

**BOARDS OF INTERMEDIATE EDUCATION
KARACHI
CURRICULUM & SYLLABI
FOR
HIGHER SECONDARY CERTIFICATE
EXAMINATIONS
CLASSES XI & XII (HOME ECONOMICS GROUP)
(H.S.C.PART I & II)
2003-2004 AND ONWARDS**

Home Economics Group

A) COMPULSORY SUBJECTS

Papers to be offered at Part-I and Part II Examinations:

Part I-Examination		Part II-Examination	
1.Urdu (Normal/Easy) OR Urdu Non Mother Tongue OR History & Culture of Pakistan (For Foreigners)	Paper-I 100 Marks	1.Urdu (Normal/Easy) OR Urdu Non Mother Tongue OR History & Culture of Pakistan (For Foreigners) OR Sindhi/Gujarati In Lieu of Urdu	Paper-II 100 Marks
2.English (Normal/Advanced)	Paper-I 100 Marks	2.English (Normal/Advanced)	Paper-II 100 Marks
3.Islamiat (For Muslims) OR Civics (for Non Muslims)	50 Marks	3.Pakistan Studies (For Muslims & Non Muslims) 4.Information Technology	50 Marks 100 Marks

(b) HOME ECONOMICS GROUP

B) ELECTIVE SUBJECTS

Part I-Examination	Part II-Examination
1.General Science & Food Nutrition Paper-I General Science Part-A Biology &Bacteriology 75 Marks	1.General Science & Food Nutrition i) a) Chemistry Theory (2 Hours)35 Marks b) Chemistry practical <div style="text-align: right;">15 Marks</div> ii) a) Physics Theory (2 Hours)35 Marks b)Physics practical <div style="text-align: right;">15 Marks</div> iii) Minimum passing marks (combining together)in

	<p>Theory shall be 23 marks (out of 70) and in practical (combining together) shall be 10 Marks (out of 30)</p> <p>iv) Appearance in both parts of Theory as well in practical shall be necessary For every candidate.</p>
<p>2.General Science & Food & Nutrition Paper-II Food & Nutrition Part A Food & Nutrition 75 Marks</p>	<p>2.General Science & Food & Nutrition Paper II Food & Nutrition Part-B: Meal Management & Food preservation 75 Marks</p>
<p>3.Clothing & Textile & Applied Arts Paper –I: Clothing & Textile Part-I,A: Clothing & Textile 75 marks</p>	<p>3.Clothing & Textile & Applied Arts Paper –I: Clothing & Textile Part-B: Family Clothing Problems 75 Marks</p>
<p>4.Clothing & Textile & Applied Arts Paper-II Applied Arts Applied Arts 75 Marks</p>	<p>4.Family Life and Home Management Paper-I: Home Management 75 marks</p>
	<p>5.Family Life and Home Management Paper-II Family Life Child Development & Family Relations 75 Marks</p>
Total: 550 Marks	Total: 750 Marks

GRAND TOTAL= 1300 MARKS

GENERAL (OVERALL) SCHEME OF STUDIES

(HIGHER SECONDARY STAGE)

1. Secondary Education is to be regarded as a continuous process and therefore the objectives and purposes already laid down for the secondary stage will apply equally to the Higher Secondary Stage. The pupil is now almost an adult and is passing through the latest and perhaps the most critical period of adolescence. He is an adult physique but lacks the sound judgment and stability of an adult. He wants to be free and useful to himself and to the society, but he is likely misuse his freedom without wise guidance. The guidance has to be given sympathetically and unobtrusively so that sense of his importance is not injured and he moves on with confidence and self-reliance to the responsibilities of an adult life as a member of some profession or to the University for Further Studies.
2. The Higher Secondary Stage, therefore, constitutes the last step in general education and its objectives must be terminal if pupils are to assume the responsibilities of an adult. To meet the requirements of this stage, the number of compulsory subjects has been reduced to four Groups of elective subjects have been constituted for specific purpose so as to give this stage of education a pre vocational character. The total number of subjects to be studied has been reduced to the minimum so as to make the training as thorough to them as possible. Emphasis is led more on the formation of critical judgment than on the acquisition of information: on the development of character through individual self-effort than on the control of the teacher and on the understanding of social relationship by Co-operative personal associations. Education given, on these lines may be expected to produce young men and women who will have clear concepts of fundamental moral and spiritual values; and be imbued with a spirit of co-operation, self-sacrifice and patriotism.
3. Although the Curriculum and Syllabi constitute a continuous and integrated whole for the Higher Secondary Stage, the public examination will be held in two parts. One Part of the Examination will be taken in Class XI (the result of which will remain intact for a period of 2 years) and the Second Part at the end of Class XII. A failure of Part. II including failing papers of Part I) will have three more consecutive chances to clear the failing papers i.e. the following Supplementary, Annual and its Supplementary. However, if a candidate does not avail any of the 3 chances, he shall forego his right to clear failing papers within the given chances and will be required to appear again in all papers of Theory and Practical pertaining to Part 1 & II Examinations. Success in the Examination will be determined by the student's achievement in both parts taken together (which are integral parts of a whole).
4. A student not satisfied with the result of Part 1 Examination, may repeat all the papers of Part 1 Examination along with the papers of Part II examination or may repeat only Part I Papers after obtaining permission from the Board
5. The Registration of Private Candidates and Enrolment of Regular Candidates shall expire after three years from the date of Registration/Enrolment whether they appear or not after allotment of Registration/Enrolment Number. Fresh Registration/Enrolment will be required after 3 years.

6. The Certificates issued by the Board of Intermediate Education will be supplemented by the Certificates issued by the Heads of Institutions (in respect of Regular Students only) based on a record of progress in studies, behavior, health, group activities and traits of character. Such a record shall be made available when a student leaves.
7. The week will consist of 40 to 42 periods of 40 to 45 minutes each varying with the nature of subjects taken by the pupil. Certain subjects, because of the Practical will need more time.

2- SCHEME OF STUDIES FOR THE HIGHER SECONDARY CERTIFICATE EXAMINATION, PART 1 2001 AND ONWARDS

There will be two compulsory subjects i.e., Urdu and English having one paper each. In case of Urdu students who had Sindhi or Gujrati as their medium of instruction may offer the compulsory paper of Sindhi or Gujrati carrying 100 marks in lieu of Urdu compulsory Paper II. Foreign Students shall have the option to offer History and Culture of Pakistan in place of Urdu Compulsory Paper I in addition to above compulsory subjects, there shall also be one additional compulsory subject of Islamic Education carrying 50 marks. Besides, Three Elective Subjects will be taken from the Section (sub-groups) directed towards the realisation of specific ends as pre-vocational training for different professions or preparation for particular types of University Courses

Physical Education and Manual Work being non-examination subjects will be compulsory for all Regular Students.

3- MINIMUM PASS MARKS AND MARKS FOR BEING PLACED IN DIFFERENT GRADES AT THE HIGHER SECONDARY CERTIFICATE EXAMINATION

1. Minimum Pass Marks :
 - (a) In subjects which have one paper of theory only, a candidate shall have to obtain 33% marks of the total marks of that papers.
 - (b) In subjects which have two papers of theory, a candidate shall have to obtain 33% of the total marks of the two papers taken together but if a candidate fails to obtain 33% marks in any paper/subject of the Part 1 Examination, he or she shall also have to appear in that paper also with the paper of Part II unless specially exempted on written request.
 - (c) Candidates appearing in Urdu Paper I and in Sindhi or Gujrati in lieu of Urdu Paper I shall have to obtain 33% marks in both Urdu Paper I and Sindhi or Gujrati separately.

- (d) In subjects which have Practical a candidate shall have to obtain 33% marks in both Theory and Practical separately. Theory and Practicals are separate passing heads at the H.S.C. Stage.
- (e)) To qualify for the Higher Secondary Certificate Examination, a candidate shall have to pass in all the Compulsory and Elective Subjects including Practicals, if any.

ENGLISH (Compulsory) NORMAL COURSE

(Two Papers of 100 Marks each)

The pupils should enter this stage with the active vocabulary of 1000 to 2500 words. This is sufficient for most of the needs of everyday life, and sufficient for pupils to tackle Standard English prose within a short time. It has been claimed that about 80% of Swift's vocabulary and 15% of Stevenson's lie within a 3,000 vocabulary range.

Students should also, if they have been taught efficiently, have a mastery of the 250-300 basic structures, enough for them to communicate without undue difficulty both orally and in writing.

In the teaching of English in Pakistan our Schools have in the past tried to run before they could walk. A real grasp and appreciation of literature can be based only on a sound knowledge of language. We introduced literature and often difficult literature too early.

The following is broad indication of what should attempt at the Higher Secondary Stage:-

1. *Spoken English*:-The Committee recognizes the great importance of such remedial work including stress; rhythm and intonation drills, as may be necessary. The standard of English envisaged in the modern conversational English of the type exemplified in W. Standard Allen's Living English Structure (Longmans).
2. *Written English*:-
 - (1) Composition on more advanced themes than at the Secondary level. (Logical arrangement, paragraphing, balance are as important as correct English). Plain style to be encouraged.
 - (2) Precis—passages chosen to be factual non-emotive, contemporary English.
 - (3) Written comprehension.
 - (4) More advanced letter-writing including letters to newspapers on matters of tropical interest.
 - (5) Articles for the School/College Magazine.
 - (6) Formal exercise and drills on points of special difficulty to Urdu speakers, e.g., the articles and the anomalous finites.
3. *Literature*.

Work in Class XI and XII to be based on a course-book aiming at improving the student's mastery of English language. At this stage the following types of books would be found useful:-

Direct Method English Course: Books IV and V, by E.V. Gaten (Longmans) supplemented by W. Standard Allen's Living English Structure. (Shorter version produced in Pakistan by the Allies Book Corporation, Karachi). Emphasis is to be laid on straight forward 20th Century prose in the form of selections including topics from the

fields of history, geography, civics, current affairs; science and technology as well as from literature. There is a case of restricting the vocabulary to the 5,000 words limit, though this is not essential if the selections are made in full awareness of the desirability of avoiding difficult English.

Modern prose one-act plays of intrinsic interest and providing to be studied for language and content rather than style. If the right choice is made there should be no need to differentiate in prose and play, between the needs of pre-Arts, pre-science, pre-Commerce, pre-Medical and pre-Engineering students.

4. *Poetry.*

Chiefly short poems of a lyrical and narrative nature; some selections from longer poems, including twentieth-century poetry, but excluding poems offering any serious difficulty in language.

The following would merely indicate the academic standard:

- (1) A novel, such as the *Under the Greenwood Tree*, by Thomas Hardy.
- (2) A play or Plays; e.g. Two short Plays, *The Monkeys' Paw*-W.W.Jacobs; *The Dumb Wife of Cheapside*-A. Duke).
- (3) A selection of essays, such as *On the Air*; *An Anthology of the spoken Words*, chosen by R.C.Goffin, (O.U.P).
- (4) A selection of poems; about 20 poems to be selected, such as the following pieces from *Twentieth Century Poems* edited by Mr.Wollmao (Harrap, 1954).
"The Castle" by Edwin Munir.
"The Stone" by Wilfrid Gibson.

PAPER I

100 Marks

Text.

- (1) Two One Act Plays = 20 Marks
- (2) Intermediate English Book 1 =15 Marks
- (3) Selection Form English Verse =15 Marks

Part I

General English.

- (1) Letter or Story –Writing =10 Marks

Applied Grammar

- (1)Preposition =5 Marks
- (2)Articles =5 Marks

(3)Tenses =5 Marks

(4)Punctuation =5 Marks

Translation:

(a) Urdu to English =10 Marks

(b) English to Urdu =10 Marks

Total Marks=100

PAPER II

100 Marks

Text.

(1) Intermediate English Book II =20 Marks

(2) Selections from English Verse =15 Marks

(3) Prisoner of Zenda =15 Marks

There will be questions on each text, one general and the other explanatory.

General English:

(1) Essay (Narrative/Descriptive) =20 Marks

(2) Direct and Indirect =5 Marks

(3) Modern English Usage =10 Marks

(4) Comprehension =15 Marks

Total Marks=100

URDU COMPULSORY NORMAL COURSE

(Two Papers of 100 Marks each)

Objectives.

1. To teach Urdu as a living and growing language.
2. To develop competence in clear, concise, effective and correct expression, both oral and written.
3. To encourage insight into the need for precision, grace, clarity and integrity in thinking, writing and speaking.
4. To enlarge the vocabulary and encourage discrimination in the selection of words and phrases.
5. To inculcate in the pupils some feeling for style in writing and speaking and develop individuality of expression.
6. To encourage pupils to responsibility for improving their own oral and written expression.
7. To encourage appreciation of the role of language in fostering good human relations.
8. To take delight in reading good literature.

Scope and Attainment.

The aim of education at the higher Secondary Stage is a dual one; it is terminal for some students and preparation for University education in the case of others.

The better student has to be sufficiently equipped to receive and benefit from the broad-based instructions that would be imported to him under the new scheme. In the teaching of language particular stress has to be laid on training him to express himself with precision and grace. He should also be made familiar with different literary forms so as to facilitate his understanding at the University level and also to develop his critical faculty.

The composition should now assume the form of the essay and the student should be trained to write in the form of brief dissertations on subjects within the scope of his knowledge and capacity. He should be acquainted with the importance of unity, balance and coherence in easy-writing

Translation exercises act as a restraint on the general tendency among students to indulge in loose writing. Further practice in this should be given as an aid to accuracy of expression.

In the teaching of Urdu at the advanced level the student should also be introduced to the rudiments of criticism so as to enable him to appreciate literature and discover and enjoy the intrinsic beauty of literary composition. In the teaching of poetry the students should be made conversant with some of the more common figures of speech. The scope of teaching should include an important age, and should be restricted to the most important literary figures of the

age. For the translational period the objectives set forth in this paragraph will be given effect to primarily in paper II.

PAPER I

100 Marks

This paper will be concerned primarily with the teaching of functional Urdu and the literary aspect will have a secondary place.

گلزار اردو گیارہویں جماعت کے لیے

مطبوعہ سندھ بک بورڈ حالیہ ایڈیشن

پرچہ الف کے لوازمہ نصاب کے مستقل عنوانات کے نمبروں کی تقسیم حسب ذیل ہوگی

مضامین : ۱۵ نمبر

افسانوی ادب : ۱۰ نمبر

سفر نامہ : ۱۰ نمبر

سوانح اور شخصیت نگاری: ۱۰ نمبر

مکاتیب: ۵ نمبر

طنز و مزاح: ۱۰ نمبر

پاکستانی زبانوں کا ادب: ۵ نمبر

۶۵ نمبر

نظم: ۲۵ نمبر

غزل: ۳۵ نمبر

نثر:

(۱) مضامین: سرسید احمد خاں، خواجہ الطاف حسین حالی، محمد حسین آزاد مولانا شبلی نعمانی، خواجہ حسن نظامی، میاں بشیر احمد، ڈاکٹر حفیظ الرحمن صدیقی۔

(۲) افسانوی ادب: مولوی نذیر احمد، عبدالحلیم شرر، خدیجہ مستور۔

(۳) سفر نامے: ابن انشاء، بیگم اختر ریاض الدین۔

(۴) مکاتیب: غالب، علامہ اقبال، اکبر الہ آبادی۔

(۵) طنز و مزاح: پطرس بخاری، شوکت تھانوی، شفیق الرحمن

حصہ نظم :

(۱) غزل: میر تقی میر، خواجہ میر درد، آتش، غالب، حسرت، فیض احمد فیض، ناصر کاظمی، سچل سرمست۔

۲) نظم: نظیر اکبر آبادی، خواجہ الطاف حسین حالی، اکبر الہ آبادی، علامہ اقبال، میر انیس، ظفر علی خان، جوش ملیح آبادی، سید محمد جعفری۔

Total 100 Mark

Prescribed Text Book

اردو نصاب لازمی بارہویں جماعت کے لیے مطبوعہ سندھ ٹکسٹ بک بورڈ۔ حالیہ ایڈیشن

PAPER II-100 Marks

Allocation and Distribution of Marks

1) Prose

60 Marks

(a) Explanation

20 marks

(b) Critical questions on Short Story on One Act Plays

15 Marks

(c) Questions on a Story writer or Play writer

15 Marks

(d) Summary of a Story

10 Marks

2) Poetry

40 Marks

(a) Explanation

25 Marks

(b) Critical questions on Poets

15 Marks

Total 100 Marks

Text Book

(A) Prose

The Text Book shall comprise of collection of short Stories and One Act Plays and separate collection of Ghazals.

Suitable Short Stories and One Act Plays should be selected from following:

Short Story: Haider Baksh Haidari, Rajab Ali Beg Suroor, Nazir Ahmed, Prem Chand, Ghulam Abbas.

One Act Plays: Krishan Chander, Hasan nizami, Imtiaz Ali Taz, Muhammad Mujib, Ishtiaq Husain Qureshi, Mirza Adeeb, Azim Beg Chagatai,

Upendra Nath Ashk, Saleha Abid Hussain Ahmed Naidm Qasimi, Ismat Chughtai, Abdul Fazal Siddiqi.

(B) Poetry

Poetical selections should include the best of the easy ghazals from the following poets:

Mir Dard, Mushfi, Atish, Ghalib, Momin, Zafar, Hali, Dagh, Amir, Hasrat, Fani, Asghar, Jigar, Wahshat, Iqbal, Hafeez

ISLAMIC EDUCATION (ISLAMIAT)

Compulsory for Muslims Paper I

(One Paper of 50 Marks)

1. Islamic Education (Islamiyat) shall be compulsory for Muslims While Non Muslims may offer Civics (Compulsory) in lieu thereof. But Non Muslims, too, can offer Islamic Education (Islamiyat). If they so desire. In other words, there is no restriction for them in this regard.
2. Islamic Education (Islamiyat) paper carries weight age of 50 marks and there will be two periods per week. This subject shall be taught in 1st year and the Examination will also be taken with the papers of 1st year.

General Objective:

The general objectives of teaching Islamiyat at Higher Secondary Stage would be to:

1. Acquaint the students with the meaning and significance of Islam as the universal and practical Deen (Religion).
2. Develop sense of belongingness to Islam and responsibility through the text of Holy Quran and Hadith.
3. Encourage the learning of Arabic for the understanding of Holy Quran and Sunnah.
4. Develop the qualities of practical Muslim for understanding and fulfilling his duties towards Allah and His creation in order to better his life in this world and Hereafter.
5. Application of the concepts and principles of Islam to the total practical life situations for all the time.

Specific Objectives:

The specific objectives, derived from the general objectives, may be classified and outlined below:

A-Cognitive:

- i) To acquaint the learners with the meaning, significance, practicability and finality of Islam as the universal Deen.
- ii) To promote the knowledge of the revelation of Holy Quran, as God given book.
- iii) To promote the knowledge of Prophet Mohammad (May Allah be upon him) as the last Prophet of Allah."
- iv) To increase in the knowledge and understanding of the Basic tenets of Islam.

B-Affective:

- a) To engender love for the recitation of Holy Quran with correct pronunciation, intonation and articulation.
- b) To develop faith in the basic concepts of Islam, individual doctrine of responsibility towards Creator (Allah) and His creation.
- c) To develop love for the understanding of Islam as the practical Deen for all the times.
- d) To inculcate the individual and collective role through the text of Holy Quran and Sunnah.
- e) To sensitise the level of distinction between (AWAMIR) and (NAWAHI)

C-Psychomotor:

- i) Ability to recite the Holy Quran with correct pronunciation, and articulation intonation.
- ii) Ability to practice Islam as the Universal and complete Deen.
- iii) Ability to apply the basic tenets of Islam throughout the life.
- iv) Ability to the realization of the belief and application of Islamic concepts to the solution of the life-based problems and salvation of spiritual struggles.

PAKISTAN STUDIES (COMPULSORY)

Compulsory Paper II for Muslims & Non-Muslims

(One Paper of 50 Marks)

1. Ideology of Pakistan (Pakistan Studies) shall be compulsory subject in 2nd year for all candidates.i.e.Muslims or Non Muslims.
2. Pakistan Studies paper carries weightage of 50 marks and there will be two periods per week.

INTRODUCTION

The Course on Pakistan Studies is prescribed as a compulsory paper in Component-1 in the Scheme of Studies for Intermediate Classes. It forms Paper II along with Islamic Education. The Pakistan Studies paper carries weightage of 50 marks and two periods per week.

Pakistan Studies is already a compulsory subject in Secondary classes .Its introduction at the intermediate level is consonance with national aspirations, and aims of education adopted in the Education Policy. The Subject has been adopted as compulsory component for all Degree Examinations by the University Grants Commission from the year 1980-81.

AIMS AND OBJECTIVES OF THE COURSE ON PAKISTAN STUDIES

The aims and true spirit objectives of teaching the subject of ideology of Pakistan at the intermediate level are directly related to all the overall aims of education at intermediate level as enunciated in the New Education Policy .The specific objectives are as under:

1. To inculcate a true spirit of patriotism, love and affection for country, religion culture through the clear understanding of ideology of Pakistan.
2. To create awareness amongst the students that besides being Pakistan they are also members of the Muslims Ummah.
3. To understand the meaning and scope of the ideology of Pakistan.
4. To relate ideology of Pakistan to the freedom movement of the Muslims in the sub-continent.
5. To understand the rational for the creation and establishment of Pakistan as an Islamic Ideological State.
6. To appreciate the contribution and role played by great personalities in bringing Pakistan into being.
7. To understand Islamic socio-economic principles and related their application to Pakistan, as an Ideological State.
8. To appreciate the international relations of Pakistan as an ideological Islamic State.

Allocation of Marks: 50

- 1) Descriptive Questions =32 marks
- 2) Objective Questions=18 marks

BOOKS PRESCRIBED

- 1) Mutalia-e-Pakistan
(Urdu version)
Sind Text Book Board,
Sind University Campus, jamshoro
- 2) Pakistan Studies,
Written by M.D.Zafar,
(English version)

GENERAL SCIENCE &FOOD &NUTRITION

This subject has two papers. Paper I is General Science and paper II is Foods and Nutrition.

Paper I is divided into two parts. Part A consists of Biology and Bacteriology which is done in class XI and part B has Chemistry and Physics which is done in Class XII.

Paper II is also divided in two parts. Part A is consists of Food and Nutrition and is done in Class XI and Part B has Meal Management and Food Preservation which is done in class XII.

Paper 1 (GENERAL SCIENCE)

Part A: Biology and Bacteriology

Theory: 50 marks; practical: 25 marks

To be done in class XI

Biology.

1. Study of basic animal science.
2. (a) Cytology, i.e., protoplasm, cell structure and cell division.
(b) Histology of simple and compound tissues in general.
3. Physiology of human body.
 - (a) A general study of the structure and function of the skeleton, digestive, respiratory, circulatory, nervous, excretory and reproductive system of the body
 - (b) A study of the structure and the function of the eye, nose, skin and tongue.

Bacteriology.

1. Morphology and classification of bacteria
2. Physiology of bacteria.
 - (a) Nutrition of bacteria.
 - (b) Factors involved in killing and inhibiting the growth of bacteria.
3. Cultivation of bacteria.
 - (a) Preparation and use of culture, media natural and artificial media.
4. Applied microbiology.
 - (a) Microbiology of sewage, air, water and milk.
 - (b) Microbiology of good-food preservation and food spoilage.

Disease.

5. Disease producing micro-organisms. Defense of the body against disease. Means of transmission of pathogenic organism.
6. Common infectious disease of human beings.
 - (a) Small pox
 - (b) Diphtheria
 - (c) Tuberculosis
 - (d) Typhoid
 - (e) Chorea
 - (f) Bacillary dysentery.
 - (g) Amoebic dysentery
 - (h) Malaria

PRACTICALS

Biology

1. Study of various tissues:-
e.g., bone, heart, stomach, intestine, spleen, kidney, liver and skin
2. Drawings of the various systems of the human body, e.g., eye, nose, ear, tongue and skin.

Bacteriology.

1. Methods of sterilization.
2. Predation of culture media
3. Staining techniques.
4. Determination of suitability of water for human consumption.
5. Quantitative estimation of bacteria in food.

Paper I (GENERAL SCIENCE).

Part B: Chemistry and Physics

Theory: 75 marks: Practical 25 marks

To be done in Class XII

1. Chemistry

1. Study of different states of matter.
2. Elements: mixtures and compounds.
3. Chemical symbols, formulae and chemical equations,
4. Dalton's atomic theory; laws of chemical combination.
5. Elementary idea of electron, proton and neutron and electronic structure of atom.
6. Definitions of atomic weight: molecular weight and equivalent weight

7. Elements of thermo-chemistry and thermo-chemical equation.
8. Oxidation -- Reduction.
9. Electrolysis and ionisation.
10. Calaysis and colloids.

2. Inorganic Chemistry:

1. Chemical nature of solutions and to develop an appreciation of the part that solutions play in our daily lives.

(a) Water as a solvent.

(b) Characteristic of a true solution of a colloidal solution, of a suspension. 2. Preparation, properties and uses of Oxygen, Hydrogen, Ozone, Hydrogen peroxide.

3. Acids, Bases and Salts. General characteristic of each class.

4. To acquire information about the properties and uses of certain non-metals and their compounds.

1) A study of Halogen family.

2) A study of Nitrogen and its compounds.

3) A study of Phosphorous.

4) A study of carbon compound

5) Carbon dioxide preparation, properties and uses (fire extinguishers).

5. To learn the properties and uses of certain metals and their compounds.

(1) Alkali metals.

(i) Sodium.

(ii) Potassium

(iii) Calcium

(2) Light metals.

(i) Light metals

(ii) Aluminum and magnesium

(3) Heavy Metals.

(i) Iron.

(ii) Copper.

3. Organic Chemistry:

(i) Study of Hydrocarbons.

(ii) Study of Alcohols.

(iii) Study of Aldehyde.

- (iv) Study of Ketone.
- (v) Study of Organic Acids
- (vi) Study of Amino Compounds.
- (vii) Carbohydrates (i) Glucose, Starch, study of cellulose with special reference to its industrial importance in rayon, paper, cellophane and synthetic materials.
- (viii) Fats and oil-soap and saponification.
- (ix) Proteins.

Physics (theory):

1. Understanding of the importance of the system of the measurement with standard units and of accurate measurement in the household.

English and metric systems, conversation from one to another. Study of construction and use of weighing devices, spring balance, arm balance. Use of accurate measurement in producing standards uniform products in food preparation. Establishment and enforcement of standards of weights and measures.

2. Understanding of purpose of simple machines and their construction. Analysis of efficiency of simple machines and the effect of friction. Use of lever, inclined plane, wheel and axel, screw and pulley.
3. Understanding of certain characteristic of materials in relation to the household. Properties of material such as density, specific gravity, viscosity and surface tension. Application of Archemedes.
4. Temperature, effect of heat and methods of heat transmission.

Principle of operation of thermometer of thermocouples. Difference in thermometer scales. Operation of thermostats. Review of methods of heat transfer and their applications . effect of insulation on heat transfer. Effect of heat in causing expansion and change of state. Heat unit; calorie and btu

5. Basic principles of electricity and magnetism.

Nature of electricity and of the electric current. Theories of the magnetism and insulators. Meaning of amperes. Walts omh s volts. Ohm law. Generation of electric cvurrent. Alternating and direct current. Use of transformers. Value of fuse and circuit breakers. Use of electricity in th home. Principles of dynamo and motor measurement of electricity in the home; amount of electricity required to operate house hold appliances.

6. Light colour sound

Properties of light waves. Laws of the reflection and refraction. Different type of electric light. Measurement of the illumination. Different lenses and their uses. The spectrum, transmission of sound providing good quality light in the home natural and artificial. Amount of light required for certain kind of task.

PRACTICALS

1. Examine construction of balances and practice of using them.
2. Develop a series of problems in conversion of one system of measurement to another for examples; weight of a student from pounds to kilograms; a recipe from gms and c.c. to pounds and ounces.
3. Often experienced cooks cannot give a recipe in standard measurement because they have learnt through trial and error how to judge amounts. Hence their recipes cannot be repeated by other people. Develop standard measurements and directions for such recipe so that it can be repeated.
4. Demonstrate the use of simple machine in common household equipment such as scissors, pump, nut-cracker, clothes wringers, and food grinder. Demonstrate the effect of friction on the efficiency of a machine and a method of overcoming it.
5. Quantitative of relative density, specific gravity or surface tension of water, ice, oil, cork, coal, or other materials used in the home.
6. Measurement of dimensions. Changes with changes in temperature. Use of thermometers, thermostats, safety valves, etc., on household appliances.
7. Experiments with solid-liquid, liquid-vapour, and solid vapour transitions, using refrigerant as an illustrative medium.
8. Experiments with methods and effectiveness of heat transfer in refrigerators, saucepans of different materials etc.
9. Experiments with magnetic fields.
10. Measurements of resistances of cells in series and in parallel with voltmeters and ammeters.
11. Experiments with alternating current generator and commutator of direct current.
12. Experiments measuring resistances with voltmeter, ammeter and transformer.
13. Experiments with electromagnetism as applied to the door chimes, telephones, galvanometers and motors.
14. Determination of food candles of light different types of lamps.

Paper II (FOOD AND NUTRITION)

Part A: Food and Nutrition

Theory: 50 marks; Practical: 25 marks

To be done in Class XI.

1. Understanding the nutritional importance of food.

- (1) Definition of nutrition.

- (2) Classification and functions of food nutrients; carbohydrates, fats, proteins, minerals, vitamins and water.
- (3) Composition and nutritional value of vegetables, fruits eggs, milk, meat and other common foods.
- (4) Conservation of nutrients in foods preparation.

2. Family Meal Management.

- (1) Points to be considered in meal management:-
 - (a) Personal nutritional needs.
 - (b) Factors governing nutritional requirements in respect of age, sex, activity.
 - (c) Adequate diet for the family; infant nutrition, invalid diets and others.
 - (d) Adopting recipes to number of persons to be served.
- (2) Food Preparation:
 - (a) Use of weights, measures and equivalents.
 - (b) Methods and principles of cookery; meat, vegetables, fruit and sugar.
 - (c) Effect of cooking on nutrients, palatability, texture, color.
 - (3) Study care, and use of equipment used in food preparation.

3. Food Fads and fallacies.

Relation of food fads and fallacies to personal food selection such as superstition, religion, special days.

4. Digestion and absorption of food.

5. Practical Gardening and food production.

- (1) Value planning for and producing food at home-nutritional and educational.
- (2) Soil preparation and management of the garden.
- (3) Selecting vegetables, fruits, and flowers suited to the area selected for gardening.
- (4) Protecting vegetables, fruits, and flowers from pests,heat, excessive rain.
- (5) Care and use of fresh, home produced food.
- (6) Poultry and other sources of protein rich food for the family.

6. Practical.

- (1) Record food intake and activity for a given period of time (two days or more) and evaluate dietary adequacy in relation to energy requirement.
- (2) Learn to measure 100 calorie portions of food. Compare the dietary adequacy of rice, eggs, dal, atta, meat, fruits, vegetables. Compare nutritional value of polished and unpolished rice, maida and atta.
- (3) Estimate number of servings from a prepared recipe
(keep in mind the amount of adequate servings).

(4) Plan a menu which will furnish the daily food requirements for a family. Prepare one meal from this menu.

Paper II (FOOD AND NUTRITION)

Part B: Meal Management and Food Preservation

Theory: 50 marks; Practical: 25 marks

To be done in Class XII

1. Meal Planning.

Consideration of palatability nutritional adequacy and income level of families.

2. Meal Preparation.

Acceptable combinations of food efficiency and ease in preparation of food.

3. Meal Service.

Accepted procedures of meal service. Contribution of meal service. Table appointments to social development .

4. Marketing

Methods of determining quality of various foods such as fresh fruits, vegetables, meat, dry foods, etc. Factors affecting price and availability of food in complete sanitation.

5. Sanitary Practices.

Causes of food spoilage. Methods for controlling food from spoilage. Pest and insect control from food borne disease and ways to prevent them. Legal safe guards in food sanitation.

6. Conservation and Preservation of Food.

Difference between conservation and preservation. Importance of food preservation to families of Pakistan.

PRACTICALS

1. Plan meals to meet daily requirements of family members with different nutritional needs.
2. Plan, serve and evaluate simple meals for daily family occasions.
3. Plan, prepare, serve and evaluate meals for different family occasions.
4. Prepare foods commonly used in Pakistani meals by methods that will conserve nutrients, and enhance or retain flavor, color and texture.
5. Investigate regulation and their enforcement relating to food adulteration.
6. Make studies of dietary practices of people at different income levels.
7. Study food-borne diseases and ways to prevent them.

CLOTHING & TEXTILES & APPLIED ARTS

This subject has two papers. Paper I is Clothing and Textiles and Paper II is Applied Arts.

Paper I is divided into two parts. Part A consists of Clothing and Textiles which is done in Class XI and Part B has Family Clothing Problems which is done in class XII.

Paper II (Applied Arts) has no division and is done in Class XI.

Paper I (CLOTHING AND TEXTILES)

Part A: Clothing and Textiles

Theory: 50 marks; Practical: 25marks

1. Selection ,Construction and Storage of Clothes;

To be done in Class XI

1. Principles of art applied to selection of clothes and fabrics:-

- i) Analysis of personal characteristics.
- ii) Study of design elements in dress.
- iii) Selection of appropriate dress and accessories.

2. Shopping practices and consumer ethics:-

- i) Study of markets and prices.
- ii) Effective shopping practices.
- iii) Ethical and un-ethical practices in shopping.

3. Principles of wardrobe planning:-

- i) Planning individual wardrobe in terms of family, socio-economic status and the economy of Pakistan.
- ii) Factors that determine wardrobe planning such as family budget, activities personality, season of the year, age, sex and occasion in terms of social customs of the country.

4. Construction of Clothes:-

- i) Drafting individual bodice block-taking accurate measurements and considering correct drafting procedures.
- ii) Construction of minimum of two garments for the students herself based on her wardrobe analysis and incorporating at least five new techniques and learnings.
- iii) Sewing equipment, its proper use and care ;choice of fabrics for garments;construction processes.

2. Study of Textile Fibers:

1. Classification of textile fibers:

A comparative study of the characteristics of textile fibers, identification of textile fibers in common use, microscopic structure simple methods of the fiber identification such as the burning tests for identifying fibers.

2. The three basic weaves and their characteristics, plain, twill, and satin weave.

3. Finishing processes such as mercerization, napping, cleandering, pre-shrinking.

3. Practical.

1. Drafting individual bodice block.

2. Construction of a minimum of two garments based on own wardrobe analysis and incorporating at least five new techniques and learnings.

3. Stain removal.

4. Ironing and pressing clothes.

5. Common mending methods; patching, darning.

6. Examination and collection of variety of fabrics made from different textile fibers.

7. Identification of fibers using simple methods.

8. Examination of textile materials treated with different finishes.

Paper I (CLOTHING AND TEXTILES)

Part B: Family Clothing Problems

Theory: 50 Marks; Practical: 25 marks

To be done in Class XII

EFFECT OF FAMILY VALUES, SOCIAL STATUS,
CULTURAL AND RELIGIOUS INFLUENCE
UPON FAMILY CLOTHING

The study of infants and children clothing.

Psychological effects, selection of suitable design and fabrics.

Selection of clothing and accessories.

The influence of advertisements and labeling on buying practices. The promotion of information .Labeling by the consumer.

Care of family clothing.

Seasonal storage, selection and use of various laundry supplies and equipment, dry cleaning.

1. Dry Cleaning.
2. Consumer's responsibilities.
3. Stain removal.
4. Cleaning household articles.
5. Principles underlying dry cleaning processes.

Drafting garments.

Accuracy in body measuring; actual drafting of:-

- i) Dress and Knicker for pre- school age girl.
- ii) Knicker and bush-shirt for pre-school boy.
- iii) Men's kurta and pajama.

Use of available sewing machine attachment.

Development of skill suitability and time serving factors.

Construction of garments for family members.

Garment for a small girl of a small boy; a man's kurta.

PRACTICAL

- 1) Drafting a girl's garment, a boy's garment and man's garment (Kurta, Pajama).
- 2) Constructing a Man's kurta.
- 3) Constructing a small girl's or a small boy's garment.
- 4) Stain removal; laundering family garments.

REFERENCES

- (1) *Clothing Construction and Wardrobe planning.*
The MacMillan Co., N.Y.,
Lewis, D.C.and Bowers, M.G
- (2) *Clothing for Childern.*John Wiley and Sons

- Inc.N.Y.m
Thompson, Henrietta, M&Rea, Lucille,G.
(3) Standards and Labels for Consumer Goods.
Ronald Press, New York,
Coles, Jesse V.
(4) Economics for Consumers.
Consumers Living.
Gorden Willhaman, L.J

Paper II: APPLIED ARTS

Theory: 50 marks: Practical: 25marks

To be done in class XI

1. *Application of Art in everyday living.*

1. Application of design through planning, designing and construction of any five of the following craft:

- i) Tied and dyed and stenciled dupattas or scarves, batik curtain; kamiz, sari.
 - ii) Leather work-pocket books, sandals, basketry-two types of baskets.
 - iii) Straw weaving mats for table block printing, weaving, rubbing of carvings and engraving.
 - iv) Composition using natural material, e.g., flowers, grasses, branches, fruits.
 - v) Selection and arrangement of pictures and wall hangings.
 - vi) Construction of frames.
2. Principles of art applied to all planning, and construction; harmony, rhythm
Balance, proportion, emphasis.
3. Elements of art applied to all creative work; color, texture, line, form.
4. Demonstration of arrangement of space, line and color on posters, illustrative material for other classes, bulletin, boards and decoration for parties.

2. *Practical*

Students will submit five creative projects for evaluation with an analysis of how the principles of art and the elements of art are used .At least one project should illustrate the use of color and color harmony.

FAMILY LIFE & HOME MANAGEMENT

*This subject has Two papers .Paper I is Home Management and Paper II is Family Life
.Both Paper I (Home Management) and Paper II(Family Life) are done in Class XII*

Paper I: HOME MANAGEMENT

Theory: 50 marks: Practical: 25 marks

To be done in Class XII

1. Management and its relationship to family goals, values and resources for Home management.

Simple definition of management and management process. Activities involved in management. Who manages? When do people manage? Good and poor management-how to judge the effectiveness of management.

Individual and Family Goals.

Definition of goals. Importance of goals in management. Long and short terms goals. Difference between individual and family goals. Identification of goals-self, own family, and other families. Kinds of goals families set for themselves.

Management in the use of Resources.

Kind of resources available to families; human and material. Recognition and identification of resources used in specific situations. how are human resources developed?(Like attitudes, abilities).Type of information regarding material resources which a home-maker needs to have – food ,textiles,clothing,housing etc.Were and how can home –maker obtain this information?

Decision making as the crux of management.

Process of decision making .Relation to home management. Kind of decisions collage girls make importance of decision making in daily living.

2. Management in relation to two specific resource; time and energy.

Ways of measuring energy: Oxygen consumption, fatigue, feeling of tiredness. Energy requirements for various household activities.

Body mechanics: relationship of structures of body to method of work and to design of equipment: basic physical laws related to method of work and design of equipment gravity, leavers, momentum.

Work Simplification: who needs to simplify work? Ways to simplify work; acceptance and rejection of change.

Factors affecting home-makers use of time. Different way of planning the use of time for individuals and families.

3. Management in relation to household equipment.

Application of principles of physics to work of the home .Characteristics and properties of materials used in construction of household equipment. Study of principles of heat transfer of refrigeration, of dirt removal. Importance of these principles in design and function of household equipment. Application of laws of gravity, leavers, momentum to design and construction of household equipment (simple and complex equipment used in Pakistani homes).

Selection, Care, Use and storage of household equipment.

Variety of prices of equipment available for performing the same job: comparison of cost and effectiveness; minimum equipment needed to maintain a home. Relationship of design of equipment to its function. Daily and special care required for household equipment for cooking, cleaning and for cooling or refrigerating. Placement of equipment to insure most effective and efficient use of working heights. Storage of household equipment; kinds of drawers, shelves, cupboards, flies, boxes, etc.Principles of functional storage; ways to provide functional storage; devices that can be added to existing storage to make it more functional. Problems to consider when planning for storage of equipment; ways to provide flexible storage.

4. Comfort and beauty in the home.

Philosophies and /or belief underlying the division and function of the various areas of the home ;recreational, sleeping, working, etc.(e.g., the home as place of security,comfort,hospitality,beauty.The home as a place to develop individual personalities).Criteria by which one can judge attractiveness. How to achieve this quality with available resources. Functional housing; how to achieve with resources, available at various income levels.

Application of principles and elements of art to furniture and arrangements; harmony, balance proportion, rhythm, emphasis, tone, color, form, texture. Construction techniques in marking furniture joints, direction of grain,finishes,etc.Factors in wise selection of furniture and furnishing;socio-economics status, aesthetic values functional utility; materials used to make furniture and furnishings with emphasis on indigenous materials.

5. Protection of health in the home.

Sanitation in the home; study of current practices and ways; these can be changed to improve sanitation. Construction features of the house in relation to the health of the family; ventilation, lighting, drainage, disposal of refuse, insulation.

PRACTICALS

1. In several given situations involving management (case histories, short stories, dramas, films, student's experiences, visit of homemakers, etc.) Identify goals, values and resources used to achieve the goals. Classify goals according to long or short term.
2. Have Class plan, carry out, and evaluate some activity cleaning room in school building, exhibit for bulletin board.etc.) Class might be divided into small groups and each group participates in a different activity.
3. Study how to use the body effectively by experimenting with :-
 - i) Various heights in chairs, table, working counters for different kinds of work: beating, rolling, ironing cutting garments, etc.
 - ii) Equipment design: brooms with a variety of handle length, etc.
 - iii) Lifting and carrying a load or a heavy object.
 - iv) Pushing a heavy object.
4. Analyse some activity (dish washing, serving of food, cleaning, etc.) Done in the home. Apply 3 or 4 work simplification principles. Demonstrate the new set –up to see how time and energy required was reduced. Discuss changes which led to improvement and simplification of the task.
5. Arrange a room in the school so that it will be functional for its intended purpose .Change the arrangement so that it will be functional for some other purpose.
6. Plan exhibit of inexpensive but well designed objects that are used in a home .Objects should be selected with the aim of being functional or making the home attractive. Invite other students and staff to the exhibit.
7. Make a plan for decorating a student's bedroom.
8. Examine furniture in the collage and identify construction techniques used.
9. Experiment with making various types of time plans to determine one most suitable for each individual student.
10. Experiment with various kitchen utensils (surface cookery, over cookery and accessories) to observe the case in use or performance; product obtained; construction design, materials used; and principles involved in effective operation.
11. Use different cleaning equipment (brooms, brushes, dusters, vaccum cleaners, etc.) to compare ease in cleanings effort and time require probability and flexibility in use .Ease and amount of storages, cost, care and upkeep required.
12. Compare various method of laundering clothes (bearing with stick, plunger type agitator, scrubbing boards, washing machine)to determine effect and time required, effect on finished product; amount of water and soap needed ,suitability for various kinds of fabric ;cost and upkeep.

Distribution of Marks

Theory	50 Marks
Practical	25 Marks

REFERENCES

1. Managing for Effective Living.
John Wiley and Sons, Inc.,
New York
Good Tear and Khlor
2. Management for Better living
D.C.Health and Co.,
Boston
Starr, Marry C.
3. Management for you
J.B. Lippincott Co.,
New York
Fitzsimmans C.and White, N.
4. Housecraft Principles & Practices.
Sir Issac Pitman and Sons Ltd.
London
5. Home with Character
D.C.Health and Co
Boston
Craig, Hazel, and Rusk, Ola
6. Housing and Home Management
The Mac Millan Co.,
New York
Lewis, Dora, S., Burns
Jean and Seguer,
Ester F.
7. The House; its Plan and Use.
J.B.Lippincott Co.,
New York
Agan Tessie
8. Art Everyday Life
The MacMiilan Co.,
New York
Goldstein, Harriet and Goldstein, Velta
9. Today's Home Living.
J.B.Lippincott Co.,
New York
Justin, Margaret, M.and Rust, Lucile O.

10. The Happy Home.
The Indian Women Writers
Co-operative publishing Society,
New Delhi
11. Be Your Own Architect and Engineer.
Oxford University Press,
Pakistan

Paper II: FAMILY LIFE AND CHILD DEVELOPMENT

Theory: 50 marks; Practical: 25marks

Section A-Family Relations

To be done in Class XI

1. Knowing Oneself.

Knowledge of Basic human needs affect on behavior these needs are not met.

2. Family.

- a. Family its nature and functions.
- b. Types of Families in pre-literate societies.

3. Family in Pakistan.

- a. Individual and joint families.
- b. Change from Autocratic to Democratic.
- c. Modern social changes affecting the family.

4. Individual and the Family.

- a. Parent child relationship and responsibilities.
- b. Influence of cultural environment
- c. Exceptions and roles; factors effecting change of rolls, cultural conditioning, conflicts, their causes and accommodation.

BOOKS RECOMMENDED

1. An Introduction to Family Relationship
W.B.Saunders Company, Philadelphia and London
Smart and Smart
2. Family Living
The MacMillan Company
Dovall
3. The Family and Democratic Society

John Wiley and Sons Inc.new York,
Champan and Hall Limited London
Folsom

4. The Family

The American Book Company

Borgess and Locke.

5. Psychology of Personal Adjustment

John Wiley and Sons Inc., New York.

Champan and Hall Ltd., London

Fred McKinney

Section B- Child Development

Growth of Child

Importance of knowing child development. Heredity, Laws of Heredity.

Environment and its nature .nature and Laws of growth.

Development and case of the child (Physical, Social, intellectual and Emotional) from birth to 5 years of life.

Origin Behavior.

1. Motives and Drives
2. Maturation and Learning.
3. Emotional stability.

The Importance of Play in Child's Life.

Play equipment, Theories of play, some behavior problems and how to deal with them.

Observation in the Nursery School.

BOOKS RECOMMENDED

1. Child Psychology

16-Akhoy Das Lane, Daribed,

Dacca.

Dr. (Mrs.) Mehrunnisa Ahmed

2. Growth and Development of the Young Child

W.B.Saunders Company.

Philadelphia

Rand, Sweeny and Vincent

3. Child Development

McGraw Hill Book Co, Ltd.,

Elizabeth B.Hurdock

4. Your Child from One to six

Chief Children's Bureau.

Marth M.Eliot.

