BAGALKOT UNIVERSITY

MUDHOL ROAD, JAMKHANDI-587301
DIST: BAGALKOTE

The Draft

Open Elective Courses From
BACHELOR OF COMPUTER APPLICATIONS (BCA)

As per NEP 2020 and adapted from RCU Belagavi

applicable from the Academic Year 2023-24

BCA I SEMESTER OEC

NOTE: Students from Other Departments/Subjects may choose one OE course from BCA department.

FROM BCA(OEC)

SEMESTER-1									
Category	**Course code**	**Title of the Paper**	**Marks**			**Teaching hours/week**			**Credit**
			IA	**SEE**	**Total**	**L**	**T**	**P**	
OEC1	126BCA01XXXOEC01T	C Programming Concepts	40	60	100	3	0	0	3

OPEN-ELECTIVE SYLLABUS:

Year	I	**Course Code:** 126BCA01XXXOEC01T **Course Title: C programming Concepts**	**Credits**	03
Sem.	I		**Hours**	40
Course Pre-requisites, if any		NA		
Formative Assessment Marks:40		Summative Assessment Marks:60		Duration of ESA:..32hrs.
Course Outcomes		At the end of the course the student should be able to: 1. Read, understand and trace the execution of programs written in C language 2. Apply programming control structures for a given problem to create C code 3. Understand derived data types and develop C code using arrays/strings 4. Understand user defined functions and data types to Develop C code		
Unit No.		**Course Content**		**Hours**
Unit I		**Introduction to C Programming:** Overview of C; History and Features of C; Structure of a C Program with Examples; Creating and Executing a C Program; Compilation process in C.**C Programming Basic Concepts: C Character** Set; C tokens-keywords, identifiers, constants, and variables; Data type; Declaration & initialization of variables; Symbolic constants. **Input and output with C:** Formatted I/O functions - *print f* and *scan f*, control stings and escape sequences, output specifications with *print f* functions ;Unformatted I/ O functions to read and display single character and a string - *getchar, putchar, gets* and *puts* functions **C**		10

Unit II	**Operators & Expressions:** Arithmetic operators; Relational operators; Logical operators; Assignment operators; Increment & Decrement operators; Bitwise operators; Conditional operator; Special operators; Operator Precedence and Associatively; Evaluation of arithmetic expressions; Type conversion. **Control Structures:** Decision making Statements - Simple if, if else, nested if else, else_if ladder ,Switch Case, go to, break & continue statements; Looping Statements-Entry controlled and exit controlled	10

	statements, while, do-while, for loops, Nested loops.	
Unit III	**Derived data types in C:** Arrays: One Dimensional arrays-Declaration, Initialization and Memory representation; Two Dimensional arrays-Declaration, Initialization and Memory representation. **Strings:** Declaring & Initializing string variables; String handling functions - strlen ,strcmp,s trcpyandstrcat; Character handling Functions - toascii, toupper, tolower,Isalpha ,is numericetc	10
Unit IV	**User Defined Functions:** Need for user defined functions; Format of Cuser defined functions; Components of user defined functions - return type, name, parameter list, function body, return statement and function call; Categories of user defined functions-With and without parameters and return type.	10
Recommended Leaning Resources		
Print Resources	**Reference Books:** 1. C: The Complete Reference ,By HerbertSchildt. 2. C Programming Language, By BrainW.Kernighan 3. Kernighan&Ritchie:TheCProgrammingLanguage(PHI) 4. E.Balaguruswamy:ProgramminginANSIC(TMH) 5. Kamthane: Programming with ANSI and TURBO C(PearsonEducation) 6. V.Rajaraman:ProgramminginC(PHI–EEE) 7. S.ByronGottfried:ProgrammingwithC(TMH) 8. YashwantKanitkar:LetusC 9. P.B.Kottur:ProgramminginC(SapnaBookHouse)	

BCA II nd
SEMESTER OEC

FROM BCA(OEC)

SEMESTER-2									
Category	**Course code**	**Title of the Paper**	**Marks**			**Teaching hours/week**			**Credi**
			IA	**SEE**	**Total**	**L**	**T**	**P**	
OEC2	126BCA02XXXOEC02T	Web Designing	40	60	100	3	0	0	3

NOTE:

Students from Other Departments/Subjects may choose one OE course from BCA department.

Year	I	**Course Code:** 126BCA02XXXOEC02T **Course Title: Web Designing**	**Credits**	03
Sem.	II		**Hours**	40
Course Pre-requisites, if any		NA		
Formative Assessment Marks:40		Summative Assessment Marks: 60	DurationofESA:..02hrs.	
Course Outcomes		At the end of the course the student should be able to: 1. Understand the History of Internet and web Designing tools 2. Understand Markup Languages and style sheet 3. Implement Scripting 4. Appreciate website creation		
Unit No.		**Course Content**		**Hours**
Unit I		Histroy of Internet, The World Wide Web, Web Browser, Web Server, URL, Working of Web, Web Page, Types of Web Pages, Web Content, Websites, Home Pages, Building Website, Website building tools; Web graphics design, basic tips for graphics design, to web programming: what is web programming?, web Programming languages.		10
Unit II		Introduction to XHTML-Basic Syntax, Standard structure, Basic text markup, Images, Hypertext, Links, Lists, Tables, Forms-<form>,<input>,<label>,<select>,<textarea> tagsandaction buttons (submit and reset).CSS-Introduction, Levels of style sheets, Select or forms, Property value forms, Font properties, List properties, Color, Alignment of text, The box model, Background images, Theand tags.		10
Unit III		JavaScript: Object orientation and JavaScript; General syntactic characteristics; Primitives, operations, and expressions; Screen out put and key board input; Control statements; Object creation and modification; Arrays; Functions; Constructor; Pattern matching using regular expressions; Error sin scripts; Examples.		10
Unit IV		Introduction to XML, Syntax of XML , XML document structure, Displaying raw XML documents, Displaying XML documents with CSS ,XSL T Style sheets and Displaying XML documents with XSLT.		10

	Web Design: Concepts of effective web design, Web design issues including Browser, Bandwidth and Cache, Display resolution, Look and Feel of the Website, Page Lay outand linking, User centric design, Sitemap, Planning and publishing website, Designing effective navigation	
Recommended Leaning Resources		
Print Resources	**Reference Books:** 1. RobertW.Sebestra,"ProgrammingtheWorldWideWeb",7thEdition /4th editionAddisonWesleyPublication,2013. 2. DevelopingWebApplications,RalphMoseleyandM.T.Savaliya,Wiley-India 3. WebTechnologies,BlackBook,dreamtechPress 4. HTML5,BlackBook,dreamtechPress 5. WebDesign,JoelSklar,CengageLearning 6. DevelopingWebApplicationsinPHPandAJAX,Harwani,McGrawHill 7. InternetandWorldWideWebHowtoprogram,P.J.Deitel& H.M.Deitel,Pearson	

ASSESSMENTMETHODS

Evaluation Scheme for Internal Assessment:

Practical

Assessment Criteria	25marks
1st InternalAssessment Testfor20marks1/2hrafter8weeksand2nd InternalAssessmentTest for 20marks1/2hrafter15weeks. Average of two tests should be considered.	20
Assignment	05
Total	**25**

Assessment Criteria	25marks
SemesterEndInternalAssessmentTestfor20marks2hrs	20
Journal(Practical Record)	05
Total	**25**

Question Paper Pattern:

Bachelor of Computer Applications

Sub: Code: MaximumMarks:60

a. **Answer any Six Questions from Question 1**

b. **Answer any Three each Questions from Question2,3,4and5**

Q.No.1.	**Answer any Six Questions (Atlest Two question from Each Unit)** **a.** **b.** **c.** **d,** **e.** **f.** **g.** **h.**	**2X6=12**
Q.No.2.	**(Should cover Entire Unit-I** **a.** **b.** **c.** **d.**	**4X3=12**
Q.No.3.	**(Should cover Entire Unit-II** **a.** **b.** **c.** **d.**	**4X3=12**
Q.No.4.	**(Should cover Entire Unit-III** **a.** **b.** **c.** **d.**	**4X3=12**
Q.No.5.	**(Should cover Entire Unit IV** **a.** **b.** **c.** **d.**	**4X3=12**