GOVT. BILASA GIRLS' P.G. (Auto.) COLLEGE

Link Road, Bilaspur (C.G.)

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बिलासपुर (छ.ग.)

SYLLABUS

B.C.A.
Semester - I & II

2021-22

Rules and Regulations for the Semester System at the Graduation Level

1. These subjects are compulsory for all students:-
   (a) Environmental Studies (I Semester)
   (b) English Language (II and III Semester)
   (c) Hindi Language (IV and V Semester)
   (d) Skill Based Course (VI Semester)

2. In each semester there will be only one theory paper in each elective Subject.

3. For Honours Degree Course, there will be one additional theory paper in each semester i.e. semesters, III to VI.

   For Honours Degree Course, separate practical classes will be held round the year but the examinations shall be held only in even semesters i.e. semesters II, IV and VI.

4. **Marks Pattern:-**
   (i) For non practical subjects, each theory paper will be of 100 marks i.e. 80 External + 20 Internal.
   (ii) For practical subjects, each theory paper will be of 75 marks i.e. 60 External + 15 Internal.
   (iii) Practical examination will be of 50 marks. Practical Classes will be held round the year but examination shall be held only in even semesters i.e. semesters II, IV and VI.

5. **Theory Examination:-**
   Duration for theory examination shall be of two and half hours.

6. **Practical Examination:-**
   Duration for Practical examination shall be as suggested in the syllabi.

7. **Admission Period:-**
   (i) Admissions in the First Semester shall be completed before 15th of July every year.
   (ii) Admissions in Semesters i.e. II, III, IV, V and VI shall be completed within 7 days after the completion of examinations on the provisional basis.
   (iii) The provisional admission shall be regularized within 7 days from the date of declaration of result.
   (iv) Request for permission for late admission shall not be entertained.

8. **Schedule of Classes-**
   (i) I Semester's classes will be commenced from 16th of July every year
   (ii) III and V Semester's classes will be commenced from 2nd July every year.
   (iii) II, IV and VI Semester's classes will be commenced from 2nd January every year.
   (iv) All the classes shall be continued till seven days prior to the commencement of the examination.

9. **Examination Schedule- Tentative Schedules of examinations are as under-**
   (i) Odd semester (I, III & V)- 20th November to 20th December.
   (ii) Even semester (II, IV & VI) - 15th April to 14th May.

10. **Examination Pattern -**
    (a) Questions will be asked Unit wise and Section wise. Questions will be set from all Units Covering the entire syllabi.
    (b) For non practical subjects, maximum marks will be 80 (External).
    (c) For the practical based subjects, maximum marks will be 60 (External).
    (d) In each theory paper there will be three sections and the marks distributed for different sections will be in the following pattern –

Theory (Non- Practical):- There will be three sections A, B and C in the question paper.
Section - A Objective Type/ In few words (30 words)

There will be 15 questions to be set, three from each unit and 10 to be attempted. Each question will carry 2 marks.

Section - B Short Answer Type (60 words)
There will be 5 questions to be set, 1 from each unit and all five questions to be attempted. Each question will carry 6 marks.

Section - C Long Answer / Eassy Type Question
There will be 5 questions to be set, 1 from each unit and 2 to be attempted. Each question will carry 15 marks.

Marks Scheme for - Non-practical subject –

Types of Questions	Question to be set from each Unit	Total No. of Questions	Questions to be solved	Marks assigned	Total Marks
Objective / In few words	03	15	10	02	20
Short Answer Type Questions	01	05	05	06	30
Long / Essay type of questions	01	05	02	15	30
					Total - 80

(i)   Theory (Practical Subject):- There will be three sections A, B and C in the question paper.

Section - A Objective Type/ In few words (30 words)
There will be 15 questions to be set, three from each unit and 10 to be attempted. Each question will carry 2 marks.

Section - B Short Answer Type (60 words)
There will be 5 questions to be set, 1 from each unit and all five questions to be attempted. Each question will carry 4 marks.

Section - C Long Answer / Eassy Type Question
There will be 5 questions to be set, 1 from each unit and 2 to be attempted. Each question will carry 10 marks.

Marks Scheme for - Practical Subject –

Types of Questions	Question to be set from each Unit	Total No. of Questions	Questions to be solved	Marks assigned	Total Marks
Objective / In few words	03	15	10	02	20
Short Answer Type Questions	01	05	05	04	20
Long / Essay type of questions	01	05	02	10	20
					Total - 60

For question papers of compulsory papers of General group subjects i.e. Environmental Studies, English Language, Hindi Language and Skill Based Course, the pattern of question shall be applicable as suggested by the concerned Board of Studies.

(ii) Practical

	Each Practical
Laboratory Note Book / Project	10
Vive voce	10
Lab work / Field work	30
Total - 50	

(e)   In odd semester examination, a candidate shall appear in papers of odd semester(s) only. Similarly in even semester examinations, a candidate shall appear in papers of even semester(s) only. Papers of odd and even semesters shall not be confined in one examination.

(f)   Minimum passing marks for external/ semester end theory and practical shall be 34%.

(g)   There shall be provision of 3 grace marks and it would be distributed in maximum two theory Papers / Practical.

Internal Assessment

- Internal Tests are compulsory for theory papers and must be held as per following calendar:-

    Odd Semesters   1st Test - August, 2nd Test - October and 01 Assignment (during semester)

    Even Semesters   1st Test - February, 2nd Test - March and 01 Assignment (during semester)

- Each test & Assignment will be of 20 marks for the subjects without practical & 15 marks for the subjects having practicals. Average of the marks obtained in the best of two tests & assignment shall be incorporated as the final marks. Qualifying marks is 40%.

- If a candidate failed to attend the test on bonafide grounds, one special test may be arranged on the production of relevant documents, before submission of application forms and fees to the office.

- The Unit tests/Assignment marks to be sent to the examination cell of the college as per notification to be issued by the Principal/ Controller Examination from time to time.

- If a candidate (whose status is Regular / Ex/Supplementary) failed in First Year of the current session (2013-14) of annual system will be appeared in the first semester examination as ex-student with under the rules and regulations of Semester System. Number of Internal Test of passed year (2013-14) will not be incorporated or carried forward.

	Non Practical Subject		Practical Subject	
	External	Internal	External	Internal
MAX MARKS	80	20	60	15
MIN MARKS	28	08	21	06

Eligibility criteria for appearing in the examinations

(i)   A candidate should have 75% of attendance both in theory and practical classes. 65% attendance may be considered only on special circumstances and on certification by the Principal of the college.

(ii)   A candidate shall have to qualify in the internal tests securing at least 40% marks.

(iii)   A candidate shall be allowed to appear in those papers only in which she has secured qualifying marks in internal test.

(iv)   If a candidate after taking admission in 1st semester could not continue the classes or could not obtain eligibility cannot appear in the 1st semester examinations. In such cases the student will not be allowed to continue in second semester and she has to continue the classes and obtain eligibility in 1st semester again in next academic year as ex-student.

11.   Lecture Periods /Classes

There shall be a minimum of 50-60 hours Classes for each theory papers in respective course. Minimum of 50-60 hours shall be for each practical paper. This shall be strictly adhered to.

12.   Other Guidelines

(i)   There will be no provision for Revaluation, Supplementry or Betterment (Division Improvement).

(ii)   A candidate has to clear all the papers within 12 semesters (six years) from the year of first admission in the programme.

(iii)   A candidate will choose Honours subject just before the start of third semester from any one of the three elective subjects /group selected by her in the first semester. A candidate can change the Honours subject within 15 days from the date of admission in the third semester.

(iv)   The system of credit of ten point scale examination marks in the final mark sheet shall be introduced only after its formal approval by the competent authorities.

(v)   The system of Choice based credit system and Gradation system shall be introduced only after its formal approval by the competent authorities.

For Honours Degree Course (Total Marks: 2800).

13.   **Admission -**
       The process of admission in Honours Degree Course will be as follows -
       (i)   Student shall select course (Pass Course / Honours Degree Course) at the time of first admission in the college.
       (ii)   Admission shall be on merit basis after receiving the application from students.
       (iii) Number of seats for Honours Degree Course will be decided as per the Govt. Rules.

(A) Each theory Paper (Non Practical Subject)

Each Theory Paper		Internal Assessment	
Full Marks	Minimum Passing 34%	Full Marks	Minimum Marks 40%
80	28	20	08

(B)   Each theory Paper (Practical Subject)

Each Theory Paper		Internal Assessment	
Full Marks	Minimum Passing 34%	Full Marks	Minimum Marks 40%
60	21	15	06

(C)   Each Practical Paper

Minimum Passing Percentage	Full Marks	Minimum Passing Marks
34%	50	17

(D)   Grace Marks
Total/Maximum 03 in two theory paper/practical.

Amendments in Promotion Rules for Semester System at the Graduation Level

(a)   A Candidate is eligible to continue the second semester classes immediately after the 1st Semester examinations and can appear in the 2nd semester examinations notwithstanding the number of arrear papers in 1st semester provided she must have appeared in the 1st semester examination.

(b)   A candidate will be promoted to 3rd semester with not more than two papers of 1st semester and she will continue to attend classes of 3rd semester provisionally. She will be allowed to get final admission in the 3rd semester with maximum of four back papers in all 1st semester and 2nd semester.

(c)   A Candidate is eligible to continue the 4th semester classes immediately after 3rd semester examination and can appear in the 4th semester examination with maximum 2 back papers in 1st semester and/or any numbers of back papers in 2nd and 3rd semester.

(d)   A candidate will be promoted in 5th semester with not more than 2 back papers in 3rd semester and not more than 4 back papers in all 3rd and 4th semeser provided she has cleared 1st and 2nd semester examination.

(e)   A candidate is eligible to continue the 6th semester immediately after the 5th semester examination and can appear in 6th semester examination with maximum of 2 back papers in 3rd semester and/or any number of back papers in 4th and 5th semester examination.

(f)   If a Candidate of 6th Semester is passed in all the semesters except the 5th Semester with back in only one subject, she is allowed to appear in the back paper of the 5th Semester with the examination of 6th Semester.

(g) The students at the UG Level can view their valued answer copies and apply for the **Challenged Valuation** within 03 days from the date of the declaration of the result.

(h) A candidate will be eligible to get Graduation and Graduation Honours degree after passing all the six semester examination. For cleaning all semester papers a candidate will be given a period 6 years (12 semesters) from the year of first admission.

सेमेस्टर स्नातक स्तर प्रमोशन नियम

प्रथम सेमेस्टर में प्रवेश की पात्रताः-
- प्रथम सेमेस्टर में छात्राओं का प्रवेश छ.ग. शासन के प्रवेश नियम के आधार पर किया जावेगा।

द्वितीय सेमेस्टर में प्रवेश की पात्रताः-
- विद्यार्थी को प्रथम सेमेस्टर की परीक्षा के तत्काल बाद कितने भी विषयों में बैक के साथ द्वितीय सेमेस्टर में अध्ययन की पात्रता होगी, बशर्ते वह प्रथम सेमेस्टर की परीक्षा में शामिल हुआ हो।

तृतीय सेमेस्टर में प्रवेश की पात्रताः-
- प्रथम सेमेस्टर में 02 से अधिक विषयों में बैक नही होना चाहिए।
- प्रथम एवं द्वितीय सेमेस्टर में सम्मिलित रूप से 04 विषयों से अधिक में बैक न हो।

चतुर्थ सेमेस्टर में प्रवेश की पात्रताः-
- प्रथम सेमेस्टर में 02 से अधिक विषयों में बैक नही होना चाहिए।
- द्वितीय एवं तृतीय सेमेस्टर में कितने भी विषयों में बैक हो।

पंचम सेमेस्टर में प्रवेश की पात्रताः-
- प्रथम सेमेस्टर उत्तीर्ण होना चाहिए ।
- द्वितीय सेमेस्टर उत्तीर्ण होना चाहिए।
- तृतीय सेमेस्टर में 02 से अधिक विषयों में बैक न हो ।
- तृतीय एवं चतुर्थ सेमेस्टर में सम्मिलित रूप से 04 विषयों से अधिक में बैक न हो ।

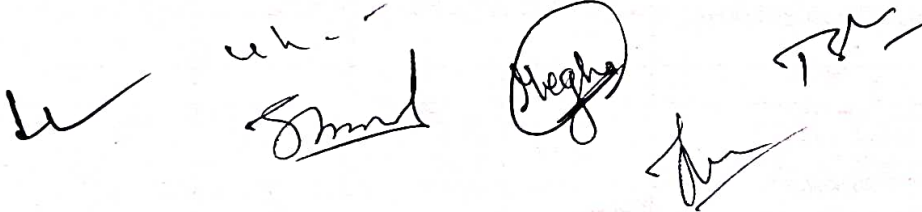### षष्ठम् सेमेस्टर में प्रवेश की पात्रताः-
- प्रथम सेमेस्टर उत्तीर्ण होना चाहिए।
- द्वितीय सेमेस्टर उत्तीर्ण होना चाहिए।
- तृतीय सेमेस्टर में 02 से अधिक विषयों में बैक न हो।
- चतुर्थ एवं पंचम सेमेस्टर में कितने भी विषयों में बैक हो।
- यदि कोई छात्रा सभी सेमेस्टर में उत्तीर्ण है एवं केवल पंचम सेमेस्टर में 01 (एक) विषय में बैक है, ऐसी छात्रा को षष्ठम् सेमेस्टर की परीक्षा के साथ परीक्षा देने का अवसर दिया जावेगा।

- विशेष -
  - ✓ मूल्यांकित उत्तर-पुस्तिकाओं के अवलोकन व Challenged Valuation की प्रक्रिया इस स्नातक स्तर सेमेस्टर परीक्षा अप्रैल-मई से लागू है। छात्राएं परीक्षा परिणाम घोषित होने की तिथि से 3 दिन के भीतर इस हेतु आवेदन प्राचार्य को दे सकती हैं ।
  - ✓ विद्यार्थी को स्नातक एवं स्नातक आर्नस की उपाधि तभी प्राप्त होगी जबकि उसनें सभी 06 सेमेस्टर की परीक्षायें उत्तीर्ण कर ली हों एवं 06 सेमेस्टर की परीक्षायें उत्तीर्ण करने हेतु उसे प्रथम प्रवेश की तिथि से लेकर 06 वर्षों की अवधि प्राप्त होगी।
  - ✓ छात्रा जिस सत्र बैक की परीक्षा में सम्मिलित होगी उसी सत्र का पाठ्यक्रम एवं परीक्षा संबंधी नियम लागू होगा।

Structure & Syllabus for Three Year Degree Program of

Bachelor of Computer Applications (B.C.A.)

1. The title of the programme will be Bachelor of Computer Application (B.C.A.) and will be introduced from the academic year 2017-2018.

2. Objectives: The objectives of the Programme shall be to provide sound academic base from which an advanced career in Computer Application can be developed. Conceptual grounding in computer usage as well as its practical software application will be provided.

3. Eligibility for admission : In order to be eligible for admission to Bachelor of Computer Applications a candidate must have passed HSC (10+2) from Mathematics and English as passing Subject with minimum 40% marks in aggregate.

4. Duration: The duration of the B.C.A. Degree Program shall be three years divided into six semesters.

5. The scheme of Examinations: The BCA Examination will be of 2800 marks as given Below:
    I) Compulsory papers and Basic Papers: 600 marks
    II) For Theory Papers and Practical Papers: 2200 marks

6. The Standard of Passing and Award of Class in order to pass in the examination the candidate has to obtain 34% marks out of 100. (Min 34% marks must be obtained in theoretical papers as well as practical papers of University Examination). The class will be awarded on the basis of aggregate marks obtained by the candidate for all three years examinations.

7. RULES OF A.T.K.T. As per section 14 promotion rule.

8. The Medium of Instruction and Examination (Written and Viva) shall be English/Hindi.

Instructions to Paper Setters:

9. In each theory paper, maximum 100 marks. (each theory and course paper will be of 80 marks in external / end semester examination plus 20 marks in internal). Question paper should be in English as well as Hindi. Minimum passing marks in external 28 out of 80 and internal 7 out of 20. For practical examination minimum passing marks shall be 34% in each practical / project.

10. The Semester wise Structure & plan of the program shall be as follows:

Govt. Bilasa Girls' PG College Bilaspur (C.G.)
Course structure - Bachelor of Computer Application Session 2020-21

Semester	Title of Theory Paper	Theory		Internal		Practical		Project		Total	
		Max M.	Min M.	Max M.	Min M.	Max M.	Min M.	Max M.	Min M.	Max M.	MinM.
I 1	Computer Fundamental	80	28	20	8					100	34
2	Discrete Mathematics	80	28	20	8					100	34
3	PC Software Package	80	28	20	8					100	34
4	Environmental Science	60	21	15	8			25	9	100	34
	Total Marks									400	136
II 1	Programming Methodology and C programming	80	28	20	8					100	34
2	Operating System	80	28	20	8					100	34
3	Concept of software	80	28	20	8					100	34
4	English	80	28	20	8					100	17
5	LAB I - Lab of Software packages					50	17			50	17
6	LAB II - Programming Lab in C					50	17			50	17
	Total Marks									500	170
III 1	Digital Electronics and Micro Processor	80	28	20	8					100	34
2	Computer Networks	80	28	20	8					100	34
3	Data Structure	80	28	20	8					100	34
4	English	80	28	20	8					100	34
	Total Marks									400	136
IV 1	Object Oriented Programming using C++	80	28	20	8					100	34
2	Computer Graphics and Multimedia	80	28	20	8					100	34
3	Computer organization and Architecture	80	28	20	8					100	34
4	LAB III - Programming lab using C++					50	17			50	17
5	LAB IV - Multimedia					50	17			50	17
6	Hindi	80	28	20	8					100	34
	Total marks									500	170
V 1	Numerical Analysis	80	28	20	8					100	34
2	Software Engineering and Project Management	80	28	20	8					100	34
3	Database Design and RDBMS	80	28	20	8					100	34
4	Introduction to AI and Expert System	80	28	20	8					100	34
5	Hindi	80	28	20	8					100	34
	Total Marks									500	170
VI 1	NET Technology	80	28	20	8					100	34
2	Data Mining and Data Warehousing	80	28	20	8					100	34
3	Current Trends and Technology in Computer Science	80	28	20	8					100	34
4	Major Project							100	34	100	34
5	Skill based	80	28	20	8					100	34
	Total marks									500	170
	GRAND TOTAL					2800					

M.M. 60

SYLLABUS FOR ENVIRONMENTAL STUDIES" FOR UNDER GRADUATE

UNIT-I THE MULTI DISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES :
Definition, scope and importance Need for public awarness.

Natural Resources :

Renewable and nonrenewable resources :
Natural resources and associated Problems.

(a) Forest resources : Use and over-exploitation, deforestation, case studies, Timber extraction, mining dams and their effects on forests and tribal people.

(b) Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems.

(c) Mineral resources : Use and exploitation, environmental effects of extracting and using mineral resources, case studies.

(d) food resources : Word food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilize-pesticide problems, water logging, salinity, case studies.

(e) Energy resources : Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Case studies.

(f) Land resources : Land as a resources, fand degradation, man induced landslides, soil erosion and desertification.-Role of an individual in conservation of natural resources. -Equitable use of resources for sustainable life-styles.   (9 Lecture)

UNIT-II

(a)ECOSYSTEMS

Concept of an ecosystems. Structure and function of an ecosystem.

- Producers, consumers and decomposers
- Energy flow in the ecosystem.
- Ecological succession.
- Food chains, food webs and ecosystem.
- Introduction, types, characteristic features, structure and function of the following ecosystem:

a. Forest ecosystem
b. Grassland ecosystem
c. Desert ecosystem
d. Aquatic ecosystems (Ponds, streams, lakes, rivers, oceans, estuaries)   (9 Lecture)

(b)Biodiversity and its Conservation

- Introduction - Definition : genetic, species and ecosystem diversity.
- Biogeographically classification of India.
- Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values.
- Biodiversity at global, National and local levels.

- India as mega-diversity nation.
- Hot-spots of biodiversity :
- Threats to biodiversity : habitat loss, poaching of wildlife, manwildife conflicts.
- Endangered and endemic species of India.
- Conservation of biodiversity : In situ and Ex-situ conservation of biodiversity. (9 Lecture)

UNIT-III
(A)Environmental Pollution
Definition Causes, effects and control measures of -
a. Air pollution.
b. Water pollution.
c. Soil pollution.
d. Marine pollution.
e. Noise pollution.
f. Nuclear hazards.
Soil waste management : Causes, effects and control measures of urban and industrial wastes.
Role of an individual in prevention of pollution.
Pollution case studies
Disaster management : floods, earthquake, cyclone and Landslides.
(B)Social Issues and the Environment
From Unsustainable to Sustainable development.
- Urban problems related to energy.
- Water conservation, rain water harvesting, watershed management.
- Resettlement and rehabilitation of people, its problems. Case studies.
- Environmental ethics : Issues and possible solutions.
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation.
- Consumerism and waste products.
- Environment Protection. Act.
- Rofe ot Information Technology in Environment and Human Health.
- Case Studies. (9 Lecture)

UNIT-IV
Genral Background And Historical Perspective-Historical Development ANd Concept Of Human Rights-Meaning and Definations of human rights,kind and classifications of human rights Procetions of human rights under the UNO Charter,protection of human rights under the universive declaration of human rights 1948.
Convention on the elimination of all forms of Discrimination against women.
Cinvention on the rights of the child 1989.

Unit-V
Impect of human rights Norms in India, Human rights under the constitution on India,Fundamen rights under the constitution of india, Directive Principles of state policy under the constitution india, Enforcement of human rights in india
Protection on human rights under the human rights act 1993-national human rights commiss state human rights commission and human rights court in india.
Fundamental duties under the constitution of india.

Field work
FIELD WORK

Visit to a local area to document environmental assets-river/forst/grassland/hill/mountan.
Visit to local polluted site : Urban/Rura/Industrial/Agriculture.
Study of common plants, insects, birds.
Study of simple ecosystems-pond, river, hill slopes, etc. (Field work Equal to 5 lecture hours)

REFERENCES :

1. Agarwal K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.

2. Bhairucha Erach, the Biodiversity of India, Mapin Publishing Pvt. Ltd Ahmedabad 380 013, India, Email : mapin @ ice net net (R)

3. Bruinner R.C. 1989, Hazardous waste Incineration, Mc Graw Hill inc 480p.

4. Clark R.S. Marine Pollution, Calderon Press Oxford (TB)

5. Cunningham, W.P. Cooper, T.H. Gorhani E & Hepworth, M.T. 200

6. Dr. A.K. Environmental Chemistry Wiley Eastern Ltd.

7. Down to Earth, Centre for Science and Environment (R)

8. Gloick, H.P. 1993 Water in crisis, Pacific Institute for studies in Deve, Environment & security. Stockholm Eng. Institute. Oxford Univ, Press. 473p.

9. Hawkins R.E. Encyclopedia of Indian Natural History, Bombay Natural History Society, Mumbai (R).

10. Heywood, V.H. & Watson, R.T. 1995 Global Biodiversity Assessment, Cabridge Univ. Press 1140p.

11. Jadhav H. & Bhosale, V.H. 1995, Environmental Protection and Laws Himalaya Pub. House. Delhi 284p.

12. McKinney M.L. & School R.M. 1996, Environmental Science Publication (TB).

13. Mhaskar A.K., Matter Hazardous, Techno-Science Publication (TB).

14. Miller T.G. Jr., Environmental Science, Wadsworth Publishing Co. (TB).

15. Odum, e.P. 1971, Fundamentals of Ecology, W.B. Saunders Co. USA, 574p.

16. Rao M.N. & Datta, A.K. 1987, Waste Water treatment. Oxford & IBH Publ. Co. Pvt. Ltd. 345p.

BCMP - 102
SEMESTER - I
FINACIAL ACCOUNTING
PAPER - II

M.M. 80

Unit -1 Concept of Double Entry System

Preparation of journal.sub division of Journal: Cash book, preparation of Ledger, Preparation of trial balance, capital & Revenue,Accounting standard Meaning, defination AS to AS 10.

Unit - I I Final Accounts with Adjustment

Trading Profit & Loss a/c ,Balance sheet, adjustment entries.

Unit - III Cocept of depreciation

Accounting for depreciation(As per accounting standard 6) Fixed Installment Method, Diminishing Balance method, Annuity Method, depreciation Fund method, Provisions and Reserves.

unit - IV Special Accounting Areas :

Hire-purchase and installment purchase system : Meaning of hirepurchase contract, Legal provision regarding hire-purchase contract;

Accounting for goods of substantial sale values,installment purchase system.

Unit - V Partnership

Dissolution of Partnership firm, Amalgamation of Partnership Firm..

SUGGESTED READINGS :

1. Anthony, R.N. and Reece, J.S. : Accounting Principles : Richard Irwin Inc.
2. Gupta, R.L. and Radhaswamy, M: Finacial Accounting ; Sultan chand and Sons, New Delhi.
3. Monga J.R. Ahuja Girish, and Sehgal Ashok : Financial Accountion : Mayur Paper Back Noida.
4. Shikla. M.C. Grewal T.S. and Gupta, S.C. Advanced Accounts; S.Chand & Co. New Delhi.
5. Compendium of Statement and Standards of Accounting : The Institite of Chartered Accountants of India New Delhi.
6. Agrawala A.N. Agrawala K.N. Higher Sciences of Accountancy : Kitab Mahal, Allahabad

7. Shukla S. M. Financial Accounting, Sahitya Bhavan Agra.
8. Singh S. K. Financial Accounting, SBPD publication Agra.

B.C.A. - Semester I
Computer Application
[Paper: I – Computer Fundamental]

Max. Marks: 80	Min. Marks: 28	Hours 45; Credit-3

Unit-I : Basics of Computer
Brief History of Computers, Technical Evolution of Computers, Computer Pioneers, Categories/Types of Computers, Computer Hardware, Computer Software, CPU and its components; Mother board, Microprocessor, Expansion slots, Input/output Ports, Memory; Types of Computer Memory, Memory modules viz. SIMM, DIMM, EDO, RDRAM, SDRAM, DDRRAM, etc

Unit-II: Input, Hard/Soft copy Devices, Storage Devices:
Input Concepts, Input Devices viz. Keyboard, Mouse, Joystick, Track Ball, Touch Screen, Light pen, MICR, OMR, OBR, OCR, Voice Input, Smart Cards, Bar Code readers, Digitizer, Scanner, etc. Graphic Display Devices: DVST, Graphical input devices, three dimensional input devices; Voice output systems. Hard copy Devices viz. Printer, Types of printers, Features of printers; Plotter, Types of plotters, Features of plotters; Soft copy devices viz VDU and it's types, Types of Cards (brief) viz. CGA, MGA/MDA, EGA, VGA, SVGA, etc. Storage devices viz. Fixed Disk or Hard Disk, Floppy Diskette, Data Retrieval and Characteristics; Optical Technology; CD-ROM, CD-ROM operation, CD-ROM standards, Origins of CD-ROM; Hard Disk Drive, Floppy disk drive, CD-Drive, DVD-Drive, Tape drive, Zip drive, Jaz Drive, Pen drive, etc.

Unit – III: Operating Systems and MS-DOS:
Custom made software, Pre-written software, Computer processing techniques, Functions of operating system (only list), Compiler, Assembler, Interpreter, Debugger, Loader, and Linker; Machine language, Assembly language, High level languages, Fourth generation languages; Booting process(with BIOS & POST), Auto executing programs, Setting parameters of config.sys; Internal and External commands of MS-DOS along with their syntax and different options.

Unit-IV: Windows Operating System and Internet :
Advantages, Logging on and Shutting down Windows, Start button and Task bar, Starting and Quitting a program, Opening a document, Getting help, Finding files or folders, Changing system settings, Run command, What's on your computer, Organizing files and folders, Working within documents, Saving work, Setting up a printer, Installing Software and Hardware, Copying and moving files quickly, Putting a shortcut on the Desktop, Starting programs automatically, Network neighborhood, Configuring computer to a Network, Sharing folders or printers, Using resources located on other computers, Using dial-up networking, Connecting to the Internet, Having fun, Optimizing computer, Communicating with the world, Paint, Wordpad, Internet Explorer, TV viewer, Frontpad, System Information utility, System file checker, Windows Tuneup Wizard.

Unit – V: Software Packages:
Electronic Spreadsheet, Word processing software, other pre-written software packages, Data communication packages, Desktop publishing.

Text Books
1. Computer science: an overview, Brookshear, J.G., Pearson Education
2. Fundamental of Computers, Raja Raman V., Prentice Hall of India, New Delhi.
3. Introduction to Computers, Norton, Peter, , Mc-Graw-Hill.
4. Computer Fundamentals, B. Ram, New Age International Pvt. Ltd.

Reference Books:
1. A+ Certification All-in-One Desk Reference for Dummies, Glen Clarke
2. IBM PC & Clones: Hardware Trouble Shooting and Maintenance, B. Govindarajalu, Tata McGraw Hill
3. Pc Upgrade & Repair Bible , Wiley India.

B.C.A. - Semester I
Computer Application
[Paper: II - Discrete Mathematics]

Max. Marks: 80   Min. Marks: 28   Hours 45; Credit-3

Unit-I
Recall of statements and logical connectives, tautologies and contradictions, logical equivalence, algebra of propositions quantifiers, existential quantifiers and universal quantifiers.

Unit -II
Boolean algebra and its properties, algebra of propositions as an example, De Morgan's Laws, partial order relations G.L.B., L.U.B. Algebra of electric circuits and its applications. Design of simple automatic control system.

Unit-III
Boolean functions - disjunctive and conjugative normal forms. Boolean's expansion theorem, fundamental forms. Many terminal Networks.

Unit -IV
Arbitrary Cartesian product of sets. Equivalence relations, partition of sets, injective, surjective, bijective maps, binary operations, countable, uncountable sets.

Unit-V
Basic Concept of Graph Theory, Sub graphs, Trees and their properties, Binary Trees, Spanning Trees, Directed Trees, Planar graphs, Euler Circuit, Hamiltonian Graph. Chromatic number.

Text Books:
2. Boolean Algebra and Its Applications, J. Eldon Whitesitt, Addison-Wesley.
3. A Textbook of Discrete Mathematics, Swapan Kumar Sarkar, S. Chand.
4. Discrete Math with Proof, Eric Gossett, Pearson.
5. Discrete Math Workbook: Interactive Exercises, James R Bush, Pearson.

Reference Books:
1. Discrete Mathematics, Prof. H K Pathak, Shiksha Sahitya Prakashan
2. Discrete Maths, C.L.Liu, T McGraw Hill

B.C.A. – Semester I
Computer Application
[Paper: III – PC Software Package]

Max. Marks: 80   **Min. Marks: 28**   **Hours 45; Credit-3**

Unit-I : WINDOWS 7

Installing WINDOWS, Basic Elements of WINDOWS, My Computer, Sharing Devices. Windows Explorer (Files and Folder Operations), Accessories like Accessibility, Entertainment, Communication, System Tools, Paint Brush, Calculator, Calendar, Clock, Note Pad, Word Pad Etc., Control Panel, Changing Color and Theme, Changing the Desktop Background, Screen Saver, Adjusting Display Settings, Adjusting Sound, Adjusting the Mouse, Changing the Date and Time, Changing Language and Region Options, Customizing Folder View Options, Connecting to the Internet: Dial-Up Connections, Broadband Connections, Installing New Hardware & Printer, Installing & Removing Software, Power Settings.

Unit- II : Introduction to MS Word

Menus, Shortcuts, Document types; Working with Documents: Opening Files - New & Existing, Saving Files, Formatting page and Setting Margins, Converting files to different formats- Importing, Exporting, Sending files to others, Editing text documents- Inserting, Deleting, Cut, Copy, paste, Undo, Redo, Find, Search, Replace, Using Tool bars, Ruler- Using Icons, Using help; Formatting Documents: Setting Font Styles, Setting Paragraph style, Setting Page Style, Setting Document Styles, Creating Tables, Drawing, Tools, Printing Documents, Mail Merge.

Unit-III : Introduction to MS Power Point

Creating new Presentation, Different presentation templates, Setting backgrounds, Selecting presentation layouts, Formatting a presentation-Adding style, Color, gradient fills, Arranging objects, Adding Header & Footer, Slide Background, Slide layout, Inserting pictures, movies, tables etc. into the presentation, Drawing Pictures using Draw, Setting Animation & transition effect, Adding audio and video, Printing Handouts. Generating standalone presentation viewer.

Unit-IV : Introduction to MS Excel

Introduction: Spreadsheet & its Applications, Opening spreadsheet, Menus & Toolbars & icons, Shortcuts, Working with Spreadsheets-Opening, Saving Files, Setting Margins, Converting files to different formats- Importing, Exporting and Sending files to others. Entering and Editing Data, Computing data: Formula. Formatting Spreadsheets- Cell, row, column & Sheet, Alignment, Font, Border &shading. Highlighting values, Hiding/Locking Cells: Worksheet- Sheet Name, Row & Column Headers, Row Height, Column Width and Worksheet Sheet Formatting & style background, Graphs, Printing worksheet.

Unit-V : Introduction MS Access

Database concepts Tables, Queries, Forms, Reports, Opening & Saving database files: Creating Tables, Table Design, Indexing, Entering data, Importing data, Creating Queries: SQL statements, Setting relationship, Creating Forms: GUI, Form, Creating & printing reports.

Text Books:
1. Comdex Computer Course Kit (windows 7 with office 2010), Gupta Vikas. Dreamtech Publication
2. Mastering MS Office 2000, Professional Edition by Courier, BPB Publication
3. MS Office 2000 Training Guide by Maria, BPB Publications
4. MS Office complete by SYBEX.

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GOVT. BILASA GIRLS' P.G. (AUTO.) COLLEGE
BILASPUR (C.G)
FOUNDATION COURSE
ENGLISH LANGUAGE
SYLLABUS2021-2022

CLASS: B.A./B.SC/B.COM/B.SC. (H.Sc.)/BCA/BBA

SEMESTER- II

Max. M - 80
Min. M – 29

UNIT-ITEN QUESTIONS TO BE SET (one from each chapter) AND FIVE TO BE ATTEMPTED

LESSONS   5 X 4 = 20

1. Where the Mind is without Fear – Rabindranath Tagore
2. The Ideals of Indian Art – K.BharathaIyer
3. The Wonder that was India- A.L. Basham
4. The Heritage of Indian Art – KapilaVatsyayan
5. Life in Vedic Literature – Krishna Chaitany
6. The Ramayana and the Mahabharata
7. Freedom Movement in India – Sudhir Chandra

UNIT-IICOMPREHENSION- Unseen Passage   10

UNIT-III COMPOSITION – PARAGRAPH WRITING
        (Four to be set one to be attempted)   10

UNIT-IV   LETTER WRITING (with internal choice)

- Formal letter   05
- Informal letter   05

UNIT-VA. LANGUAGE SKILLS BASED ON TEXT BOOK: 10
        Synonyms, Antonyms, Match the column, suffix and prefix
        B. GRAMMAR(25 to be set and 20 to be attempted)   20

- ArticlesandDeterminers
- The Tense forms
- Verbs
- Conditional Sentences
- Modals

BOOK: ENGLISH LANGUAGE AND INDIAN CULTURE – MADHYA PRADESH HINDI GRANTH ACADEMY.

B.C.A. - Semester II
Computer Application
[Paper: I – Programming Methodology and C Programming]

Max. Marks: 80

Min. Marks: 28　　　　　　　　　**Hours 45; Credit-3**

Unit – I : C Programming Concepts
History of C language, C Language Character set. Tokens, Constant, Keywords and Identifiers, Variables Data Types Declaration and Assignment of Variables, Defining Symbolic Constants, Operators and Expressions: Types of Operators- Arithmetic, Relational and Logical Operators, Assignment and Conditional Operators Increment & Decrement Operators, Bitwise and Special Operators, Arithmetic Expression and its evaluation, Hierarchy of Arithmetic Operations- Evaluations, Precedence and Associatively- Mathematical Functions, Library functions: Getchar (), putchar (), printf (), scanf (), puts (), gets ().

Unit-II : Control and Branch Handling
Flow of control - if, if-else, while, do-while, for loop, Nested control structures - Switch, break and continue go to statements, Comma operator, The ? : Operators, Functions -Definition - prototypes - Passing arguments - Recursion- Storage Classes - Automatic, External, Static, Register Variables, Storage Classes and Character Strings: Automatic, Register, Static, External (Local and Global), Scope rules.

Unit - III : Arrays, String, Structures and Unions in C
Arrays - Defining and Processing, Single, Two Dimensional and Multi-dimensional arrays. Passing arrays to functions, Arrays and Strings, Handling of Character Set: Declaration & Initialization of String Variables, Structures and Unions: Definitions, Initialization and Assigning Values to Members, Arrays of Structures and Arrays Within Structures, Structure with in Structure, Unions- Size of Structures.

Unit-IV : Functions and Pointers
User Defined Functions: Form of "C" functions- Calling a Function - Nesting of Functions - Recursion - Functions with Arrays, Pointers: Declaration and Initialisation of Pointers, Pointer Expression, Operation on Pointers, Pointer and Arrays, Arrays of Pointers, Pointer and Character Strings, Pointers and Functions, Pointers and Structures, Pointer on Pointers.

Unit-V : File Maintenance in C
File Input/Output: Introduction, Defining, Opening and closing a file, Study of file I/O Operations: fopen (), fclose( ), fputs ( ), fgets ( ), fread ( ), fwriteQ, Input / Output Operations on a file, Random access to file, Command line arguments, Time, Date and Localization Functions, Dynamic Allocation Functions, Utility Functions, Wide-Character Functions.

Text books:
1. LET US C, Yashwant Kanetkar, BPB PUBLICATIONS
2. The Complete Reference C, Herbert Schildt, Tata McGraw HILL
3. PROGRAMMING IN ANSI C - by E. Balgurusamy - Tata McGraw HILL
4. PROGRAMMINGWITH C. Byron Govtfred, Tata McGraw HILL

Reference Books:
1. The "C" Programming Language, Briain W. Kenigham & Dennis Ritchie, Pearson
2. The Spirit of "C"- Henry Mulish, Herbert L. Cooper.
3. Mastering "C" - Crain Bolon.

B.C.A. – Semester II
Computer Application
[Paper: II – Operating System]

Max. Marks: 80　　　　　　　**Min. Marks: 28**　　　　　　　**Hours 45; Credit-3**

Unit - I: Introduction to Operating System

What is an Operating System, Operating Systems Architecture, Operating Systems as an Extended Machine & Resource Manager, Process Model, Process States and Transitions, Types of System Calls, System Boot, Multi-Programming, Multi-Tasking, Multi-Threading; Operating Systems Classification: Simple Batch Systems, Multi-programmed Batches systems, Time-Sharing Systems, Parallel & Distributed Operating Systems.

Unit – II: Process Management

Processes: Process Scheduling, Cooperating Processes, Inter-process Communication, Threads, CPU Scheduling: Basic Concepts, Scheduling Criteria, Scheduling Algorithms, Multiple- Processor Scheduling, Process Synchronization: Background, The Critical-Section Problem, Synchronization Hardware, Semaphores, Classical Problems of Synchronization, Critical Regions, Monitors, Deadlocks: Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Recovery from Deadlock, Combined Approach to Deadlock Handling.

Unit-III: Memory Management

Main Memory Management: Background, Logical versus Physical Address space, swapping, Contiguous allocation, Paging, Segmentation, Segmentation with Paging, Virtual Memory: Demand Paging, Page Replacement, Page replacement Algorithms, Performance of Demand Paging, Allocation of Frames, Thrashing, Demand Segmentation.

Unit-IV: Device and Storage Management

File-System Interface, Mass-Storage Structure, Device Management: Techniques for Device Management, Dedicated Devices, Shared Devices, Buffering, Multiple Paths, Secondary-Storage Structure: Disk Structure, Disk Scheduling, Disk Management.

Unit-V: File-System Implementation

A Simple File System, Logical & Physical File System, File-System Interface: Access Methods, Directory Structure, Protection, Free-Space Management, Directory Implementation.

Text Books:
1. Operating System Concepts, Silbersachatz and Galvin, Pearson Education Pub.
2. Operating Systems, Madnick E., Donovan J., Tata McGraw Hill,
3. Operating Systems, A. S. Tannenbaum, PHI

Reference Books:
1. Operating Systems Internals and Design Principle, William Stallings, Prentice Hall Publishers
2. Operating Systems- A Concept-Based Approach, Dhananjay M. Dhamdhere, McGraw- Hill

B.C.A. - Semester II
Computer Application
[*Paper: III – Concept of Software*]

Max. Marks: 80

Min. Marks: 28

Hours 45; Credit-3

Unit-I : Category of Software with example and brief features

Introduction to Software (s/w), Types of s/w: Application Software & System Software, Various Application Software s/w and their examples: Word Processing s/w, Spreadsheet s/w, Database s/w, Presentation s/w, Business s/w Suite, Project Management s/w, Personal Information Manager s/w, Business s/w for Phones, Accounting s/w, Document Management s/w, Enterprise Computing s/w; Graphics and Multimedia s/w, Computer-Aided Design s/w, Desktop Publishing s/w, Image Editing s/w, Video and Audio Editing s/w, Multimedia Authoring s/w, Web Page Authoring s/w; Software for Home, Personal, and Educational Use: Personal Finance s/w, Legal s/w, Tax Preparation s/w, Home Design/Landscaping s/w, Travel and Mapping s/w, Reference and Educational s/w, Entertainment s/w, Web Applications s/w, Application Software for Communications.

Unit- II : System Software

System Programming and System Programs, Needs of System Software, BIOS, POST sequence, Concept & introduction to various system s/w such as: Assemblers, Loaders, linkers ,macro processors, Macros, Compilers, Interpreters, Operating system and formula system, Translators and its types, Editor, Simulator, Emulator, Debugger, Device Drivers, Firmware.

Unit-III : Assemblers and Macro processors

Assemblers: Structure of assembler, Overview of the assembly process, Basic function, Machine dependent and machine independent features of assembler, Types of assemblers - single pass, multi-pass, cross assembler, Macros & Macro processors: Macro definition and examples, Basic Macro Processor Functions, Machine Independent Macro Processor Features, Concept of Parameterized Macro, Nested Macros, Conditional Macro Expansion, Recursive Macro. Symbolic debugger.

Unit – IV : Loaders and Linkage Editors

Basic Loader Functions, Linking and Concept of Static & Dynamic Relocation, Various loader schemes with their advantages and disadvantages, Other loader schemes - binders, Linking loaders, Dynamic binders, Machine dependent & Machine Independent Loader Features, Interpreters: use of interpreter, pure and impure interpreter.
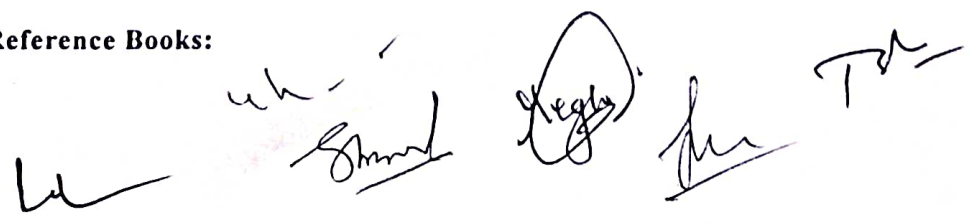
Unit-V Compilers

Introduction to Compilers, Phases of a Compiler, Comparison of Compilers & Interpreters, Machine dependent & Machine Independent Compiler Features, Aspects of Compilation, Lexical Analysis, Syntax Analysis, Memory Allocation, Compilation of Expressions; Code optimization - local and global optimization, Study of LEX & YACC.

Text Books:
1. System Programming- J. J. Donovan, Tata McGraw-Hill Education.
2. System Programming and Operating systems- D. M. Dhamdhere, Tata McGraw-Hill
3. System Software: An introduction to systems programming- Leland L. Beck, Pearson Education
4. Principles of Compiler Design-Aho and Ullman, Pearson Education.

Reference Books:

1. Compiling Techniques, J P Bennett, TMH .
2. Modern Compiler Design, Dick Grune, Koen G.L, Henri Bal, Wiley India.
3. Compiler Construction, Principles and Practice, Kenneth C. Louden; Cengage Learning

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B.C.A. – Semester II
Computer Application
[*LAB: I – Lab of Software Packages*]

Max. Marks: 50x2   **Min. Marks: 17x2**

Section-A
WINDOWS 7 : Basic Elements of WINDOWS, My Computer, Sharing Devices, Windows Explorer, Accessories: Entertainment, Communication, System Tools, Paint Brush, Calculator, Calendar, Clock, Note Pad, Word Pad Etc., Control Panel, Changing Color and Theme, Changing the Desktop Background, Screen Saver, Adjusting Display Settings, Adjusting Sound, Adjusting the Mouse, Changing the Date and Time.

Section-B
Introduction to MS Word: Menus, Shortcuts, Document types; Working with Documents: Opening Files - New & Existing, Saving Files, Formatting page and Setting Margins, Converting files to different formats- Importing, Exporting, Sending files to others, Editing text documents- Inserting, Deleting, Cut, Copy, paste, Undo, Redo, Find, Search, Replace, Using Tool bars, Ruler- Using Icons, Using help; Formatting Documents: Setting Font Styles, Setting Paragraph style, Setting Page Style, Setting Document Styles, Creating Tables, Drawing, Tools, Printing Documents.

Section-C
Introduction to MS Power Point: Opening new Presentation, Different presentation templates, Setting backgrounds, Selecting presentation layouts, Creating a presentation, Formatting a presentation-Adding style, Color, gradient fills, Arranging objects, Adding Header & Footer, Slide Background, Slide layout, Inserting pictures, movies, tables.

Section-D
Introduction to MS Excel: Introduction: Spreadsheet & its Applications, Opening spreadsheet, Menus & Toolbars & icons, Shortcuts, Working with Spreadsheets-Opening a File, Saving Files, Setting Margins, Converting files to different formats- Importing, Exporting ar^Sending files to others, Spreadsheet addressing, Entering and Editing Data, Computing data- Setting Formula, Finding total in a column or row, Mathematical operations, Formulas, Formatting Spreadsheets & Printing worksheet.

Section-E:
Introduction MS Access: Database concepts: Tables, Queries, Forms, Reports, Opening & Saving database files: Creating Tables, Table Design, Indexing, Entering data, Importing data, Creating Queries: SQL statements, Setting relationship, Creating Forms: GUI, Form, Creating & printing reports.

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B.C.A. – Semester II
Computer Application
[*LAB: II* – Programing Lab in C

List of C Programs

Program to Find area and circumference of circle.
Program to Find the Simple interest.
Program to Find Convert Temperature form degree centigrade to Fahrenheit.
Program to Find Calculate sum of 5 subjects & find percentage.
Program to Show swap of two no's without using third variable.
Program to reverse a given number.
Program to print a table of any numbers.
Program to find greatest in 3 numbers.
Program to show the use of conditional operator.
Program to find that entered year is leap year. Or not.
Program to find whether given no is even or odd.
Program to shift input data by two bits to the left.
Program to use switch statement, Display Monday to Sunday.
Program to display arithmetic operator using switch case.
Program to display first 10 natural no & their sum.
Program to print Fibonacci series up to 100.
Program to find GCD &HCF of given Numbers using Recursion.
Program to find whether gives no is a prime no or net.
Program to display sum of Series 1+1/2+1/3.......+7/n.
Program to display series and find sum of 1+3+5+.... +n.
Program to use bitwise AND operator between the two integers.
Program to add two number using pointer.
Program to find sum, subtraction, multiplication & Transpose of matrices .
Program to reverse a number using the pointer .
Program to show input and output of a string.
Program to find square of a number using functions .
Program to swap two number using of function .
Program to find factorial of a number using functions.
Program to show table of a number using functions.
Program to show call by value.
Program to show call by reference.
Program to find largest of two number using function.