BCA-110 GENERAL ENGLISH

Maximum Time : 3 Hrs. University Examination : 70 Marks

Total Marks : 100 Continuous Internal Assessment : 30 Marks

Minimum Pass Marks : 40%

(A) Instructions for the Paper setter:

The question paper will consist of five sections: A, B, C, D and E. Sections A, B, C and D will have two questions from the respective sections of the syllabus and will carry 15% of the total marks (12 marks) each. Section E will consist of 10 short answer type questions, which will cover the entire syllabus uniformly and will carry 40% of the total marks (32 marks) in all.

(B) Instructions for the Candidates:

1. Candidates are required to attempt one question each from the section A, B, C and D of the question paper and the entire section E.
2. Use of non-programmable scientific calculator is allowed.

SECTION A

Basic Skills :- Listening, Speaking, Reading & Writing.

A Practical study of Grammatical Rules (Noun, Pronoun, Adjectives, Verb, Adverb)

Tenses :- Types of Tenses

SECTION B

Idioms & Phrases,

Confused works :- Paronyms, Homonyms

Synonyms, General Abbreviations,

One word Substitution

SECTION C

Simple present, progressive & present perfect, Simple past, progressive & Past perfect, Indication of Futurity, the passive (Present & Past, Present & Past Perfect).

Reported Speech :-

(I) Declarative Sentences (II) Imperative

(III) Interrogative (Question) (IV) Active, Passive

(V) Preposition (VI) Articles

SECTION D

Writing Skills :-

Paragraph Writing, Composition Writing, Report Writing, Application & Letter Writing, Essay Writing.

Reference:

1. Tandon, R.C. Seth, R.R. Agarwal
2. V.K. Maheshwari - "English Grammar and Composition" Ratan Prakashan Mandir.
3. Sidhu, Prem & Kapoor "Collegiate English Grammar Composition & Translation" Khosla Publishing House.

BCA-120 FUNDAMENTALS OF COMPUTERS & C LANGUAGE

Maximum Time : 3 Hrs.
Total Marks : 100
Minimum Pass Marks : 40%

University Examination : 70 Marks
Continuous Internal Assessment : 30 Marks

(A) Instructions for the Paper setter:
The question paper will consist of five sections: A, B, C, D and E. Sections A, B, C and D will have two questions from the respective sections of the syllabus and will carry 15% of the total marks (12 marks) each. Section E will consist of 10 short answer type questions, which will cover the entire syllabus uniformly and will carry 40% of the total marks (32 marks) in all.

(B) Instructions for the Candidates:
1. Candidates are required to attempt one question each from the section A, B, C and D of the question paper and the entire section E.
2. Use of non-programmable scientific calculator is allowed.

SECTION A
Basic components of a digital, Classification of Computers, Generation of Computer, Generations of language, Machine level, Assembly.

SECTION B
Number System :- Binary Number System, Decimal, Hexadecimal, Octal Numbers, Conversions, Signed Numbers, Number System Representation (Sign- Boolean Algebra, Truth Table.

SECTION C
O. S. Definition, Function of O.S., Multi-programming & Multitasking, Time sharing, Real Time systems, Network O.S, Distributed O.S.

SECTION D
Tokens, Keywords, Identifiers, Custom Data Types, Operators, Type Costing, Functions, Pass by value, pass by reference, Arrays, Pointer, Structure, Unions, File processing, Pre-processing.

References:

1. Kanetkar, “Let us C”, BPB Publication.
2. E.Balaguru swami, “programming in C”, TMH
3. E. Balaguru Swami, “Programming with C”, TMH

BCA-130 MATHEMATICS

Maximum Time : 3 Hrs. University Examination : 70 Marks
Total Marks : 100 Continuous Internal Assessment : 30 Marks
Minimum Pass Marks : 40%

(A) Instructions for the Paper setter:
The question paper will consist of five sections: A, B, C, D and E. Sections A, B, C and D will have two questions from the respective sections of the syllabus and will carry 15% of the total marks (12 marks) each. Section E will consist of 10 short answer type questions, which will cover the entire syllabus uniformly and will carry 40% of the total marks (32 marks) in all.

(B) Instructions for the Candidates:
1. Candidates are required to attempt one question each from the section A, B, C and D of the question paper and the entire section E.
2. Use of non-programmable scientific calculator is allowed.

SECTION A
Set Theory: Set notations, Operation on sets, Subsets, Venn diagrams, Method of proof for sets, Laws of set theory, Partition of sets, Minsets, Duality principle. Relation: one-to-one, One-to-Many, Many-to-Many relations, onto relations, Inverse relations. Functions: Defining functions, range, domain, functions and relations, Inverse of a function, composite functions. Combinatorics : Rules of products, Permutations, Combinations and Power sets.

SECTION B
Limit continuity, Differentiation :- Derivatives of Polynomial equations, Trigonometric function, Inverse Trigonometric function, Application of Derivatives, Tangent, Normal, Maxima, Minima, Rolle's Trigonometric function, LMV Theorem, Introduction to Partial Derivative.

SECTION C
Integration of polynomial equation, Trigonometric function, Inverse Trigonometric function Standard function, Definite Integral, Limit of Sum method, Area under the curve.

SECTION D
Laws of matrix algebra, System of linear equations, Matrix inversion, Eigen Values, Eigen Vectors, Characteristic equation, Diagonalization.

References:

1. B.S. Grewal & J.S. Grewal, "Higher Engineering Mathematic", Khana Publishers.
2. R.D. Sharma, "Mathematics".

BCA-140 PC SOFTWARE

Maximum Time : 3 Hrs.
Total Marks : 100
Minimum Pass Marks : 40%

University Examination : 70 Marks
Continuous Internal Assessment : 30 Marks

(A) Instructions for the Paper setter:
The question paper will consist of five sections: A, B, C, D and E. Sections A, B, C and D will have two questions from the respective sections of the syllabus and will carry 15% of the total marks (12 marks) each. Section E will consist of 10 short answer type questions, which will cover the entire syllabus uniformly and will carry 40% of the total marks (32 marks) in all.

(B) Instructions for the Candidates:
1. Candidates are required to attempt one question each from the section A, B, C and D of the question paper and the entire section E.
2. Use of non-programmable scientific calculator is allowed.

SECTION A
Definition of software, Type of software, Application Software, Definition of system software, Benefits of using software. Window concepts, Features, windows structure, desktop, taskbar, start menu, user interface, GUI, CUI, My computer, Recycle bin, Window Accessories.

SECTION B
Word Procuring :- Ms Word – Introduction to word processing, Interface, Toolbars, Ruler, Menus, Keyboards shortcuts, Editing a document, Formatting documents, Checking the grammars & spelling, Formatting via find and replace, Word Count, Mail merge, Template, macros, Table, Converting a word document into various formats.

SECTION C
Ms- Excel :- Creating worksheet, Entering data into sheets, handling information data, text, data, alphanumeric, values, saving and quitting worksheet, opening and moving around in an existing worksheet, Toolbars and menus, Keyboard shortcuts, Working with single and multiple workbook, Working with formulas cell referencing, formatting of worksheet.

SECTION D
Introduction about Ms Access, Definition of Data, Definition of Data base, Definition of Data base management system.

References:

1. Ramesh Bangia, “Cyber Tech. Educational Series Understating Microsoft 2000”, cybertech.
2. Sanjay saxena, “Ms-Office 2000 for every one ”, Vikas publishing