software Engineering-Theory & Practice", 3rd Edition, Pearson Education, 2009
4. Carlo Ghazi, Mehdi Jazayari, Dino Mandrioli, "Fundamentals of Software Engineering", Pearson Education, 2003

Student Activity:

1. Develop requirement analysis report to develop software for any financial organization
2. Develop risk analysis report for any organization using software for its day to day transactions

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year V Semester
OOAD**

Course Objective

- To develop background knowledge as well as core expertise in object oriented system. To provide the importance of the software design process.
- To assess the unified process and Unified Modeling Language

Course Outcome

- To describe the three pillars of object-orientation methodologies and explain the benefits of each .
- To create use case documents that capture requirements for a software system. To create class diagrams that model both the domain model and design model of a software system.
- To design the interface between the classes and objects.
- To create interaction diagrams that model the dynamic aspects of a software system.
- To understand the facets of the Unified Process approach to designing and building a software system.
- To describe how design patterns facilitate development and list several of the most popular patterns.
- To design the Axioms and corollaries.
- To build a model for the user interface (UI) of a software application
- To measure the Level of User satisfaction and software quality assurance.

UNIT I

Introduction to OOAD – What is OOAD? – What is UML? What are the United process(UP) phases - Inception - Use case Modeling - Relating Use cases – include, extend and generalization.

UNIT II

Elaboration - Domain Models - Finding conceptual classes and description classes – Associations – Attributes – Domain model refinement – Aggregation and Composition

UNIT III

System sequence diagrams - Relationship between sequence diagrams and use cases
Logical architecture and UML package diagram – Logical architecture refinement - UML class diagrams

UNIT IV

GRASP: Designing objects with responsibilities – Creator – Information expert – Low Coupling – Controller – High Cohesion – Designing for visibility

UNIT V

UML state diagrams and modeling - Operation contracts- Mapping design to code
- UML deployment and component diagrams

REFERENCE BOOKS:

1. Object Oriented Analysis and Design By Grady Booch.
2. Craig Larman, "Applying UML and Patterns: An Introduction to object-oriented Analysis and Design and iterative development", Third Edition, Pearson Education, 2005
3. Mike O'Docherty, "Object-Oriented Analysis & Design: Understanding System Development with UML 2.0", John Wiley & Sons, 2005.
4. James W- Cooper, Addison-Wesley, "Java Design Patterns – A Tutorial", 2000.
5. Micheal Blaha, James Rumbaugh, "Object-Oriented Modeling and Design with UML", Second Edition, Prentice Hall of India Private Limited, 2007
6. Erich Gamma, Richard Helm, Ralph Johnson, John Vlissides, "Design patterns: Elements of Reusable object-oriented software", Addison-Wesley, 1995.

Student Activity:

1. Develop a class diagram for the flight services available in your near by air port
2. Develop a sequence diagram of activities of any automated device

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year V Semester
ELECTIVE 1: Data Mining**

Course Objectives

The Objective of this course is to understand data mining principles and techniques: Introduce DM as a cutting edge business intelligence method and acquaint the students with the DM techniques for building competitive advantage through proactive analysis, predictive modeling, and identifying new trends and behaviors. Develop and apply critical thinking, problem-solving, and decision-making skills

Course Outcomes

1. Examine the types of the data to be mined and present a general classification of tasks and primitives to integrate a data mining system.
2. Apply preprocessing statistical methods for any given raw data
3. Discover interesting patterns from large amounts of data to analyze and extract patterns to solve problems , make predictions of outcomes
4. Comprehend the roles that data mining plays in various fields and manipulate different data mining techniques
5. Select and apply proper data mining algorithms to build analytical applications.
6. Evaluate and implement a wide range of emerging and newly-adopted methodologies and technologies to facilitate the knowledge discovery.

Unit I

Introduction to Data Mining, Fundamentals of data mining, data mining functionalities, data and attribute types

Data Preprocessing:

Data cleaning, data integration, data reduction, data transformation

Unit II

Data Warehousing: Basic concepts, data ware house modeling data cube and OLAP, data warehouse design

Unit III

Mining Frequent Patterns and Associations: Basic methods, frequent Item set mining methods using Apriori algorithm

Unit IV

Classification: Basic concepts, decision tree induction, model evaluation. Rule-Based Classification.

Unit V

Cluster Analysis: What is Cluster analysis, types, Partitioning methods, Hierarchical methods, Density Based methods

References:

1. Data Mining by Vikram Pudi, P.Radha Krishna, Oxford University Press
2. Data Warehousing by Reema Thareja , Oxford University Press
3. J. Han , M. Kamber and J. Pei , Data Mining: Concepts and Techniques , 3rd.edMorgan Kaufmann, 2011
4. Introduction to data mining –G.K.Gupta, PHI
5. Data mining, Data warehouse & Olap-Berson, Tata McGraw Hill

Student Activity:

- 1.Predict the course taken by a student based on his activities and way of learning
2. Learn visual patterns of any real time data

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year V Semester
ELECTIVE – 1: UNIX**

Course Objectives

1. To understand Unix Operating System
2. To explore the Basic Shell Commands

Course Outcomes

After this course, the student will be able to

1. Implement and innovate commands using the basic tool kit.
2. Develop shell programs in vi/vim editor

UNIT I

UNIX OPERATING SYSTEM

Overview of UNIX Operating System, basic features of Unix operating System, File System Implementation of Operating System, Functions of UNIX.

UNIT II

Starting Of Unix and Text Manipulation and user-to-user communication User Names and Groups, Logging In, Format of Unix Commands, Changing your password

UNIT III

Files and Directories: File permission, Basic Operation on Files, Changing Permission Modes, Standard files, Processes Inspecting Files, Operating on Files, Printing Files, Rearranging Files, Sorting Files

UNIT IV

VI EDITORS

General characteristics, Adding text and Navigation, changing text, searching for text, copying and Moving text

UNIT V

Shell Programming:

Programming in the Bourne and C-Shell, Wild Cards, Simple Shell program, variables, Programming Construct, Interactive Shell scripts, Advanced Features, Unix Compiler

References Books:

1. Unix and shell Programming by B.M Harwani, OXFORD University Press
2. Unix Concept and application- Sumitabhadas
3. Unix Shell Programming-Yashwant Kanetkar
4. Unix Programming Environment- RobPike
5. Unix in a Nutshell- Donill Gily

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

BCA III Year V Semester
ELECTIVE – 1: COMPUTER AIDED MODELING

UNIT-I:

Introduction to Operations Research, Origin and Development of OR, Definition of OR, Applications of OR, Models and their classifications, Advantages and Limitations of OR

UNIT-II:

Linear programming problem (LPP), Formulation of LPP, Solution of LPP using graphical method and simplex method (\leq inequality only).

UNIT-III:

Transportation problem: Mathematical formulation, IBFS of transportation problem using north-west corner rule, least-cost rule and Vogel's approximation method, Simple problems.

UNIT-IV:

Assignment problem, definition, mathematical formulation of assignment problem, solution of transportation problem using Hungarian algorithm, unbalanced assignment problem, simple problems, difference between assignment and transportation problems

UNIT-V:

Introduction – Definition – Terminology and Notations Principal Assumptions,

Problems with N Jobs through Two Machines

Problems with N Jobs through Three Machines

Prescribed Text Book:

Operations Research (2nd Edition) by S.Kalavathi, Vikas Publications Towers Pvt. Ltd.

Scope:

UNIT-I: 1.1, 1.2, 1.3, 1.5, 1.6, 1.7

UNIT-II: 2.1, 2.2, 2.2.1, 2.2.2, 3.1, 3.1.1, 4.1, 4.2, 4.3

UNIT-III: 8.1, 8.2, 8.3, 8.4.1, 8.4.2, 8.4.3

UNIT-IV: 9.1, 9.2, 9.2.1, 9.2.2, 9.3, 9.4

UNIT-V: 12.1, 12.2, 12.2.1, 12.2.2, 12.3, 12.4

Reference books:

1. Operations Research by Kanthiswaroop, P.K.Gupta, Manmohan by Sultan Chand & Sons
2. Operations Research by Paneerselvam by Prentice Hall of India

INSTRUCTIONS TO PAPER SETTER:-

1. The Paper setter is instructed to set theory questions from the first unit and problems from the remaining units. The importance of applications to emphasis.
2. Number of constraints in LPP should be less than or equal to 3.
3. The order of transportation and assignment matrix should be less than or equal to 5.
4. **Two questions must be given from each unit**

**BCA III Year V Semester
Elective -2 : Android Basics**

Course Objectives:

1. Describe the platforms upon which the Android operating system will run.
2. Create a simple application that runs under the Android operating system.
3. Access and work with the Android file system.
4. Create an application that uses multimedia under the Android operating system.
5. Access and work with databases under the Android operating system.

Course Outcomes

After completion of this course students should make Android apps for Android devices. Students will be able to write simple GUI applications, use built-in widgets and components, work with the database to store data locally, and much more.

UNIT-I

What is Android, Android Tools, Your First Android Application, Anatomy of Android Application, Workspaces, Editors in Eclipse

UNIT-II

Creating Android Emulator, Creating Snapshot, SD Card Emulation, Sending SMS Messages to the Emulator , Transferring Files into and out of the Emulator

UNIT-III

Activity, Linking Activity using Intent, Fragments, Calling Build-In Application using Intent, Notifications

UNIT-IV

Components of a Screen, Display Orientation, Action Bar, Listening for User Inter

UNIT-V

Basic Views, Picker Views, List View, Specialized Fragment, Gallery and Image View, Image Switcher, Grid View, Options Menu, Context Menu

Reference Books:

1. Android Programming: The Big Nerd Ranch Guide (Big Nerd Ranch Guides) By: Bill Phillips & Brian Hardy
2. Android Design Patterns: Interaction design solutions for developers by Greg Nudelman
3. Android User Interface Design: Turning Ideas and Sketches into Beautifully Designed Apps By: Ian G. Clifton
4. Android Recipes: A Problem-Solution Approach By: Dave Smith & Jeff Friesen
5. Hello, Android: Introducing Google's Mobile Development Platform (Pragmatic Programmers) By: Ed Burnette

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

Android basics lab

Exercise 1

Developing Simple Applications for Android

Exercise 2

Creating Applications with Multiple Activities and a Simple Menu using ListView

Exercise 3

Creating Activities For Menu Items and Parsing XML Files

Exercise 4

Writing Multi-Threaded Applications

Exercise 5

Using WebView and Using the Network

Exercise 6

Using Audio Functions in Android

Exercise 7

Graphics Support in Android

Exercise 8

Preferences and Content Providers

Exercise 9

Location Services and Google Maps in Android Data Storage

Exercise 10

Simulating Sensors

**BCA III Year V Semester
Elective -2 : Principles of Animation**

Course Objectives

Students can expect to learn basic principles and relevant techniques for comprehending the underlying

Course Outcome

Understanding of the key principles of animation.

Understanding of the concept of timing for animation and its application as a means of communication.

Ability to creatively manipulate frame time as a means of emphasizing and actualizing action and expressing an idea.

UNIT-I

What is Animation: Its definition, early examples of Animation. History of Animation: Stop Motion, Photo Animation, Cell and Paper Animation

UNIT-II

Types of Animation: Cell Animation, Stop Motion Animation, Computer Animation, 2-D Animation, 3-D Animation. Skills for an Animation Artist: Visual and creative development of an Artist ,

UNIT-III

importance of observation with minute details, efficiency to draw gestures, facial expressions, good listener, hard work and patience, creative and innovative

UNIT-IV

Basic Principles of Animation: Illusion of Life, straight action and pose to pose Timing, Drama and Psychological Effect, Fade in and Fade out, Squash and Stretch, Anticipation, staging, follow through and overlapping action, Solid Drawing, slow in and slow out

UNIT-V

Various Terms: Animation Drawings/Cells, Rough Drawings , Clean ups, Color reference drawings, Layout, Model Sheet, Key Drawings and in Betweens, Master Background, Concept Piece, Character drawing , Story Board.

Reference Books:

- 1.The complete animation course by Chris Patmore -Baron"s Educational Series.(New York)
2. Animation Unleashed by Ellen Bessen, Michael Weise Productions,2008(U.S.A)
- 3.The Animator"s Survival Kit by Richard Williams, Arrar Straus & Giroux Pub.(U.S.A)

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

Computer Animation lab

ADVANCED 2D ANIMATION

1: Action scripting

Using actions to control a timeline - Using frame labels - Creating button symbols - Creating animated buttons using movie clips – Movie Clip Controls – Browser / network.

2: Advanced Animation Methods

Creating movies playing within movies (movie clips and .swf) - Controlling multiple timelines (movies) through action scripting - Critique storyboards.

3: Streamlining Files for Use on the Web, Publishing Files to the Internet & Pre loaders

Pre loaders - Controlling sound with script - Exploring types of output - Work on final project in class - Importing video - Publishing demo (video) reels on web - Publishing and exporting files - Trouble shooting sites.

Suggested books for Reading:

Flash books

The Illusion of Life: Disney Animation by Frank Thomas, Ollie Johnston (Contributor), Collie Johnston.

Adobe Flash CS3

The Animator's Survival Kit: A Manual of Methods, Principles, and Formulas for Classical, Computer, Games, Stop Motion, and Internet Animators by Richard Williams

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

BCA III Year V Semester
Elective -2 : Computer Organization

UNIT-I

BASIC STRUCTURE OF COMPUTERS: Computer Types, functional units, basic operations concepts, bus structures, software, CISC and RISC instruction sets, multi processors and multi computers.

UNIT-II

LOGIC CIRCUITS: Basic logic functions, Logic gates- AND, OR, NOT, NAND, NOR Gates.
INPUT-OUTPUT ORGANIZATION: Accessing I/O devices, Interrupts, DMA, and standard I/O interface

UNIT-III

ARITHMETIC: Addition and subtraction of positive numbers, Design of fast adders, Multiplication of Positive numbers, carry – save addition of summands.
Integer Division – Restoring division, Non – restoring division

UNIT-IV

COMPUTER PERIPHERALS: Input devices- keyboard, mouse, trackball Joystick and touch pad, scanners. Output Devices- Video displays, flat panel Display, printers.

UNIT-V

THE MEMORY SYSTEM: Read-only-memories- ROM, PROM, EPROM, EEPROM, cache Memories-mapping functions, Virtual memory.

Text Book:

Computer Organization – Carl Hamacher, Zvonko G- Vranesic, Safwat G, Zaky Fifth Edition, Mc-Grawhill INC...

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

BCA III Year VI Semester

E-COMMERCE

Course Objectives

1. To develop an understanding of scope of E-Commerce.
2. To develop an understanding of electronic market and market place.
3. To develop an understanding of business models.
4. To develop an understanding of legal issues, threats of E-Commerce.

Course Outcomes

1. Students would be able to analyze the concept of electronic market and market place.
2. Students would be able to understand the business models.
3. Students would be able to understand the business standards.
4. Students would be able to understand the legal and security issues.

UNIT – I:

Electronic Commerce:

Electronic Commerce Framework – Electronic Commerce and Media Convergence – Anatomy of E-Commerce Applications – Electronic Commerce Organization Applications.

Internet as a Network Infrastructure:

Internet Terminology – History of the Internet – Internet Governance: The Internet Society – Overview of Internet Applications.

UNIT – II:

Electronic Commerce and World Wide Web:

World Wide Web as the Architecture – Web Background: Hypertext Publishing – Technology Behind the Web – Security and the Web.

Electronic Payment Systems:

Types of Electronic Payment Systems – Smart Cards and Electronic Payment Systems – Credit Card-Based Electronic Payment Systems – Risk and Electronic Payment Systems – Designing Electronic Payment Systems.

UNIT – III:

Inter-Organizational Commerce and EDI:

EDI: Legal, Security and Privacy Issues – EDI and Electronic Commerce.

Advertising and Marketing on the Internet:

The New Age of Information-Based Marketing – Advertising on the Internet – Market Research.

Mobile and Wireless Computing Fundamentals:

Mobile Computing Framework

UNIT – IV:

Introduction to Scripting: JavaScript Introduction - Simple Program - Obtaining User Inputs with Prompt Dialogs - Memory Concepts – Arithmetic - Decision Making: Equality and Relational Operators.

JavaScript – Control Statements I: Introduction - if Selection Statement – if...else Selection Statement - while Repetition Statement - Assignment Operators - Increment and Decrement Operators.

UNIT – V:

JavaScript – Control Statements II: Introduction - Essentials of Counter-Controlled Repetition - for Repetition Statement - switch Multiple - Selection Statement - do...while Repetition Statement - break and continue Statements – Labeled break and continue Statements - Logical Operators.

JavaScript – Functions: Introduction - Program Modules in JavaScript - Programmer-Defined Functions - Function Definitions - Scope Rules - JavaScript Global Functions

Text Books:

- 1) H. M. Deitel, P. J. Deitel, A. B. Goldberg, Internet & World Wide Web – How to Program, Pearson Education (Third Edition)
- 2) Kalakotia, Whinston, Frontiers of Electronic Commerce, Pearson Education

Reference Books:

- 1) Bhaskar Bharat, Electronic Commerce - Technologies & Applications, TMH
- 2) Loshin Pete, Murphy P.A, Electronic Commerce, Jaico Publishing Housing.
- 3) Murthy, E–Commerce, Himalaya Publishing.
- 4) M.M. Oka, E-Commerce, EPH

Student Activity:

1. Study the activities of any E-Commerce website and give suggestions to improve their business
2. Prepare your own E-commerce business site

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year VI Semester
Elective- I**

Hadoop & R Language

Course Objectives

Apply Data Mining and understand Decision Trees and Random Forests

Master the concepts of Hadoop 2.7 framework and its deployment in a cluster environment

Learn to write complex MapReduce programs Perform Data Analytics using Pig & Hive

Acquire in-depth understanding of Hadoop Ecosystem including Flume, Apache Oozie workflow scheduler, etc.

Master advance concepts of Hadoop 2.7 : Hbase, Zookeeper, and Sqoop

Get hands-on experience in setting up different configurations of Hadoop cluster Work on real-life industry based projects using Hadoop 2.7

Course Outcomes

Hadoop and R Language will prepare you to perform analytics and build models for real world data science problems. It is the world's most powerful programming language for statistical computing and graphics making it a must know language for the aspiring Data Scientists. 'R' wins strongly on Statistical Capability, Graphical capability, Cost and rich set of packages.

UNIT I

Introduction to BIG'Data ' & ' Hadoop Introduction to MapReduce ' & ' HDFS

UNIT II

The Hadoop MapReduce API & Algorithms. How to get started writing programs with Hadoop's API. Programming methodologies and paradigms in Map Reduce Beyond basics: The flow; APIs; Creating Input Formats and Output Formats; Driver; Mapper; Reducer; Streaming

UNIT III

Introduction to The'Hadoop'Ecosystem'Components An introduction to components surrounding Hadoop, which complete the greater ecosystem of available, processing tools.

UNIT IV

R over view, basic syntax, data types, variable, operators, decision making, loops, functions

UNIT V

String, vectors, list, matrices, data frames, reshaping, packages, graphics.

References:

Hadoop: The Definitive Guide By: Tom White *Hadoop in Practice* (By: Alex Holmes)

Hadoop Operations (By: Eric Sammer) *Instant MapReduce Patterns - Hadoop Essentials How-to* (By: Srinath Perera)

An Introduction to R: A Programming Environment for Data Analysis and Graphics **Author(s)**
William N Venables, David M Smith.

The Art of R Programming: A Tour of Statistical Software Design **Author(s)** Norman Matloff

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year VI Semester
Elective- I**

VISUAL PROGRAMMING

UNIT – I

Object Oriented Programming : Introduction to OOPS – Basic Concepts – Objects and Classes – Concepts of Inheritance. Encapsulation and Polymorphism.

Fundamentals Of Visual Basic : Introduction – Features of VB – VB Editions – Controls – Properties – Events – Methods.

UNIT – II

Application Window

Project Explorer – The Properties Window – Tool Box: Text Box Control – Command Button – Check Box – The line and shape controls – Menu Bar – Tool bars – Tool box – Project explorer window – Properties window – Object browser – Form Designer – Code editor window – Form layout window

UNIT-III:

Forms and controls:

Setting form properties – Working with Properties Window – Name – Caption – Picture – The Controls box – Min button and Max button – Movable – Border style – Font – properties

Variables in VB: Declaring variables – Data types – Constants – Conversion – Arrays

Writing Code in VB: The code window – Subroutine – control Structures in VB – Performing Loops in VB.

UNIT IV

Arrays: Definition, one dimensional and two dimensional arrays, declaring array, storing values in an array

UNIT V

Menus: Menu convention – creating menus in VB

Multiple Documents Interfaces: Features of MDI Form – Property – Creating MDI forms

REFERENCE BOOKS:

1. PROGRAMING WITH VISUAL BASIC – MOHAMMED AZAM – Vikas publishing house Pvt.Ltd. – New Delhi.
2. OBJECT ORIENTED PROGRAMING – E. BALAGURUSWAMY – Tata McGraw – Hill Publishing Company Limited – New Delhi.

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year VI Semester
Elective- I**

Cyber laws

Course Objectives: The objectives of this course is to:

1. Enable learners to understand, explore, and acquire a critical understanding of Cyber Law
2. Develop competencies for dealing with frauds and deceptions (confidence tricks, scams) and other cyber crimes for example, child pornography etc. that are taking place via the Internet.
3. Make learners conversant with the social and intellectual property issues emerging from „Cyberspace“.
4. Explore the legal and policy developments in various countries to regulate Cyberspace;
5. Develop the understanding of relationship between commerce and cyberspace; and give learners in depth knowledge of Information Technology Act and legal frame work of Right to Privacy, Data Security and Data Protection.

Course outcomes

At the end of the course, students should be able to:

1. Critically evaluate ongoing developments in law relating to information technologies
2. Display an understanding of how these developments relate to one another.
3. Examine areas of doctrinal and political debate surrounding rules and theories;
4. Evaluate those rules and theories in terms of internal coherence and practical outcomes;
5. Draw on the analysis and evaluation contained in primary and secondary sources

Unit I

Introduction: Computers and its Impact in Society, Overview of Computer and Web Technology, Need for Cyber Law, *Cyber Jurisprudence* at International and Indian Level.

Unit II

Cyber Law- International Perspectives: UN & International Telecommunication Union (ITU) Initiatives, Council of Europe -Budapest Convention on Cybercrime, Asia-Pacific Economic Cooperation(APEC)

Unit III

Constitutional & Human Rights Issues in Cyberspace: Freedom of Speech and Expression in Cyberspace, Right to Access Cyberspace – Access to Internet, Right to Privacy, Right to Data Protection.

Unit IV

Cyber Crimes & Legal Framework: Cyber Crimes against Individuals, Institution and State, Hacking, Digital Forgery, Cyber Stalking/Harassment, Cyber Pornography, Identity Theft & Fraud, Cyber terrorism

Unit V

Cyber Torts: Cyber Defamation, Different Types of Civil Wrong under the IT Act, 2000, Intellectual Property Issues in Cyber Space, Trade marks

Reference Books

1. Chris Reed & John Angel, *Computer Law*, OUP, New York, (2007).
2. Justice Yatindra Singh, *Cyber Laws*, Universal Law Publishing Co, New Delhi, (2012).
3. Verma K, Mittal Raman, *Legal Dimensions of Cyber Space*, Indian Law Institute, New Delhi, (2004)
4. Jonathan Rosenoer, *Cyber Law*, Springer, New York, (1997).
5. Sudhir Naib, *The Information Technology Act, 2005: A Handbook*, OUP, New York, (2011)
6. S.R. Bhansali, *Information Technology Act, 2000*, University Book House Pvt. Ltd., Jaipur (2003).
7. Vasu Deva, *Cyber Crimes and Law Enforcement*, Commonwealth Publishers, New Delhi, (2003).

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year VI Semester
Elective- II**

Advanced Android

Course Objective

The objective is to help learners to create applications using Google's Android open-source platform. The course explains what Android is and how it compares to other mobile environments, the setup of the Android™ Eclipse-based development tools, the Android SDK, all essential features, as well as the advanced capabilities and APIs such as background services, accelerometers, graphics, and GPS

Course Outcomes

1. Build your own Android apps
2. Explain the differences between Android and other mobile development environments
3. Understand how Android™ applications work, their life cycle, manifest, Intents, and using external resources
4. Design and develop useful Android applications with compelling user interfaces by using, extending, and creating your own layouts and Views and using Menus.
5. Take advantage of Android's APIs for data storage, retrieval, user preferences, files, databases, and content providers
6. Tap into location-based services, geo-coder, compass sensors, and create rich map-based applications
7. Utilize the power of background services, threads, and notifications.
8. Use Android's communication APIs for SMS, telephony, network management, and internet resources (HTTP).
9. Secure, tune, package, and deploy Android applications

Unit-I

Data Persistence: User Preferences, Persisting Data to Files

Unit-II

Messaging: SMS Messaging, Sending E-mail

Unit-III

Location-Based Services: Displaying Maps, Getting Location Data, Monitoring a Location, Building a Location Tracker

Unit-IV

Android Services: Create your Own Service, Communication between Services and Activity, Binding Activities to Services, Threading.

Unit-V

Exception Handling in Android: Handling Errors, Handling Exceptions Using Try, Catch and Finally

Reference Books:

1. Android Programming: The Big Nerd Ranch Guide (Big Nerd Ranch Guides) By: Bill Phillips & Brian Hardy
2. Android Design Patterns: Interaction design solutions for developers by Greg Nudelman
3. Android User Interface Design: Turning Ideas and Sketches into Beautifully Designed Apps By: Ian G. Clifton
4. Android Recipes: A Problem-Solution Approach By: Dave Smith & Jeff Friesen
5. Hello, Android: Introducing Google's Mobile Development Platform (Pragmatic Programmers) By: Ed Burnette
6. Beginning Android Games By: Mario Zechner
7. Programming Android By: Zigurd Mednieks, Laird Dornin, G. Blake Meike & Masumi Nakamura

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year VI Semester
Elective- II**

Design of Video Games

Course Objectives

1. Discuss and define the terms and principles of game design and development.
2. Select and evaluate programming and scripting languages to develop particular games.
3. Define the structure and duties of the game development team.
4. Practice animation production and creation tools.
5. Apply the mathematics used in game design.
6. Apply the physics needed to design computer games.
7. Apply artificial intelligence to developing computer games.

Course Outcomes

After completing this course, students will be able to understand all game development problems and issues, such as story creation, selection of programming language, mathematical analysis, physical analysis, graphics, multimedia, artificial intelligence, and others.

UNIT I

History of video games, game genres, The games industry, Theory of funativity: what is fun?

UNIT II

Game design teams and processes, Level design, Modeling

UNIT III

Human-computer interaction (HCI) & interface design, collision detection, lighting, and animation

UNIT IV

Game scripting and programming, Game data structures and algorithms

UNIT V

Artificial intelligence, Play testing

Reference Books

1. Introduction to Game Development Edited by: Steve Rabin ISBN: 1- 58450-377-7 Charles River Media, May 2005.
2. Game Development Essentials: An Introduction. 3rd Edition
3. *A Theory of Fun for Game Design*, by Koster
4. *Understanding Comics: The Invisible Art*, by McCloud

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

**BCA III Year VI Semester
Elective- II
SOFTWARE TESTING**

Course Objectives

The Objective of this course is to enable a clear understanding and knowledge of the foundations, techniques, and tools in the area of software testing and its practice in the industry. The course will prepare students to be leaders in software testing. Whether you are a developer or a tester, you must test software. We can learn strengths and weaknesses of a variety of software testing techniques.

Course Outcomes

After completion of this course the student will be able to plan, develop, and execute an automated test plan.

UNIT-I

Introduction: Purpose of testing, model for testing, Bugs, Bug life cycle

Flow Graphs and Path testing: Basics concepts of path testing, predicates, path predicates and Achievable paths

UNIT-II

Transaction Flow Testing: Transaction flow, transaction flow testing techniques.

Dataflow testing: Basics of dataflow testing, components of data flow testing, strategies in dataflow testing

UNIT-III

Domain Testing: domains and paths, domain testing, domains and interfaces Testing, domain and interface testing, domains and testability.

UNIT-IV

Paths, Path products: Path products & path expression, reduction procedure

Logic Based Testing: Overview, decision tables, path expressions kv charts

UNIT-V

State, State Graphs and Transition testing: State graphs, graphs state testing

Graph Matrices and Application: Motivational overview, matrix of graph, power of a matrix, Node reduction algorithm, building tools. (Student should be given an exposure to a tool like Win runner.)

Reference Books

1. Software Testing techniques –Baris Beizerm Dreamtech, Second edition.
2. Software Testing Tools – Dr. K.V.K.K. Prasad, Dreamtech.
3. Software Testing Principles and Practices by Naresh Chauhan, Oxford University Press
3. The craft of software testing – Brain Matrick, Pearson Education.
4. Software Testing Techniques – SPD (Oreille)
5. Software Testing in the Real World-Edward Kit, Pearson.
6. Effective methods of Software Testing, Peery, John Wiley.
7. Art of Software Testing – Meyers, John Wiley.

Student Activity:

1. Prepare a chart for guidelines for data security in your organization
2. Test the performance of any software that is used by your organization under maximum load

Instruction to Paper Setter :

Two questions must be given from each unit in Section-A and Section-B

PROJECT & VIVA-VOCE

The objective of the project is to motivate them to work in emerging/latest technologies, help the students to develop ability, to apply theoretical and practical tools/techniques to solve real life problems related to industry, academic institutions and research laboratories.

The project is of 4 hours/week and a student is expected to do planning, analyzing, designing, coding, and implementing the project. The initiation of project should be with the project proposal. The synopsis approval will be given by the project guides.

The project proposal should include the following: Title

Objectives Input
and output

Details of modules and process logic

Limitations of the project

Tools/platforms, Languages to be used

Scope of future application

The Project work should be either an individual one or a group of not more than three members and submit a project report at the end of the semester. The students shall defend their dissertation in front of experts during viva-voce examinations.