

1992 FYB Com

GUJARAT UNIVERSITY

Navrangpura, Ahmedabad-380 009

SUBJECT F.Y.B.COM

Academic Section

(4)

BOARD OF STUDIES IN ADHOC BOARD OF _____

Year : _____

MEETING

	DATE	TIME
(1)	- -200 _____	- P.M.
(2)	- -200 _____	- P.M.
(3)	- -200 _____	- P.M.
(4)	- -200 _____	- P.M.
(5)	- -200 _____	- P.M.

GUJARAT UNIVERSITY



FIRST B.COM. EXAMINATION

(In force from June, 1978)

(New Course in force from 1980)

O. Com. I :

A candidate for admission to the First Year B.Com. of the Three-year Degree Course must have passed the Higher Secondary School Certificate Examination with Commerce group of subjects, conducted by the Gujarat Higher Secondary Education Board or an examination of any other University recognised as equivalent thereto or the Pre-University Commerce Examination. A candidate who has been allowed to keep terms for the First B.Com. class will also be eligible for admission to the F.Y.B.Com. class.

No candidate shall be admitted to F.Y.B.Com. examination, unless —

- (i) he has kept two terms at a college affiliated to this University for the purpose of this examination, and
- (ii) he produces satisfactory testimonials in the prescribed form that he has gone through the Physical Training required to be undergone unless exempted therefrom on the ground that he is medically unfit to undergo such exercise or that he is a member of the National Cadet Corps or a member of N.S.S. unit of the college or that he has been regularly taking part as a member of the college team in the recognised fixtures of the major games.

Note. — (1) In order to go through Physical Training satisfactorily, a student shall have attended the Physical Training class of his College for at least 3/4 of the possible number of periods.

(2) A member of the National Cadet Corps exempted from Physical Training will be required to attend at least 75 per cent of the number of parades.

(3) A member of the N.S.S. units of the college will be required to put in 120 hours of work or any other work that may be decided upon by the college as per N.S.S. scheme as and when introduced by the University.

O. Com. 2 :

Candidate must forward their applications for examination to the Registrar on or before the prescribed date with the certificate of attendance during the first term. Certificates of attendance during the second term shall be forwarded by Principals of colleges within a week of the close of the second term.

R. Com. I (First B.Com. New scheme in force from June, 1978) :

The following are the subjects prescribed for the Two terms of the First B.Com. Examination :

No.	Subjects	Marks		Duration of Examination	
		Paper	External		Intern.
1.	English	One	70	30	3 hours
2.	Commercial Communication-I	"	"	"	"
3.	Economics-I	"	"	"	"
4.	Accountancy	"	"	"	"
5.	Business Organisation and Management-I	"	"	"	"
6.	Principal Subject	One	"	"	"

One paper, i.e., Paper I in any one subject from the following offered as Principal subject :

- (1) Advanced Accountancy & Auditing
- (2) Advanced Business Management
- (3) Advanced Statistics
- (4) Actuarial Science
- (5) Economics of Cotton
- (6) Agriculture with Commercial and Managerial aspects
- (7) Banking & Finance
- (8) Public Administration
- (9) Advanced Public Economics
(including public enterprise)
- (10) Business Statistics.

7. Subsidiary Subject

One 70 30 3 hours

One paper, i.e., Paper I in any of the subjects in (6) above other than the Principal subject offered or any one from the following offered as a subsidiary subject :

- (1) Secretarial Practice
- (2) Marketing
- (3) Insurance
- (4) Business Communication (English language)
- (5) World Resources and World Trade
- (6) Co-operation
- (7) Mathematics for Statistics or Actuarial Science
- (8) Computer Programming and Data Processing Paper I.

Reg. F.B.Com. I :

(Common Regulation for F.Y.B.Com., S.Y.B.Com., and T.Y.B.Com. Examinations) :

- (i) The marks for the internal evaluation in each paper shall, except when it has been specifically provided to the contrary, be 30 per cent of its total marks and every candidate shall be required to pass separately in internal evaluation.

- (ii) The 30 % of the total marks reserved for internal evaluation shall, except where specifically provided to the contrary, be distributed as follows .
- 25 % for not less than the prescribed number of test held as per relevant rules in this behalf during the year and 5% for class-work attendance and performance in general during the year.
- (iii) Each question-paper for a full-length test shall be as per the duration fixed by the University for its examination.
- (iv) The result of each test shall be put on the notice board within one month after it is held.
- (v) The answer-scripts of the candidates in the various tests shall be duly examined and assessed by the Examiners concerned in the colleges and shall be marked in ink, and no marking shall be erased or defaced and no correction of marking made without corresponding initialling by the Examiner to whom the work is assigned, in support of the correction.
- (vi) The answer-scripts of the candidates in the various tests shall be confidentially preserved by the colleges for at least eight months after the expiry of the academic year to which they relate and shall be produced before the University as and when asked for by the University office.
2. (i) No candidate who has not passed in at least half the number of heads for internal evaluation shall be admitted to the University examination concerned and in the event of such admission made through mistake or any reason whatever, it shall be deemed to be cancelled in which event full examination fees shall be refunded to the candidate.
- (ii) The result of the internal evaluation shall be placed on college notice board by the 15th March every year or before the date on which the examination commenced, whichever is earlier and any candidate who has doubt or dispute relating thereto shall apply to the Principal of the college within two days of the declaration of the result for internal evaluation in the subject concerned together with a fee of Rs. 5/- which shall be retained by the college if no mistake is found or returned to the candidate if mistake is found. If a mistake is found, the Principal shall communicate the amended result within three days provided that no amendment shall be entertained by the University, if it is received after 15th April of the year to which it relates.
- (iii) The decision of the Principal on the internal evaluation or any doubt or dispute relating thereto shall, subject to the time-limit mentioned in No. (ii) above, be final and no appeal shall be entertained thereon.
3. The marks in the Internal evaluation of a candidate who has failed in one or more heads of passing shall be carried forward unless the candidate is permitted by the Principal to appear in the tests for internal evaluation again as per relevant rules in this behalf, in which cases the revised result as communicate by the Principal shall take the place of the original result in records.
4. It shall be the duty of the college to communicate the results of internal evaluation of all the candidates whether fresh or repeaters by the prescribed date and in the prescribed manner.

Provided further that a student appearing at the above examination has to appear for the purpose of internal evaluation in one full-length examination in each term as follows :

1. The full-length examination will be held in each term as per the pattern and the duration prescribed for the University examination.
2. Wherever any practical work is assigned for a course of study in any subject, it will be compulsory for every student to appear in one full-length examination in each term in each subject for the practical work as per the pattern and duration prescribed for the University practical examination in addition to the theoretical tests in the subjects.
4. The Principal of the college is authorised to arrange for an extra test, if he so wishes, in case a student is not able to appear at any one test for a bonafide reason, provided that under no circumstances, a student shall be given an opportunity to appear at an extra test more than once.
5. The marks assigned to each student for the total internal evaluation in each subject shall be sent to the University by 20th March every year by the Principal of the College from where the student is sent up for the examination.

R. Com. I-A :

Candidates will be allowed to change their subjects only in the First Year of the Degree Course, provided that such a change is made before 15th November of the year in which he joins his First Year of the Degree Course. Notwithstanding anything contained above the Vice-Chancellor may on the recommendation of the Dean of Faculty, permit a student for change in his optional subject for the reasons deemed sufficient by them.

R. Com. I-B : Deleted.

R. Com. 2 :

The following are the syllabi in the subjects for First B.Com. Examination :

(1) ENGLISH (Compulsory) (New course)

(In force from June, 1984)

General Objectives :

- (a) The emphasis in English (Compulsory) courses in Arts, Science and Commerce under three-Year Degree Pattern shall be on learning and teaching of language skills so that by the end of their University studies the students are enabled—
 - (1) to read and understand on their own writing in English having relevance to the academic disciplines of their choice and
 - (2) to express themselves in writing with a degree of accuracy in English on subjects within their experience and in forms having functional utility.
- (b) The teaching and learning of the text-books prescribed for these courses, shall be geared entirely to the satisfactory attainment of the objectives mentioned in 'A' above.

For exercises on language work the students will be required to use the prescribed Work-Book. The Work-Book will cover, besides work done in Lectures/ tutorials, the assignment given to students by the teacher. The Work-Book will be required to be certified by the Head of the Department and the Principal of the College. 5 marks of internal evaluation, at present allotted for tutorial work in compulsory English, paper will be given on the basis of student's Work-Book.

III. Stream 'A' at F.Y. Level :

(1) Objectives :

While serving to attain to a certain extent the general objectives stated in I above this course shall seek to ascertain and consolidate the students' attainment in English in terms of a prescribed vocabulary and certain areas of grammar.

(2) Contents :

(a) Text-book study : ... 30 marks

1. Short questions (2 to 3 sentences) (10 marks)
2. General question (20 to 25 sentences) (10 marks)
3. Short notes (10 to 12 sentences) (10 marks)

(b) Vocabulary (Text based) ... 7 marks

For Vocabulary from the Text-book prescribed :

Words given in the section entitled "Notes and Exercises" Section of the prescribed Text-book under the heading *Difficult words* as well as in the first exercise under the heading *Vocabulary and grammar* are to be done.

(c) Grammar ... 15 marks

(d) Comprehension (An unseen paragraph of about 200 words) ... 10 marks

(e) Composition (Paragraph writing of not more than 100 words) ... 08 marks

(3) Language work--Details Language work--Details

Verb-kinds of verb (Regular-irregulars)

Tenses :

Simple Present (Not in the sense of future)

Progressive Present

Simple Past

Perfect Present

Progressive past

Perfect past

Simple future

Auxiliaries : Do, Have, Be.

Articles and Determiners } a, an, the, some, any

Pronouns : Personal, Reflexive, Emphatic, Demonstrative, Indefinite, Interrogative, Distributive, Relative.

IV. Stream 'B' at F.Y. Level :

(a) Objectives :

This course is intended to help the students acquire a minimum vocabulary and basic structures of English so as to enable them—

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1. to read and understand on their own relatively short passages in English within that range and
2. to write a short, i.e. guided narrative paragraph of about 100 words.

(b) Contents :

(a) Text-book study :	... 35 marks
1. Short questions (2 to 3 sentences) (15 marks)	
2. Short notes (10 to 12 sentences) (10 marks)	
3. Comprehension (Text based) (10 marks)	
(b) Vocabulary (Text based)	... 8 marks
(c) Grammar	... 15 marks
(d) Comprehension (Unseen passage of about 150 word)	... 07 marks
(e) Guided composition (Paragraph writing)	
(Not more than 75 words)	... 05 marks

Text-book for grammar :

Practical English Grammar—Thomson and Martinet.

(c) Language work—Details :

Verbs : Subject-verb, Agreement.

Tenses (Introduction only) : 7 Tenses.

Auxiliaries : Do, Have, Be.

Pronouns : Personal, Reflective, Emphatic, Demonstrative, Infinitive, Interrogative, Distributive.

(2) COMMERCIAL COMMUNICATION—Paper I (Compulsory)

(New Course in force from June, 1980)

The objective of this course is to help the student to be familiar with and to understand simple narations in English on business situations and to help them to learn progressively skills of drafting routine non-legal business letters as well as to summarise or translate writings into simple language.

1. Understanding the Basics (15% marks)

- 1.01 Understand letter as an effective means of Communication.
- 1.02 Understand different parts of the layout of a Business letter.
- 1.03 Recognise correct and incorrect specified details from those given in 1.02.
- 1.04 Show familiarity with different Formats.
- 1.05 Show familiarity with factors affecting the appearance of a business letter.
(Stationery, Typing, Margins, Spacing and Envelope)
- 1.06 Qualities of a good business letter.
(Correctness, Conciseness, Clarity, Courtesy, Co-ordination (Logical linking of ideas) and appropriate language).

2.00 Drafting of the letters (40% marks)

- 2.01 Letters of Inquiry, Replies to them.
- 2.02 Orders, Cancellation of Orders, Replies to Orders.
- 1.03 Letters of Complaint and replies to such letters including adjustment.
- 2.04 Circulars announcing opening a Shop / Branch / Department / Counter / An Agency acquired, Change in Premises, Reduction Sale, Change in Prices.

2.05 Applications for Positions.

3.00 Developing a Theme (15% marks)

3.01 Develop a Theme for or against a given proposition (in not more than 150 words), which is within the range of experience of students (The proposition will be selected from a general context).

4.00 Translation from English into Gujarati / Hindi OR summarising a given passage in English (15% marks)

4.01 Translate a passage (of not more than 100 words) on a topic of commercial or economic interest from English into Gujarati / Hindi.

OR

4.02 Summarise a given passage in English (of 200-350 words) on a topic of commercial or economic interest.

5.00 Vocabulary testing (15% marks)

5.01 Vocabulary testing of around 100 words often confused and misused in a manner either than through a question or filling in the gaps.

(The words prescribed are the same as for 1980 exam.)

N.B.—(1) There will be no question on theory related to 2-00

(2) In selecting a passage under 4.02 its Vocabulary level of students at First B.Com. will be taken into considerations.

(3) In the Assignment of marks 9 latitude of 3% is permitted.

New List of Words for C. C.—Paper I

1. Accept	14. Commission	27. Destructive
Except	Commitment	Destructible
2. Access	15. Canvas	28. Decease
Excess	Canvass	Disease
3. Accede	16. Clothes	29. Draft
Exceed	Cloths	Draught
4. Affect	17. Council	Drought
Effect	Counsel	30. Effective
5. Alternate	18. Coarse	Efficient
Alternative	Course	31. Fair
6. Ascent	19. Cast	Fare
Assent	Caste	32. Formerly
7. Bail	20. Cost	Formally
Balr	Coast	33. Hoard
8. Born	21. Complement	Horde
Borne	Compliment	34. Human
9. Bought	22. Cite	Humane
Brought	Sight	35. Intolerant
10. Breath	23. Cue	Intolerable
Breathe	Queue	36. Loose
11. Break	24. Deficiency	Lose
Brake	Deficit	37. Lightening
12. Beside	25. Dependent	Lighting
Besides	Dependable	38. Lead
13. Confidant	26. Dear	Led
Confident	Deer	39. Main
		Mane

40. Momentum	54. Suit	69. Defer	86. Addicted
Momentous	Suite	Differ	Devoted
41. Passed	55. Successful	70. Eligible	87. Cold
Past	Successive	Illegible	Cool
42. Permissible	56. Team	71. Imminent	88. Character
Permissive	Teem	Imminent	Conduct
43. Patrol	57. Trial	72. Ingenious	89. Childish
Petrol	Trail	Ingenuous	Childlike
44. Pray	58. Vain	73. Industrial	90. Clean
Prey	Vain	Industrious	Clear
45. Principal	Wane	74. Incredible	91. Continual
Principle	59. Vocation	Incredulous	Continuous
46. Rain	Vacation	75. Judicial	92. Custom
Reign	60. Waste	Judicious	Habit
47. Rays	Waist	76. Official	93. Contagious
Raze	61. Wear	Officious	Insectious
Raise	Ware	77. Precedent	94. Deny
48. Right	62. Weather	President	Refuse
Rite	Whether	78. Popular	95. Envious
Write	63. Adapt	Populous	Jealous
49. Ring	Adopt	79. Proceed	96. Doubt
Wring	Adept	Precede	Suspect
50. Route	64. Accident	80. Respectable	97. Sensible
Rout	Incident	Respectful	Sensitive
51. Role	65. Amicable	81. Abstain	98. Social
Roll	Amiable	Refrain	Sociable
52. Soul	66. Allusion	82. Admit	99. Very
Sole	Illusion	Confess	Vary
53. Story	67. Creditable	83. Answer	100. Verbal
Storey	Credulous	Reply	Oral
	68. Consious	84. Artist	Verbose.
	Conscientious	Artisan	
		85. Avenge	
		Revenge	

(3) ECONOMICS—1 (Compulsory) (New Course)

(Inforce from June, 1986)

1. Theory of Demand : 25% marks

(a) Derivation of Law of demand on the basic of Utility analysis—Law of Diminishing utility—limitations of Utility analysis—Indifference curves—concept and characteristics—Budget line—depicting consumer's and budget line—change in the price of a commodity and its impact on demand price effect, its division into substitution effect and income effect—concept of consumer's surplus.

(b) Concepts and usefulness of price elasticity and income elasticity of demand—factors influencing price elasticity of demand.

2. Behaviour of a Firm : 10% marks

(a) Various concepts of costs : Fixed and Variable costs—Marginal Cost—Average cost—Average cost and Total Cost.

(b) Concepts of Revenue : Concepts and nature of marginal revenue—Average revenue and total revenue in perfect competition and other forms of market.

3. Different Markets Structures : 30% marks

- (a) Perfect Competition : Meaning—equilibrium of the firm in the short run Equilibrium of the industry.
- (b) Monopoly : Meaning—Forms types—price determination—Possibility and profitability—price discrimination and social welfare—effects—of Monopoly power.
- (c) Monopolistic Competition : Meanings and characteristic price determination—selling cost—impact on demand price competition v/s non-price competition—meaning of oligopoly & Duopoly.

4. Distribution : 20% marks

Marginal productivity theory as a general theory of distribution—modern theory of rent—collective bargaining theory of wages—effects of minimum wages—risk, uncertainty, innovation—theory of profit.

5. Public Finance : 15% marks

Classification of taxation—Elementary idea of incidence and effects of taxation—importance and effects of public expenditure—types of public debt, (Effects of individual taxes will not be asked).

(4) ACCOUNTANCY (Compulsory) (New Course) (Inforce from June 1986).

(A) Analysis and Classification of Cost : 15 % Marks

(a) Elements of Cost :

- (i) Materials : Meaning of direct and indirect materials : Explanation and meaning of terms—Raw materials, Stores, Spares, Components, Work-in-progress finished goods.
- (ii) Labour : Meaning of direct and indirect wages (excluding payment of wages to casual workers, idle time, over-time, labour-turnover).
- (iii) Expenses : Meaning of direct and indirect expenses; difference between indirect expenses and overheads; Types (Classification) of overheads.

(b) Preparation of a Statement (Simple and of a Primary Nature) :

50% Marks

Note.—(1) In the examination, paper-setter is expected to clarify the nature of and stage at which the scrap (in any) occurs and how it is to be valued. The work-in-progress (if any) should also be clearly identified with a specific stage i.e., prime cost or factory cost.

- (2) Preparation of simple cost Statement only; Computation of tender or budget based on given cost data is not expected.

(B) (1) Consignment Accounts :

50 % Marks

Main features : Consignment as a method of distribution; Difference between consignment and scales—Preparation of Account Sales & Pro-forma invoice—Books of consignor (except preparation of final accounts) including valuation of closing stock, calculation of normal and abnormal loss, calculation of different types of commissions, Books of consignee (only consignor's accounts & related journals entries.)

(2) Joint Venture Accounts :

Purpose—Difference between joint venture—consignment and partnership—preparation of Books of Accounts under the following methods :

- (i) When separate Books are not kept.
- (ii) When separate books for joint venture (only Joint Bank a/c. method) are maintained.
- (iii) Consignment business in joint venture.

(3) Accounts of Non-trading Institutions :

Concept of Non-trading Institutions (Hospital, Educational Institutions, Sports Club, Public Library and other Social service organisations).

Definition and Distinctions of Capital Expenditure—Revenue Expenditure & Deferred Revenue Expenditure with practical illustrations.

Preparation of Receipts and Payments A/C, Income—Expenditure A/C. and Balance sheet.

(4) Branch Accounts :

Meaning of Branch : Distinction between Sales effected through Branch, Consignment, Joint venture and Brokers.

- (i) Dependent Branch : Records & Books to be kept by a branch—Accounting treatment in the books of H. O. only including Stock & Debtors system.
- (ii) Independent Branch : Accounting treatment in the books of Branch and H. O. (excluding foreign Branch).

Note.—Consolidated Balance Sheet may be asked in case of H. O. having only one branch.

(5) Hire-purchase Accounts :

(excluding Hire purchase Trading A/c) : Meaning; Difference between Hire-purchase and Instalment; Calculation of interest and cash price (including use of Annuity Table)

Accounting treatment in the books of purchaser and vendor (except in case of default and repossession).

(1) Reading of Ledger Accounts : 20% marks

Meaning; Basic rules involved; Practical significance; Interpretation.

Accounting concepts, conventions and Principles :

Concept : (i) Entity concept (ii) Going concern concept (iii) Cost concept (iv) Stable money value concept.

Conventions and Principles :

- (i) Conservatism (ii) Materiality (iii) Disclosure (iv) Periodicity
- (v) Objectivity (vi) Realisation (vii) Matching with revenue
- (viii) Consistency.

Note.—Illustrative objective questions shall be asked to test the understanding of the concepts and conventions.

(3) Structure of a Balance Sheet :

- (i) Balance sheet : Meaning and purpose (objectives) its preparation.
- (ii) Coverage of Balance sheet : i.e. Assets and Liabilities

Assets : Tangible, Intangible and Fictitious.

Liabilities : Owners' capital, Reserves and surpluses, Long term liabilities, and Current liabilities.

(iii) Arrangement of assets and liabilities :

(a) (i) In order of permanency

(ii) In order of liquidity,

(b) (i) Horizontal (ii) Vertical.

(iv) Computation of the following items from a given balance sheet :

(i) Owners' funds (ii) Long term liabilities (iii) Total investment as per books of accounts (iv) Long term investment as per books of accounts (v) Gross and Net current assets (Gross and Net Working Capital) as per books of accounts.

(D) Writing up to following subsidiary Books from not more than 8 given vouchers and posting therefrom : (15% marks)

(i) Purchases Book (ii) Sales Book (iii) Purchase Return book
(iv) Sales Return Book (v) Cash Book (three columnar)

Notes.—(1) A latitude of 5% in the relative weightage of the allotted marks is permissible.

(2) The paper shall be set in such a manner that the student will not be able to leave any one or more of the given topics of the syllabus.

(5) BUSINESS ORGANISATION MANAGEMENT—I (Compulsory)

(In force from June, 1986)

(1) Process of Management (20% marks)

Meaning of Management—Characteristics of Management—Levels of Management—Management skills Viz. Conceptual, Technical and interpersonal.

Functions of Management—planning and decision making, Organising, directing and controlling.

Planning and decisions making—meeting process i.e. steps in planning and decision making.

Organising—meaning and Steps in Organising.

Directing—meaning and tools of directing Viz, motivating leading and Communicating.

Controlling—meaning and steps in Controlling.

(2) Personnel Management—meaning functions. (50% marks)

Employee procurement—Man power Planning—meaning, Objects and steps—Labour turnover (including methods of Computation) Absenteesm—meaning, causes, effects and measurement—Job analysis, job discription, Job specification—their meant and uses.

Recruitment and selection—procedure psychological and other tests, techniques of interviewing.

Employee development—training—methods of training Viz. on the job traing, vestibute training, case study role playing, business games.

Employee Advancement—Promotion—merit Vs. seniority as basis of promotion.

Employee appraisal—meaning—methods of appraisal Viz. Graphic or linear rating scale, forced choice method and critical incident method.
Employee compensation—time rate and piece rate method Calculation by factor comparison method.

Problems of incentives—group incentive and profit sharing.

(3) Production Management (30% marks)

production. Meaning of Production Characteristics of Plant location—factors affecting location.

Plant Layout—product and process Layout—their meaning respective merits and demerits.

Breakeven Analysis, PERT—CPM. (Only arithmetical examples on these topics)

Purchasing—meaning—importance—problems of purchasing—purchase policy—purchase procedure—Organisation of purchase department; evaluation of working of the purchase department.

Materials management—meaning—importance—inventory—Types of inventory—inventory control objectives of inventory control methods of inventory control—A.B.C. analysis—Economic order quantity.

Quantitative Levels of inventory—maximum and minimum and reordering levels—danger level. EOQ.

(Practical problems on the above to be covered)

PRINCIPAL AND SUBSIDIARY SUBJECTS

- (1) Advanced Accountancy & Auditing
- (2) Advanced Business Management
- (3) Advanced Statistics (Common paper)
- (4) Actuarial Science
- (5) Economics of Cotton
- (6) Agriculture with Commercial and Managerial Aspects
- (7) Banking & Finance
- (8) Public Administration
- (9) Advanced Public Economics including Public Enterprise
- (10) Business Statistics.

(1) ADVANCED ACCOUNTING AUDITING

(New Course in force from June, 1986)

(A) (1) Admission of a Partner : (55% marks)

New agreement regarding share of Profits, Revaluation of assets and liabilities : Meaning of Goodwill and its valuation based on simple or weighted average profits of last few years only : Treatment of Goodwill on admission; Agreement regarding capital of partners in the new firm.

(2) Joint Life Policy :

Accounting treatment of premium paid by the firm :

- (i) Premium as revenue expense
- (ii) premium as capital expenditure
- (iii) premium as capital expenditure to be carried forward only to the extent of surrender value
- (iv) premium as capital expenditure to be

carried forward to the extent of surrender value after creating "Joint Life policy Reserve A/c"; Life insurance policy of individual partners taken by the firm, Treatment on maturity of Joint Life Policy of life insurance policy of individual partners.

(3) Retirement of death of a partner :

Revision of remaining partners' share interse Revaluation of Assets and Liabilities at the time of retirement or death; Treatment of Goodwill; Mode of payment to outgoing partner, Agreement regarding capital of the remaining partners.

(4) Retirement cum admission :

Note : The problems involving computation of profits prior to retirement and after admission of the new Partner/s are not expected to be covered in topics (1), (3) and (4).

(5) Dissolution of Partnership firm (1) :

When all partners are solvent (excluding problems involving preparation of final accounts upto the date of dissolution).

(6) Dissolution of Partnership firm (2) :

When one more or all partners are insolvent (including treatment of capital deficiency under Garner Vs. Murray).

Note : Students are expected to follow profit-sharing ratio for sharing capital deficiency of insolvent partners, unless a specific mention is made for application of Garner Vs. Murray's decision.

(7) Piecemeal distribution of each on dissolution Partnership firm :

Preparing statement of distribution of cash under 'Surplus capital Method' and 'maximum Loss Method' (excluding application of Garner Vs Murray).

(8) Conversion of a Partnership firm into a Company :

Accounting treatment in the books of partnership firm only (Distribution of shares and debentures among the partners in the profit sharing ratio only).

(B) (1) Royalty Accounts : (25% marks)

Meaning : Royalties, Minimum Rent, Short-working and Recoupment of short-workings.

Accounting treatment of the above in the books of Lessor and Lessee (excluding the transactions of sub-leasing).

(2) Five Insurance Claims :

Claims for : Loss of stock, loss of profit and loss of other property.

Computation of amount of claim and its accounting treatment in the books of insured (excluding claim for increased standing charges is not expected to be covered).

(3) Farm Accounting :

Importance of keeping farm accounts, Income and expenditure of farming, Preparation of farm account and General profit and Loss Account. (Examples relating to cultivation of crops only are expected).

(C) Auditing : (20% marks)

(a) Meaning and Definition of Audit—Objects of audit—Advantages and Limitations of Audit.

(b) Allocation of Capital and Revenue Expenditure.

(c) Vouching : Meaning and definition: vouching of subsidiary Books and Ledger Accounts with reference to the books of sole trader and partnership firm only.

Note. - (1) Latitude of 5% in the relative weightage of the allotted marks is permissible.

(2) The paper shall be set in such a manner that the student will not be able to leave any one or more of the given topics of the syllabus.

Books recommended

ગ્રંથિયાવાલા જે. આઈ. : 'સંચાલન-સિદ્ધાંતમાં અને વ્યવહારમાં'

Koontz & D'Donell :

Davar R. S. : 'The Process of Management Stoner'

Terry George : 'Principles of Management'

(2) ADVANCED BUSINESS MANAGEMENT—PAPER I

(Personnel Management)

(Principal and Subsidiary)

(Effective from June, 1990)

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|--|-----|
| (1) Nature of Personnel Management—Human Resource Management and Personnel—Nature of Personnel Policies. | 10% |
| (2) Acquisition of Human Resource : Recruiting personnel—job Analysis Sources—Methods of recruitment—Selection of personnel—Selection process—Interviewing and testing. | 10% |
| (3) Development of Human Resource : Employees' training and Management development—Training and learning—Determination of training needs —Employees' training methods—Management development method —methods of developing managers—Evaluating training effectiveness. | 20% |
| (4) Motivation of Human Resource : Definition of motivation—Maslow's hierarchy of needs—Macgregor's Theory \pm and y —Herzberg's Two factor (Hygiene) Motivation theory—Maclelland's Needs Theory—Vicom's Expectancy Theory. | 20% |
| (5) job Design and Performance Appraisal : job Enlargement—job Enrichment—job Rotation—
Performance Appraisal : Definition and Appraisal process. | 10% |
| (6) Maintenance of Human Resource : Base Compensation—Factors affecting Compensation Policy—job Evaluation and job Evaluation System—
—Communication : Meaning and Nature of communication—function—functions of communication—Communication process—
Barriers to effective communication. | 10% |
| (7) Disciplining the employee : Causes for disciplinary actions—General guide—lines in administering discipline—Disciplinary actions—Oral warning—Written warning—Suspension—Demotion—Pay cut—Dismissal. | 10% |
| (8) Internal Mobility. | 10% |

(3) ADVANCED STATISTICS (New Course)

OR

(4) ACTUARIAL SCIENCE (New Course)

(Inforce from June, 1992)

Paper I—Statistical Techniques

1. (a) **Functions** : Concepts of a function of a Single variable, limit and continuity of a function $f(X)$ where $f(X)$ is a polynomial of X or a ratio of two polynomials in X .
- (b) **Differentiation** : Definition of derivative of a function $f(X)$. Rules of derivative of functions of the type $X^n, e^x, a^x, \log X$ without proof and examples. 20%
2. (a) **Permutation and Combination** : Basic idea of permutation and combination with simple illustrations. Proof of Binomial theorem by induction for positive integer only. Binomial expansion of $(X \pm a)^n$ with n as positive integer and examples.
- (b) **Probability** : Random experiments, sample space, generation of sample space with tossing of coins, dice and drawing of cards, balls etc. events and algebra of events, mutually exclusive events. Probability-various definitions, addition and multiplication theorems, conditional probability and independence of two events, examples 20 %
3. (a) **Mathematical Expectation** : Concept of a discrete random variable, probability. mass function of discrete random variable and its properties, definition of mathematical expectation of a discrete random variable. mean and variance, examples.
- (b) **Probability Distributions** : Binomial and Poisson distributions and their probability mass functions and derivation of mean and variance and examples. 20 %
4. (a) **Elements of Decision Theory** : Basic Structure of decisions, Classical basis of pay off matrix models, payoff matrix under conditions of risk, expected Value, maxi-max, Harwicz and Laplace criteria, EMV, utility and standard gamble method of estimating utilities.
- (b) **Mathematical Induction** : Principle of Mathematical induction, Determination of the Sum of Series upto n terms (using Principle of induction)
of the type : (i) $\sum_{i=1}^n i$ (ii) $\sum_{i=1}^n i^2$ and (iii) $\sum_{i=1}^n i^3$ Application of these results and numerical examples. 20%
5. (a) **Sampling Methods** : Idea of population and a Sample, advantages of sampling versus complete enumeration, Methods of sampling : simple random, Stratified and Systematic Sampling (only description of these methods). Drawing of random samples of sizes upto three from a population of size N (5, with and without replacement.
- (b) **Interpolation and Extrapolation** : Meaning and purpose interpolation and extrapolation, Idea of operators like Δ and E , methods of interpolation Newton's, Binomial expansion method and Lagrange's method and examples.

References

1. Allen R.G.D. Mathematical Analysis for economists Macmillan (1937) Chapters—2, 4, 6, 7, 9, 10.
2. Ewart, P. J., Ford J. S. & Lin C. Y. : Probability for Statistical Decision making, Prentice Hall (1974), Chapters—2, 4, 5, 6, 7 (Articles 7.1 & 7.2 only) 9.
3. Goon, Gupta and Dasgupta : Fundamentals Statistics Vol. I & II. World Press, Calcutta.
4. Shenoy, G.V. Srivastava U. K. & Sharma S.C. : Business Statistics, Wiley eastern.
5. Lapin, L. Statistics for modern business decisions, Harcourt-Brace-Joranovich Inc (1978 : Second edition, Chapter—5.6.
6. Shenoy G.V. Srivastava U.K. and Sharma S.C. : Quantitative techniques for managerial decision making wiley eastern.
- 7.9 Freeman H : Mathematics for Actuarial Students Parts I & II.
8. Elhance D. N. : Fundamentaental of Statistics.
9. Kenney and Keeping : Mathematics of Statistics Vol. I, Van-Nostrand.
10. Mathematice for Standard XI & XII, शुद्धरित रीत्य पाठ्य-पुस्तक भंडाल. (Relavent Chapters of the course)

Mathomatics for Stattstics or Acturial Science Paper-I

1. (A) Elements of Number System : Introduction to natural numbers, integers, prime numbers, rational and irrational number, real and complex numbers.
Decimal and Binary systems, conversion from decimal form to binary form and vice versa. (10%)
- (B) Functions : Linear, Quadratic, Exponential and logarithmic functions and their graphs, Graphs linear inequalities in two variables.
Idea of permutations and combinations. Statement of Binomial Theorem and some applications with different indices. Definition of number 'e'. (10%)
- (C) Elements of Trigonometry ; Definitions of Trigonometric ratios like sine, cosine, tangent, secant etc of angles and their relationship. Trigonometric ratios of angles of degree 0, 30, 45, 60 and 90. Use of trigonometric tables. (10%)
- (D) Idea of Sequence and Series : Arithmetic and Geometric progression and their business applications. Calculation of Annuity and Present value, (10%)
2. (A) Matrices : Meaning and various operations on matrices like addition, subtraction and multiplication. Determinant of square matrices with real elements of order two and three. Matrix inversion, Solution to system of linear equations by matrix inversion. (10%)

(5) ECONOMICS OF COTTON—Paper I

1. Main agricultural crops—cash crops vs. other crops—cotton as a cash crop—importance of cotton as a raw material in textile industry.
2. Brief history of cotton cultivation—cotton plant—its characteristics—factors affecting the cotton yield and quality.
3. The cotton cultivation—main agricultural processes in brief—uses of cotton bye-product of cotton—other competitive fibres.
4. Major cotton producing countries of the world—India, U.S.A., U.A.R., U.S.S.R., China, Pakistan, Turkey, Brazil, Sudan, Maxico—Position of India in world cotton production, consumption and grade.
5. Cotton producing area in India—Impect of partition on cotton cultivation in India—cotton improvement work done in India after independence.
- 6 Types of cotton—main commercial verties growth in India. Classification of cotton crop according to staple in India and other major countries.
Corporation of India—its functions and role.

(6) AGRICULTURE WITH COMMERCIAL & MANAGERIAL ASPECTS—Paper I

- I. Definition of Agriculture—Origin & Development of Agriculture—Factors affecting Agriculture—Types of Agriculture Subsistence & Commercial—Modes and Types of Farming—Importance of Agriculture and Need for Farm Management.
- II. Difference between Agriculture and Industry—Definition of Farm Management—Objectives of Farm Management—Relation of Farm Management to other Sciences—Scope of Farm Management—Essentials of good farm management.
Diminishing Return in Agriculture—Factors Substitution Terms of Trade between Agriculture and Industrial Product.
- III. Selection and Size of a Farm—Meaning of Different Types of Holdings—Size of Farm Business—Advantages and Disadvantages of Large Scale and Small Scale Farming—Optimum Scale of Farming.
- IV. Farm Financing—initial, seasonal & developing finance. Agency of Finance. Features of Farm Labour as a resource—Systems of Wage Payments—Reducing Labour Peaks—Factors affecting Labour Productivity—Measures of Labour Production—Methods of Improving Labour Productivity.
- V. Classification of Farm Labour—Planning Labour Requirements—Special Features of Farm Labour as a resource—Systems of Wage Payments—Reducing Labour Peaks—Factors affecting Labour Productivity—Measures of Labour Production Methods of Improving Labour Productivity.
- VI. Farm Mechanization—Advantages—Distinction between Mechanization on farm and in Factory—Alternative in Mechanization—Scope for Farm mechanization in India.
- VII. Factors affecting Farm Returns—Farm efficiency standards.

Reference Books

1. 'Principles of Farm Management' : J. F. Efferson
2. 'Farm Management' : James Wyllie
3. 'Farm Organisation and Management' : Foster, G. W.
4. 'Farm Management' : Adms, R. L.
5. 'World Resources and Trade' : M. C. Agrawal & J. R. Monga
6. 'कृषि अर्थशास्त्र' : देसाई परेश-शाह, युनिवर्सिटी ग्रंथनिर्मातृ बोर्ड.

(7) BANKING & FINANCE—I**Basic Banking Operations :**

Marks

1. Definitions of Banker and Customer—Banker—Customer Relationship—Debter—Creditor Relationship—Banker as Trustee and Agent—Rights and Obligations of a Banker. 10%
2. Opening an account—Procedure—Importance of Reference—Operating Account—Type of Customers—Precautions to be taken by the Banker in case of different types of customers (1) Individual, (2) Partnership, (3) Joint—Stock Company, (4) Co-operative Societies, (5) Other Registered Bodies. 16%

Marks

3. Cheques—Characteristics of a cheque—Crossing of a cheque and its effects 16%
—Dishonour of a cheque—Consequences of wrongful dishonour.
4. Payment of cheques—Paying Banker's duty—Precautions to be taken— 16%
Material alterations—Statutory protection to the paying banker—when the
banker must refuse payment of a cheque.
5. Collection of cheques—Banker as a collecting banker—Statutory 14%
protection to a collecting banker—Duties of a collecting banker—
Clearing House.
6. Bills of Exchange and Promissory Notes—Definitions—Clearing House— 16%
Kinds of Bills of Exchange—Acceptance and type of acceptance—
presentment—Dishonour of an instrument nothing and protest—Acceptance
for honour, Holder and Holder in due course—Endorsements and types
for endorsements.
7. Ancillary services rendered by Bank :
 - (1) Remittance—DD/TT/Travellers cheques
 - (2) Safe Custody of Valuables
 - (3) Safe Deposit Vaults
 - (4) Executors and Trustee Services
 - (5) Merchant Banking.
8. Various types of books maintained by Banks—Cash book-transfer-use
of ready reckoner (interest tables).
Note.—Students to be familiarised by the teacher with the use of ready
reckoners.

} (12%
marks)

Basic books

1. 'Banking Law and Practice'—Tannan
2. " " " —P. N. Varshney
3. N.I.B.M. Publications.

(8) PUBLIC ADMINISTRATION

Foundation and Fundamentals of Public Administration—I

Basic functions of government—Meaning and Nature of Administration—
Administration Importance in Modern State—Public Administration : Science or Arts ?
Public Administration vs. Private Administration—Principles of Organisation—Personnel
Administration—Public Personnel Management—Financial Administration—Administra-
tive Responsibility—Administration in a Democracy—Politics and Administration—
Popular Participation in Administration.

List of Books

1. Avasthi and Maheswari : 'Public Administration'
2. A. R. Tyagi : 'Public Administration' (Latest edition)
3. L. D. White : 'Introduction to the Study of Public Administration'
4. J. C. Charlesworth : 'Governmental Administration'
5. Chartes S. Hyneman : 'Bureaucracy in a Democracy'
6. Albert Lapawaky (ed.) : 'Administration'
7. Herman Piner : 'Theory and Practice of Modern Government'
(Relevant chapters).

(7) Subsidiary Subject :

- (1) Secretarial Practice
- (2) Marketing
- (3) Insurance
- (4) Business Communication (in English language)
- (5) World Resources and World Trade
- (6) Co-operation
- (7) Mathematics for Statistics or Actuarial Science.

SUBSIDIARY SUBJECTS**1. SECRETARIAL PRACTICE (SUBSIDIARY)****(Course In force from June, 1980)**

1. Basic idea of a Company (15% marks)
Definition and various types of limited companies, Secretary, types of secretaries, Company secretary, his prescribed qualifications under the Companies Act. Statutory Duties and Responsibilities, Powers and authorities and liabilities of a Company Secretary.
2. Duties of the Secretary of a Ltd. Company with reference to the following : (30 Marks)
 - (a) Formation and registration of a company—Commencement of business.
 - (b) Memorandum and Articles of Association, their nature, form and contents, amendment—Table A.
 - (c) Prospectus, form and contents, effects of omission, misrepresentation and fraud—statement in lieu of prospectus.
3. Shares : (25 % marks) Definition, types and issue of shares. Application and allotment procedure for issue of shares calls, forfeiture annulment and reissue of shares, lien share certificate, share warrant, transfer and transmission of shares, issue of Share Certificate Rules.
4. Statutory Provisions and procedure regarding members meeting. (22 % marks)
Provisions regarding meeting in general, Notice, Motions and Resolutions. Agenda, Proxy Quorum, Chairman, Voting Minutes, Company meetings, types of meetings, Statutory meeting, General meeting and extra ordinary meeting.
Drafting : Notices for various shareholder meeting, minutes of the shareholder meeting.
5. Maintenance of Statutory books and registers. (8 % marks)
N.B.—(1) A latitude of 3 % marks in the relative weightage of the allotted marks is permissible.
(2) The paper shall be set in such a manner that the student will not be able to leave any one or more of the given topics of the syllabus.

2. MARKETING—Paper I**(Black figures to the right indicate percentage of marks allotted.)**

- | | Marks |
|---|--------------|
| (1) Meaning and scope market, marketing and marketing management. | 15 % |

Marketing in developed and undeveloped countries. Marketing of Agricultural and Industrial goods, Consumer goods, capital goods and services.

- | | |
|---|------|
| (2) Behaviour of different classes of buyers, viz. ultimate consumer, middle man, manufactures and Government agencies : Purchase behaviour and use behaviour and factors affecting such behaviour, i.e., buying motives. | 15 % |
| Differences in buyer behaviour for different classes of goods. | |
| (3) Market segments : Meaning, base and uses of market segmentation. | 15 % |
| (4) Product policies : Meaning of the term product, product planning and development, product line and product mix, packaging of the product. | 15 % |
| (5) Pricing strategies and factors affecting pricing strategy. | 15 % |
| (6) Brief understanding of channels of distribution and factors affecting the choice of particular channel or channels and distribution. | 15 % |
| (7) Promotional policies (only a brief idea) : | 10 % |
| (a) Personal selling | |
| (b) Advertising | |
| (c) Sales promotion. | |

N.B. — (1) A latitude of 3 % marks in the relative weightage of the allotted marks is permissible.

(2) The paper shall be set in such a manner that student will not be able to leave any one or more of the given topics of the syllabus.

Books recommended for Marketing Papers I and II

- (1) 'Fundamentals of Modern Marketing' by Cundiff-Still Govani
(Prentice Hall of India)
- (2) 'Basic Marketing' by Cundiff-Still (P. H. I.).
- (3) 'Sales Management' by Still-Cundiff-Govani (P. H. I.).
- (4) 'Marketing Management & Indian Economy' by S. Neelamagham's (Vikas)
- (5) 'Modern Marketing Management in the Indian Context' by R. S. Daver
(Progressive Corpn.).
- (6) 'Marketing Management' by Phillip Kollar (P. H. I.).

3. INSURANCE—Paper I

- (i) Brief History of Life Assurance—Definition of Life Assurance and its objects and importance—advantages and principles of insurance and their application to this main form of Insurance—contract not a wagering contract—difference between life and other forms of insurance.
- (ii) Policy conditions and kinds of policies (including annuity plans) as salary saving scheme—calculation of premiums—occupational risk—under average lives—valuation—recoveries—surplus, its distribution (Bonus)—Investment of Life Assurance Funds—Death claims—Maturity claims.
- (iii) Physical hazards—moral hazards—proposal form—personal statement and medical report—substandard risks—liens—assignments and nominations—alteration of policies—lapses and revivals—reserves and surrender values and other benefits available on cessation of payment of premiums—loans—loans—tax reliefs.
- (iv) The development of insurance business in India Insurance Legislation—Nationalisation of Insurance—Life Insurance Corporation of India.

Books for Insurance

- (1) 'Elements of Insurance' by W. A. Rajdev (Pitman)
- (2) 'Insurance Principles & Practice' by R. S. Sharma (Vora & Co.)
- (3) " " " " by Bhir & Limaye (Lakhani)
- (4) 'Insurance Act, 1938 with up to date amendments'
- (5) 'Principles & Practice of Life Assurance' by Nev. & Eason (Byakely Press)
- (6) 'Principles & Marine Insurance' by H. A. Turner (Stone & Co.)
- (7) 'Marine Insurance Act, 1963-VNC Narich'—Awmia & Co.
- (8) 'Fire Insurance Theory & Practice' by T. R. Smith (Stone & Co.)
- (9) 'Principles & Practice of Accident Insurance' by W. A. Dinsdas (By Clerk Press)

4. BUSINESS COMMUNICATION (IN ENGLISH LANGUAGE—Paper I)

(a) A study of Text (For 1990 & 1991 Examination)

Good bye Mr Chips—James Hillen Macmillan stories to remember series

For 1992

Flight of Imagination ; Ed. by S. K. Desai, Oxford University.

(b) Conversational English for various situations and occasions.

(This part of the syllabus will carry 14 marks).

(c) Official Correspondence such as leave note, request for testimonials letter to public authorities, Letters to editors, Social letters such as invitation, congratulatory messages, condolence message, reply to an invitation etc.

(This part will carry 14 marks.)

(d) Drafting and delivering speeches.

(This part will carry 14 marks.)

(Total 70 marks)

5. WORLD RESOURCES AND WORLD TRADE—Paper I

1. Relationship between economic activities, natural environment and cultural factors.
2. Distribution of world population—importance of man power, planning and human attitudes in a country.
3. Natural Regions of the world—characteristic features.
4. Agriculture : Factors in agriculture development—types of agriculture—increasing importance of commercialisation in agriculture—world pattern of production and trade in main agriculture products, viz., Rice, Wheat, Tea, Coffee, Cotton-Jute, Tobacco, Sugar, Rubber, Oil seeds.
5. Forestry ; Fishery and animal husbandary—pattern of production and trade.
6. Bases of International trade—Physical and economic gains from trade—Theories of international trade—classical and modern terms of trade, tariff and quota—exchange central.
7. Trends in foreign trade (with reference to India). Importance of Suez Canal in the foreign trade of India—Measures taken to develop foreign trade (with reference to India).
8. Role of foreign and in developing countries.

6. CO-OPERATION—Paper I

- | | |
|--|-----------|
| 1. Origin of the idea of Co-operation | 10% marks |
| 2. Principles of Co-operation | 10% .. |
| 3. Capitalism, Socialism and Communism as economic systems—
Co-operation in capitalism and other economic systems | 10% .. |
| 4. Co-operation as a form of economic enterprise—Private enterprise,
Public enterprise and Co-operative enterprise. | 10% .. |
| 5. Structure of a Co-operative organisation—Primary-Central and
Apex institutions—their functions and their inter-relationship. | 10% .. |
| 6. Different kinds of Co-operative Societies—their objectives and
working—Credit—Urban Co-operative, Banks—Marketing—Consumers
—Producers Societies—Housing. | 10% .. |
| 7. Industrial Societies—Farming Societies—Labour Contract Societies—
Service Co-operatives. | 10% .. |
| 8. Co-operative education and training—their importance. | 10% .. |
| 9. State and Co-operative movement. | 10% .. |
| 10. Conditions for Success of Co-operative movement. | 10% .. |

7. MATHEMATICS FOR STATISTICS OR ACTUARIAL SCIENCE

- (a) (50% marks) (i) Summation of series
Idea of convergence and divergence
- (ii) Determinants of 2nd and 3rd order,
Cramer's method of solving two linear equations;
Def. of a Matrix; its types of matrices; addition,
subtraction and multiplication of matrices.
Inverse of matrix; solution of linear equations
involving 2 or 3 variables.
- (iii) Logarithm; Rules and their applications.
- (b) (10% marks) Trigonometrical ratios; ratios of 0°, 30°, 45°, 60° and 90°.
Use of Trigonometrical tables.
- (c) Points, division of a st. line in a given ratio, equations of st lines :
- (i) $y = mx + c$
- (ii) $y - y_1 = m(x - x_1)$.
- (iii) $\frac{x}{a} + \frac{y}{b} = 1$.
- (iv) $\frac{y - y_1}{y_2 - y_1} = \frac{x - x_1}{x_2 - x_1}$.
- General form $Ax + By + C = 0$ of a st. line, Angle between two lines
- (d) (40% marks) Calculus : Idea of continuity; meaning of derivative; rules of
derivative; applications of derivative in economics and commerce.
Def. of e , expansion of a^x and $\log(1+x)$; Integration : Method
substitution, Method by parts, Method of partial fraction. Definite
integration and their properties.

Books recommended

1. Aitken, A. C. : 'Determinants and Matrices'.
2. Freeman, H. : 'Mathematics for Acturial Students', Part I & II (Cambridge Un. Press).
3. Hall and Knight : 'Business Mathematics'.
4. Loney : 'Trigonometry'.
5. F. E. Hohn : 'Elementary Matrix Algebra'.
6. 'Mathematics for Standard XII', ભાગ ૧-૨, પ્રકાશક : ગુજરાત રાજ્ય વિદ્યા-પુસ્તક મંડળ.

**(8) COMPUTER PROGRAMMING AND DATA PROCESSING—Paper-I
(At F.Y.B.COM.)**

Summary

<i>Topics</i>	<i>No. of lectures</i>
1. Introduction to Computers Hardware & Software.	
2. Data Representation & Number Systems	
3. Peripherals and Data Generation Devices	
4. Problem Analysis	
5. Programming Language BASIC	
6. Business Applications.	
	Total 76
7. Practicals	45 Hours.

(Subsidiary)

(1) INTRODUCTION TO COMPUTER HARDWARE AND SOFTWARE

(a) HISTORY & EVOLUTION :

Evolution, Concepts and Developments of Computers—Computers Generation—Micro Mini & Main Frame—Need & use of EOP equipment Computer—ANALOG, DIGITAC, HYBRIP.

(b) COMPUTER HARDWARE :

C.P.U. RAM, ROM, FROM ERROM I/O CHIB with functional aspects only.

(c) ASSEMBLY LANGUAGE FUNDAMENTALS :

Registers and Accumulators, Instructions and addressing methods—register to register, register to storage, storage to storage etc.—Different types of Instruction Concepts of assembly language—source object programmes.

(d) SYSTEM SOFTWARE :

Operating system, compilers, LINKERS, LOADERS, INTERPRELERS, ASSEMBLERS.

(e) APPLICATION PACAGES :

UTILITIES, APPLICATION PACKAGES, TIME SHARING & MULTI PROGRAMMING APPLICATION PACKAGES.

(2) DATA REPRESENTATION AND NUMBER SYSTEM

(a) Definition of BIT, BYTE, WORD, FIELD, RECORD, FILE ETC.

(b) BINARY SYSTEM & ARITHMETIC BINARY INTEGERS & FRACTIONS. BINARY LOGICAL OPERATIONS AND OR, NOT, XOR & TRUTH TABLES.

(c) DIFFERENT NUMBER SYSTEM :

HEXADECIMAL, OCTAL, CONVERSION FROM BINARY TO DECIMAL, HEXA & OCTAL.

(d) DATA REPRESENTATION BCD, EBCDIC, ASCII

(3) PERIPHERALS AND DATA GENERATION/STORAGE DEVICES :

I/O media and recording on-cards, paper tape, magnetic tape, magnetic disc, floppy etc. I/O devices-card readers, printers, tape drives, disc drives, floppy drives, VDU Terminal etc. Graphic Display Unit. Offline devices-card punches, Key to Tape, Key to Disc/Floppy units.

(4) PROBLEM ANALYSIS :

Concepts of algorithms, flow charts and decision tables.

5. Constants, Variables (INTEGER, REAL, STRING) OPERATORS (LOGICAL AND ARITHMETIC), SYSTEM COMMANDS-LOAD, SAVE, LIST, NEW, DELETE, etc.

BASIC LANGUAGE

- | | |
|-----------------------------|--|
| (a) INPUT/OUTPUT | -LET |
| | -INPUT |
| INPUT | -GET |
| | -DATA, READ, RESTORE |
| | -PRINT |
| OUTPUT | -PRINT (TAB, SPC) |
| | -PRINT USING |
| (b) UNCONDITIONAL BRANCHING | -GO TO |
| | -ON GOTO |
| (c) CONDITIONAL BRANCHING | -IF THEN |
| (d) AUTOMATIC LOOPING | -FOR-NEXT |
| (e) STRING MANIPULATIONS | -LEFT \$ |
| | -RIGHT \$ |
| | -MID \$ |
| | -STR \$ |
| | -VAL \$ |
| | -ACS \$ |
| | -LEN \$ |
| (f) DIMENSION & ARRANGS | -DIM (Making LISTS & TABLES) |
| | -MAT |
| (g) FUNCTIONS & SUBROUTINES | -DEF FN |
| | -DEF INT/STR etc. |
| | -GOSUB-RETURN |
| | BUILT IN FUNCTION (SIN COS RND etc.) |
| (h) STOP END STATEMENT | -STOP |
| | -END |
| (i) FILES | -SEQUENTIAL (SEARCHING |
| | UPDATING READ WRITE RAN- |
| | DOM OPEN ETC.) |
| | -MAXFILES |
| (j) DEBUGGING | -TBACE, PEEK, POKE, etc. |

- (k) GRAPHIC COMMANDS. —LOW RESOLUTION
—HIGH RESOLUTION
—GR. HGR, HPLOT, PLOT, COLOR,
—etc.
- (l) BUSINESS APPLICATIONS —PAYROLL, INVOICING & FINANCIAL ACCOUNTING SYSTEMS.
—(SEQUENTIAL, RASDOM FILES, MASTER FILE TRANSACTION FILE etc.)

Allocation of marks :

For Part (1) (2) and (3)	30 %
„ „ (4) and (5)	50 %
„ „ (6)	20 %

(૧) કોમ્પ્યુટર સાયન્સના પ્રાયોગિક કામ માટેના આપેલી યાદીમાંથી ઓછામાં ઓછા ૧૦ પ્રયોગ વિદ્યાર્થીઓએ કરેલા હોવા જોઈએ અને જર્નલમાં લખેલા હોવા જોઈએ.

(૨) આપેલા પ્રયોગોની યાદીમાંથી પરીક્ષામાં કોઈ પણ એક પ્રયોગ વિદ્યાર્થીને પૂછવામાં આવશે પરીક્ષા ૩ કલાકની નીચે મુજબ રહેશે :

પ્રોગ્રામ લખવાનો ૧½ કલાક

કોમ્પ્યુટર પર પ્રોગ્રામની ચકાસણી ૧½ કલાક.

જે પ્રકારના કોમ્પ્યુટરનો વિદ્યાર્થીએ ઉપયોગ કર્યો હશે તે જ પ્રકારના કોમ્પ્યુટરનો વિદ્યાર્થીએ પરીક્ષામાં ઉપયોગ કરવાનો રહેશે.

પ્રયોગોની યાદી નીચે મુજબ છે :

1. An automorphic number is one that appears at the end of its square, for example : 25 (Appears at the end of 625).
Write a programme to find first 5 such numbers.
2. Write a programme to find all prime numbers between 1 and 500.
3. From the given N integers find those numbers which are repeated.
Print their frequencies.
4. Suppose ns(10) represents multiletter words. Examine each of the letters of these 10 words and return that letter which comes first in the alphabetical order for each word. For example if multiletter word is basic program should return A.
5. Find out the numbers such that sum of the cubes of digits of a number is the digit itself. Example : $1.3 + 5.3 + 3.3 = 153$.
6. Write a programme to compute the reciprocal of a number to 25 digits accuracy. (Hint 25 digits is beyond representation limit).
7. Write a programme that asks for first Name and last Name and prints the full Name with last Name first. Programme should prompt until the user requests for stopping the process.
8. A pollution survey is carried out in a town. Information such as Name, Sex, Age, profession of each person is available. Write A programme to find the no. of children (< 18) and old people (> 60) in the town.
9. Find the sum of all integers which are between 100 and 300 and divisible by 9.
10. Input as many positive numbers as you like with a negative Nat the end. Find out the sum, Mean no of input values.

11. Calculate the first 25 fibonacci numbers. (Each number is sum of the two preceding numbers. Initial few numbers of the series are 1, 1, 2, 3, 5, 8.....).
12. Input two positive integers with large one as the first. First input number is large and second input number is small. Find the large and small !
13. Letter grades are to be assigned to number grades as follows :

Range of Nos.	Letter Grades
90 or > 90	A
> 80 & < 90	B
> 70 & < 60	C
> 60 & < 70	D

Write a programme to read-In 10 number grades and assign letter grades. Print both number & corresponding letter grades.

14. Read in alphabetic string. Obtain another string in which characters are reversed. Print both input and reversed strings.
15. Array of elements are stored (Say 10). Have another array of 10 elements check the sign of each element of first array and fill the second array with strings ' positive ', ' Negative ' or ' zero ' depending on the value of the elements.
16. Twin prime numbers are two numbers which are relatively prime and have a difference of 2. Ex. : 11, 13. Write a programme to find out 7 such pairs. Display each element from both the pairs.
17. Given in integer separate it's digits and obtain another integer such that the digits are in descending order from left to right. Ex. : 32587 ← given integer, 87532 ← required output.
18. A class has students sitting for an examination which has 3 sections A, B, C. Write a programme to Read the marks of these sections for each student and total the marks for each student & find the class average for each section.
19. Arrange the given N integers in ascending order. Print the arranged series along with the original no. Use only two arrays.
20. Write a programme to find out all factors of a given 2 digit number which does not contain the digit zero. Ex, Input= 50
Output=2, 5, 25.
21. Read 10 names and corresponding phone nos. point out the same :
 1. In the ascending order of phone nos.
 2. In the Alphabetical order.
22. Write a program to print out a table of square Root-Factorial logarithms of numbers between 1 & 25.
23. Input record consists of an address where each line of the Address is seperated by a sign-read this record and print out the Address in different lines.
24. Write a programme to check whether the given number is a pelidorom or not Ex : 121 ← is a pelindrom. Print appropriate messages for the input values.
(A palindrom is an integer no. which has the same sea. of digits when read forward (Backword).

25. Write a programme to check whether the given string is a palindrom or not-print suitable messages Ex : Madam.
(A palindrom is a string which has the same seq. of characters when read forward (backward)).
26. Write a programme to find out the tallest boy shortest girl in a class of 30 students. (Hint : Read sex code along with data 1/2 → boy/girl).
27. Given two arrays, Call one as M and another as N. Match each element of array N (Argument array) with array N (Key array) and point appropriate message for each input. Such as 'Matching' or 'not matching'.
28. Find the percentage of each vowel in the given input text. Blanks are not characters, not counted in total-print the input text also.
29. There are 7 students in a class. Five tests are Given read the marks for the 5 tests and find out mean score of each student and each test. Find the difference between mean score of each test and the score of the students.
30. Write a programme to generate two sets of random nos. and sort them in descending order R. print out both the arrays.
31. Given two arrays in sorted order. Write a programme to merge third. Print original and merged arrays.
32. Input a pair of two numbers and find their greatest common divisor by euclio's algorithm. For Ex : Input → 1813,407.
Divide 1813 by 407. Remainder is 105. Next Divide 407 by 185. Remainder is 37. 165/37 gives remainder as '0'. At this state lower number by the greatest common divisor.
33. Input a number between 0 and 100. Print the number and the corresponding word transformation.
Ex : Input ← 99
Output ← 99 Ninety Nine.
34. Find roots of equation $AX^2 + BX + C = 0$. The Roots are $-B \pm \sqrt{B^2 - 4AC}$ / $2A$. Input values A, B, C. Check for $B^2 - 4AC \geq 0$ else ask for A, B, C. again. Print headings and the roots.
35. Given the value of a machine. Find out after how many years the value of the machine will be less than ten per cent of the initial value. The rate of depreciation is 10% per year on the written down value. Print appropriate heading, the initial value, number of years and amount to depreciation.
36. You have 1, 2, 5, 10 rupee notes. Input a sum < OR = Rs. 100, Find out the minimum number of notes that make up the sum.
Print Headings. The initial amount and the number of each note.
37. Create a file named 'Employee' that maintains records of employees of an company. The data to be recorded is :
- | | |
|--------------------|------------------------|
| Name | Permitted values |
| Name of employee | Maximum 20 characters. |
| Employee No. | 1-99 |
| Pay Per day | PS-20-Rs. 40 |
| No. of days Worked | C-26 |
- It Should be possible to store values only within permissible limits.

FIELDS

Item Number

Units

Amount per Unit.

R. Com. 4 (Standard of Passing First B.Com. Examination) :

To pass the examination, a candidate must obtain at least 36% of the marks obtainable, separately in each subject in the University examination and in the internal assessment in each subject.

Those of the successful candidates who obtain at least 60% of the total marks obtainable will be placed in the First Class, provided they obtain at least 60% of the total obtainable in the papers at the examination actually held by the University as distinguished from internal evaluation; and those obtaining 48% of the total marks obtainable will be placed in the Second Class; provided they obtain at least 48% of the total marks obtainable in all the papers at the examination actually by the University.

Candidates passing the examination in compartments shall not be eligible for class prizes, scholarships or other awards for this examination. The marks obtained by a candidate in internal assessment in a subject or subjects shall be carried forward and credited to him in the event of his appearing at a subsequent examination as an ex-student.

R. Com. 5 :

A candidate who fails in the examination and has obtained 40 per cent of the marks in English and 44 per cent of the marks in any of the other subject, provided he has passed that subject shall at his option be excused from appearing in that subject at a subsequent examination and will be declared to have passed the whole examination when he has passed in all the remaining subjects of the examination, provided that in the subject or subjects in which he appears on the last occasion, he must obtain the minimum number of the marks in each subject as required under the relevant regulation. A candidate passing the examination in this manner shall not be eligible for a prize, or a scholarship or other award for the examination.

R. Com. 5-A : deleted.

R. Com. 6 :

A candidate passing at least in four subjects at this examination will be allowed to keep terms for the Second B.Com. Course but will not be declared to have passed the Second B.Com. examination unless he passes in the remaining subject or subjects at the First B.Com. examination in the same or previous examination season. His result for the Second B.Com. examination shall not be declared till he passes the First B.Com. examination.

Provided, however, that on his reappearing in the examination subject in which he has failed, he will not be required to reappear in it if he obtains at least minimum marks required for passing in that subject notwithstanding his failure to wear all the subjects at one and the same attempt.

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