



**Janardan Bhagat Shikshan Prasarak Sanstha's
CHANGU KANA THAKUR
ARTS, COMMERCE & SCIENCE COLLEGE, NEW
PANVEL (AUTONOMOUS)**

**Re-accredited 'A+' Grade by NAAC
'College with Potential for Excellence' Status Awarded by UGC
'Best College Award' by University of Mumbai**

**Program: B.A.
Revised Syllabus of S.Y.B.A. Applied Component
Choice Based Credit & Grading System (75:25)
w.e.f. Academic Year 2020-21**

Syllabus for III and IV Semester
APPLIED COMPONENT
Computer Programming
Based on Credit Based and Grading System
with Effect from the Academic Year 2020-21

Name of the Programme: S.Y.B.A.

Course Title: Computer Programming I and II (Applied Component)

Credit Structure: No. of Credits per Semester for Theory - 02

No. of Credits per Semester for Practical - 01

No. of lectures per Practical: 3

Work load (No. of lectures per week): 3

No. of practicals per week : 1 practical of 3 lecture periods

Scheme of Examination:

Theory - 75 marks: 2.5 hours at the end of each semester.

Practical - 25 marks: 01 hour at the end of each semester

Conduct of Semester End Theory Examination (Total 75 marks)

- (a) At the end of each semester, examination of 2.5 hours duration of 75 marks based on three units shall be held.
- (b) Pattern of Theory question paper at the end of each semester: Q1, Q2 and Q3 each shall be of 20 marks with internal choices based on units I, II and III respectively. Q.4 shall be of 15 marks with questions based on units I, II and III.

Conduct of Practical exam at the end of semesters III and IV (Total 25 marks)

- (a) Practical Exam: 15 Marks
 - (b) Viva and Journal: 05 marks.
 - (c) Active Participation: 05 Marks.
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1. The questions to be asked in the practical examination shall be from the list of practicals mentioned in the practical topics. A few simple modifications may be expected during the examination.
 2. The semester end practical examination on the machine will be of ONE hour.
 3. Students should carry a certified journal with minimum of 06 practicals (mentioned in the practical topics) at the time of examination.
 4. Number of students per batch for the regular practical should not exceed 20. Not more than two students should be allowed on one computer at a time.

S.Y.B.A.		Semester – III	
Course Name: Computer Programming-I		Course Code: UA3CP1	
Periods per week (1 Period is 50 minutes)		3	
Credits		2	
		Hours	Marks
Evaluation System	Theory Examination	2½	75
	Internal	--	25

Course Outcome:

- 1) To give brief knowledge of computer hardware, software and system.
- 2) To give idea of PPT and introduce all the functions in MS Power Point.
- 3) To prepare presentations PPT with all technical aspects.
- 4) To use excel in different functions corresponding to different scenario.
- 5) To perform operations in excel as per the need

Unit	Details	Lectures
I	Introduction to Computer Systems (a) Computer Fundamentals: History and basic structure of a computer. Types of Computers: Super, mainframe, mini and micro computers. Types of micro computers: Desktop, laptop, tablet PC, PDA (Personal Digital Assistant). Units of measurement of computer memory: BITS, BYTES, KB, MB, GB, TB, etc. Terms: Hardware and Software. (b) Hardware Devices: Components of motherboard: I.C.s, bus lines, clock, micro processor chip, memory chips, ports, power supply. Types of Input and Output Devices. Types of Primary memory and Secondary memory storage devices. (c) Software: System and Application software, Types of System and Application software. FOSS. Types of Operating System, examples like DOS, UNIX, LINUX, Windows, Different versions of Windows. Features of Windows, Compilers and Interpreters, Higher and Lower Level languages, Compiler and Interpreter based languages.	15
II	MS Power Point (a) Introduction of PPT, why PPT, Uses of PPT. (b) Taskbar- File, Home, Insert, Design, Transition, Animations, Slide Show, Review, View. (c) File – Copy Paste, Cut Paste, New file, Delete PPT, Save PPT. (d) Home – insert new slide, Layout, cut, paste, delete, Find, Replace , Select, Text Alignment (e) Insert – Table, picture, clip art, shapes, smart art, charts, header, footer, audio, video, equations symbols. (f) Design – Page setup, slide orientation, colours, fonts, background styles, Hide background graphics (g) Transitions – sound, duration. (h) Animations – animation pane (i) Slide Show – broadcast, set up slide show, hide slide, Record, Use timings, media control, Resolution	15

	<p>(j) Review – Spelling, research, translate, language, New comment, compare.</p> <p>(k) View – Slide sorter, notes page, slide master hand out master, Zoom, Fit to window, Grey scale, color, arrange all, cascade, switch windows, macros.</p>	
III	<p>Spread Sheet Package (Microsoft Excel)</p> <p>(a) Concept of Workbook, Worksheet, Cell</p> <p>(b) Types of data, Entering, Editing, Deleting data, Fill command, Series command, Custom list</p> <p>(c) Selecting, Inserting, Deleting cells, Rows, Columns, Ranges, Cell formatting</p> <p>(d) References: Mixed, Relative, Absolute.</p> <p>(e) Formulas, Operators, Precedence of operators, Circular reference</p> <p>(f) Library Functions:-</p> <p>(i) Financial Functions:- FV(), PMT(), PV()</p> <p>(ii) Statistical Functions:- ABS(), AVERAGE(), MEDIAN(), MODE(), STDEV(), VAR()</p> <p>(iii) String Functions:- LEN(), RIGHT(), LEFT(), MID (), PROPER (), UPPER(), LOWER()</p> <p>(iv) Logical Functions:- AND (), OR (), NOT(), IF()</p> <p>(g) Hiding/ un hiding Rows, Columns; Background of sheet.</p> <p>(h) Data Validation, Conditional formatting, sorting, filter with customized condition, subtotal.</p> <p>(i) Chart Wizard: Bar, Pie, Line, Scatter plot.</p>	15

Books and References:

Sr. No.	Title	Author/s	Publisher	Edition	Year
1	Computer Fundamentals	Rajaraman	PHI	4 th	2014
2	Computer Fundamentals	P.K. Sinha	BPB	4 th	2016
3	Exploring Microsoft PowerPoint ...	Rebecca Lawson, Robert Grauer	Pearson	1 st	-
4	Better PowerPoint (R): Quick Fixes Based On How Your Audience Thinks Book	Stephen Kosslyn	Oxford university	1 st	-
5	Excel 2019 All-in-One For Dummies Book	Greg Harvey	John Wiley & Sons Inc	1 st	2019
6	Excel 2007 Bible Book	John Walkenbach	Wiley india Pvt. Ltd	1 st	2007

S.Y.B.A.		Semester – III	
Course Name: Practical of Computer Programming-I		Course Code: UA3PCP	
Periods per week (1 Period is 50 minutes)		3	
Credits		1	
		Hours	Marks
Evaluation System	Practical Examination	1	25

List of Practical: (Can be done in or any imperative language)	
1	Creating Power Point Presentation and save the file. Apply Designs , Fonts, Colors, Effects
2	Creating PPT and insert new slide at particular position, delete, copy, cut, paste slide, apply background styles, transitions with duration
3	Creating PPT and insert table in a slide, clip art and picture
4	Creating PPT and insert audio, video, apply animations
5	Creating an excel sheet to demonstrate bar graph, pie chart etc.
6	Demonstrating financial and statistical functions in spreadsheet
7	Demonstrating string and logical functions in spreadsheet
8	Demonstrating data analysis, sorting, filter with customized condition, subtotal

S.Y.B. Sc. Computer Science		Semester – IV	
Course Name: Computer Programming-II		Course Code: UA4CP2 (sample)	
Periods per week (1 Period is 50 minutes)			
Credits			
		Hours	Marks
Evaluation System	Theory Examination	2.5	75
	Internal	--	25

Course Outcome:

1. Knowledge of internet and networking concepts
2. Knowledge and implementation of word processor
3. Knowledge of internet security

Unit	Details	Lectures
I	Internet: World Wide Web, web servers, web clients, web sites, web pages, web browsers, blogs, news groups, HTML, web address, e-mail address, downloading and uploading files from a remote site. Internet protocols: TCP/IP, SMTP, POP3, HTTP, HTTPS. Remote login and file transfer protocols: SSH, FTP, TELNET, SMTP. Web services: chat, email, video conferencing, e-Learning, e-Banking, eShopping, e-Reservation, social networking.	15
II	Mobile technologies: SMS, MMS, 3G, 4G. Cyber-safety: Safely browsing the web and using social networks: identity protection, proper usage of passwords, privacy, confidentiality of information, cyber stalking, reporting cybercrimes Safely accessing websites: viruses and malware, adware	15

III	Introduction to a word processor: create and save a document. Edit and format text: text style (B, I, U), font type, font size, text colour, alignment of text. Format paragraphs with line and/or paragraph spacing. Add headers and footers, numbering pages, grammar and spell check utilities, subscript and superscript, insert symbols, use print preview, and print a document. Insert pictures, change the page setting, add bullets and numbering, borders and shading, and insert tables – insert/delete rows and columns, merge and split cells. Use of drawing tools, shapes and mathematical symbols.	15
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Books and References:

Sr. No.	Title	Author/s	Publisher	Edition	Year
1	Information and Computer Technology	-	Central Board of Secondary Education	First Edition	2014
2	Information Technology NVEQF Level 1	-	Central Board of Secondary Education	First Edition	2014
3	The Word Tutorials: https://www.tutorialspoint.com/word/index.htm	-	-	-	-
4	The Internet Tutorials: https://www.tutorialspoint.com/internet_technologies/index.htm	-	-	-	-

S.Y.B. Sc. Computer Science		Semester – IV	
Course Name: Practical of Computer Programming-II		Course Code: UA4PCP (sample)	
Periods per week (1 Period is 50 minutes)			
Credits			
		Hours	Marks
Evaluation System	Practical Examination	1	25

List of Practical: (Can be done in or any imperative language)

1	Demonstrate the generation and use of gmail or any email ID.
2	Uploading and downloading files in mail.
3	Use of search engine in optimistic way
4	Demonstrate creation of own youtube channel
5	Demonstrate creation of own video and upload it on the same channel
6	Write a paragraph about the sports activities in your school. Give a heading to this paragraph. Bold and Underline the heading. Save this document in your computer.
7	Write a paragraph perform the following activities: 1. Select, copy and paste text in a document 2. Select, cut and paste text in a document 3. Replace text in a document using Find option
8	Write a paragraph perform the following activities:

	<ol style="list-style-type: none">1. Create a bulleted list of the items in a document2. Create a numbered list of the items in a document
9	Write a paragraph perform the following activities: <ol style="list-style-type: none">1. Change the Font style of text using the ribbon2. Change the Font style of text using a short cut menu3. Change the Font size of text using the ribbon4. Change the Font size of text using a short cut menu
10	Write a paragraph perform the following activities: <ol style="list-style-type: none">1. Align text to the left2. Align text to the centre3. Align text to the right4. Align text to both left and right margins