

GROUP D For Internal Examination
socially useful productive work
(S.U.P.W.)
NURSERY

A. Theory -

1. Need of keeping a nursery at home and school
2. knowledge of equipments used in nursery, such as pruning knife, grafting knife, pair of scissors etc.
3. Important flowering and decoration plants such as Dahlia, Roses, Moghra, Harsingar, Jasmine, Chinapalm, Crotons, Cactus, sunflower, pansy etc.
4. Knowledge of practice involved in nursery bedding, cutting grafting hydrodization.
5. Use of manures and pesticides.
6. Planning for marketing.

B. Practicals :-

1. Preparing soil and pot for plants.
2. Bringing up young seedling in pots. / beds.
3. Transfer of seedling in growing beds preparation of beds.
4. Manufacturing the plants.
5. Practice in vegetative propagation.

KITCHEN-GARDENING

A. Theory :-

1. How to select site for kitchen garden.
2. Preparation of soil.
3. Selection of seeds for gardening.
4. Varieties of vegetable easily cultivatable in kitchen garden, green vegetable fruit vegetable roots and tubers, stem vegetable and lower vegetable
5. Common plant diseases, their prevention and control .
6. Manures and insecticides.
7. Common tools used in kitchen gardening.

B. Practicals :-

1. Selection of the site for kitchen - gardening
2. Preparation of beds for seeds.
3. Treatment of seeds
4. Planting the seedling.
5. Care of young plants.
6. Packing of vegetable for storage and marketing.
7. Use of different tools.
8. Use of manures and insecticides.

FOOD PRESERVATION

A Theory :-

1. Meaning of the term " preservation" , Its necessity and economics importance.
2. Causative agents of decomposition of food stuffs.
3. Various method of perservation. preservative agents.
4. Storage of preserved material .
5. Market potential of preserved food stuff and its export.

B Practicals :-

1. Identification and use of various preservatives in sauces, jam jellies, chutney squarshes .
2. Preparation of tomato sause and jelly.
3. Prepatation of pickles of cabbage, mange chillies and lamon .
4. prepartion of jam jellies marmalades of guava apples and other local materials.

5. Preparing syrups of orange, lemon and other juicy fruits.
6. Preparation of gulkand.

POULTRY KEEPING

A. Theoretical Aspects :

1. Importance of poultry in the light of providing nutritious food.
2. Different varieties of poultry and birds, their characteristics.
3. Selection of food and breeds.
4. Structure of an egg. Natural and artificial incubation of egg.
5. Various methods of poultry keeping.
6. Different types of poultry feeds and their constituents.
7. Common Poultry diseases and their prevention and control.

B. Practicals :-

1. Selection and identification of different types of egg laying birds.
2. Study of structure of the egg.
3. Maintenance of bird houses / cages.
4. Preparation of poultry feeds
5. Artificial incubation of eggs.
6. Rearing of chicken, observation with regard to their weekly growth.

PREPARATION OF BREAD AND BISCUITS

Theory :-

1. Merits and demerits of breads, biscuit and other food material.
2. Use of material, their production and the equipments used.
3. Varieties of bread, biscuit and cakes.
4. Various methods of preparation of bread and biscuits.
5. Method of enriching the nutritious contents of bread and biscuits.
6. Modern techniques of their preservation.

B. Practical :-

To prepare the following types of bread and cakes.

1. Bread. 2. White bread. 3. Milk bread, 4. Sweet Biscuit, 5. Salt biscuit
6. Proteinised biscuit. 7. Nankhatai biscuit. 8. Ordinary cake. 9. Decoration cake, 10 Fruit cake.

MAINTENANCE AND REPAIR OF ELECTRICAL APPLIANCES

Theory :-

1. Knowledge of electric current, potential difference, resistance, conductance, power and energy units.
2. Knowledge of common tools required for maintenance work.
3. Working of household electrical appliances.

Practicals :-

1. Fault location and replacement of fuse. use of phase tester and test lamp.
2. Preparation of series circuit with miniature bulbs.
3. Wiring a fluorescent lamp.
4. Rewinding of electric bell, buzzer, 230/6 volt transformer.
5. Replacement of elements of electric iron, soldering iron, heater, hot plate. etc.
6. Repair of Geyser, immersion heater.
7. Wiring a table lamp.
8. Reading an energy meter, M.D. meter, Voltmeter, Ammeter.
9. Using a meter for fault location and measurement of insulation resistance of electric meter.
10. Replacement of carbon brush of small water pump motor.

11. Replcement I.C.T. or D.P switch & J.C.T.P. switch.
12. Earthing meter parts.

REPAIRS OF AUTOMOBILES (TWO WHEELER ONLY)

Theory :-

1. Basic working of petrol engines.
2. Two-stroke and four stroke motor cycle.
3. Use of carburettor.
4. Use of spark plug.
5. Gear and clutch.

Practicals :-

1. Servicing a moped, a scooter or a motar cycle.
2. Removal of carbon from spark plug, washing carbon from spark plug.
3. Replacement of gear oil.

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Practicals :-

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2. Removal of carbon from spark plug, washing carbon from spark plug.
3. Replacement of gear oil.
4. Greasing.
5. Replacemet of gear, brake and clutch wire.
6. Replcement of head light meter and complete light circuit breake light
7. Tightening of the brake.

8. Replcement of wheel.
9. Washing a carburater and adjustment air fuel mixture.
10. Retarding or forwarding an engine.

PLUMBING

Theory :-

1. Water head and pressure.
2. Over head tanks.
3. Drawing a layout for laying pipe lines.
4. Types of valves and taps.
5. Use of tools.
6. Types of pipe lines.

Practical :-

1. Laying pipe lines (C.I& P.C.C.)
2. Precaution in laying P.C.C. pipe line.
3. Jointing & tapping pipe lines.
4. Preparing clamp for water service lines.
5. Threading the clamp.
6. Fixing ferool.
7. Fixing valves.
8. Cutting G.I. pipe, therding G.I. pipe with the help of cute and dye set.
9. Fixing pipe line to lavotary set for flushing.
10. Fixing union, T elebow, socket, bend etc.

PRELIMINARY SURVEYING

Theory :-

1. Scale, representative fracation.
2. chain survey :-
use of various chain and tapes, station, base line check line booking of field book, offset by chain instrument, viz cross staff optical square prism square
3. Compass survey :-
Prismatic compass, bearing of lines, fore and back bearing, whole circle and quadratal bearing, meridians, geograpic method, lcoal attraction, arbitrary method of traversing.
4. Plain table survey : - Use and application , plotting on drawing.

Practical :-

To conduct practical with the help of (1) Chain Survey , (2) Compass survey. (3) Plane table and to prepare minimum 2 drawing sheets of each.

Recommendation :-

Syallabus of course published and followed by the board of secondary education should be the basis for further learning of student in various subject areas.

COMMERCIAL OR ALLIED ART

(A) Practical work in two parts.

- (i) Illustrations (ii) Poster - making.

(B) Sessional - work

(12 works prepared during the course to be selected by the candidate and certified by the particular clas - teacher, countersigned by the Head of the School - Headmaster or Principal)

Group A

1. Drawing from life 3 full figures..... monochrome colour.
2. Drawing from nature - landscapes in monochrome/colour.
3. Outdoor sketching.
4. Study of technique of illustration for specific purpose - pastel & ink / line wash / half tone colour.
Transparent and opaque.

Group B

1. Lettering and typography.
 - (a) Study of various display types.
 - (b) Brush lettering.
 - (c) Study of some commonly used type-faces.
 - (d) Copy and space calculation.
 - (e) Designing of logo/letter heads.
2. **Layout -**
 - (a) making a layout on the basis of product study and copy with headline.
 - (b) Making a simple folder.
 - (c) Making a poster with specified data.
 - (d) Sessional (work) :
 - (i) Making two layouts for press & advertisement.
 - (ii) Two posters.
 - (iii) A folder on a given subject with a single common idea.
 - (iv) Three illustrations.

Theory :-

Knowledge of :-

1. current advertising 2. working of an advertising agency 3. Methods of reproduction.

Note :- Whatever lecture is given, it should be with demonstration by the teacher.

SCULPTURE

Note - Clay-modelling which is given in class IX & X may be continued as an S.D.P. subject in sculpture the syllabus of which has been recommended as below. The examination will be practical nature.

1. One Practicals :-

- (a) Modelling in relief
 - (b) Modelling in round
2. Sessional Work :-

Instructional Objectives

The aim is to introduce the students to the fundamentals of sculpture by exposing him through practical work which should be a continuous process as a creative element. All assignments are to be so designed and planned that the student improves himself with the practical knowledge of volume, weight, play of form in space etc. This will be in continuation with the student's rendering on a flat two dimensional surface : Adequate technical skills may be provided depending on the facilities available. Students creative ability and skills are to be only the main objectives in the teacher's outlook.

Process of keen sense of learning through observation of reproduction should go hand in hand with pure attempts of original conceptions and designs of structural and organisational elements of sculpture.

Note - The time table is to be so arranged that students are given at least two periods together. At least ten pieces of work sculpture, prepared during the course, selected by the candidate, certified by the subject- teacher concerned and countersigned by the Headmaster/Principal of the schools. Handling of clay and its techniques, pinching, coiling, rolling etc. Study of basic shapes of objects in nature and their rendering in clay. Forms/Compositions based on the study of birds, animals, plants, trees in brief and round basic elements with geometrical shapes like cube, cylinder etc. and their composition in brief as an exercise in design study of textures. Use of plaster of paris in casting should also be taught. Use of clay for composition without for embanking construction of human figure i.e. eye, nose, ear, mouth etc, rendered in clay, on study from traditional sculpture with human figure of ornamental design, design in round to be done direct in plaster with wire/wire gauge armature. Use of any one of the following materials is also recommended :-

- (i) Soap stone carving.
- (ii) Wood for carving a relief.
- (iii) Way of direct modelling.
- (iv) Tin-copper I etc. direct folding, beating, ribbetting, construction work.

PHOTOGRAPHY

Note :- Photography given as socially useful productive work and taught in earlier class may be taken as foundation.

Theory :-

Knowledge about the following should be given to students.

1. General aspects of photography :-
 - (i) Negative material and their types
 - (ii) Developers.
 - (iii) Elements of picture composition with special precaution for focussing film using lighting exposure and developing.
 - (iv) Printing the positive.
 - (v) Enlarging from the negative.
 - (vi) Filters.
 - (vii) Care and maintenance of phtographic material.
2. Special Aspects of photography :-
 - (i) Additional equipments.
 - (ii) Colouring of pirnts.
 - (iii) Border of prints.
 - (iv) Album and mounting of photographs.
 - (v) Exhibition.

Practical work :-

Picture composition in enlargement or blow up, colouring the black and white phtopoints can be practised.

The work done during the academic year after being certified by the class teacher and countersigned by the headmaster/Principal of the school will be alloted marks.

TYPE - WRITTING (ENGLISH/HINDI)

1. Simple letters with subject and heading. Margin and its general rule. Spacing single and double at top and bottom of a sheet, Paragraphing. Heading, Envelop addressing.
2. Tabular and its application, display of tabulating work, invoice, balance sheet, sales accounts etc. and their typing. Business correspondence, Drafting telegraph manuscripts Official correspondence and its classification.
3. Graph and its description, method of producing copies in numbers.
4. Ribbon wrap and its purpose, its movement and action. Ribbon spool and how to put one a new ribbon- carrier, paper and its size. how to insert the paper.
5. Process of cutting stencils for duplicating purpose. Rectification of errors on stencil paper. Duplicators, its make and uses.

Practical :-

1. Mastering the special sign of the key-board and their use. Combination of characters.
2. Centering/Vertical, horizontal rolling on the type-writer, entering on a full page and on a half page.
3. Typing simple business matters, date and time, inside address, salutation, body complementary closing, signature and identification, initials.
4. Preparation of multiple copies of a circular letter with the aid of carbon paper.

BOOK-KEEPING

To familiarize the students with Indian system of accounts.

1. Writing up of Cash Book - simple, double and triple columned cash books, balancing cash book.
2. Writing up of columnal petty cash book.
3. Writing up of purchases and sales book.
4. Position of cash-book. purchases-book and sales book into ledger accounts.
5. Stock taking valuation of closing stock.
6. Preparation trial balance' preparation of trading and profit & loss accounts there from.
7. Preparation of balance sheet.
8. Mahajani system of book-keeping, essential feature, only the name of different 'BAHIS' kept, writing-up of kachchi Rokar Bahi (cash credit transactions) Vidi malan, Khatoni and khata Bahi, balancing of accounts.

PHYSICAL EDUCATION

Subject for Internal Assessment :-

(I) **Games** : Any two games may be offered out of the following sections. One game is compulsory to select from each section. Student should know the rules and skills of the games.

For Boy

Section-A

1. Football
2. Hockey
3. Cricket
4. Volley Ball

For Girls

Section - B

1. Volley, Ball
2. Basket Ball
3. Hockey
4. Hand Ball

For Boy

Section-B

1. Kabbadi
2. Kho-Kho
3. Badminton
4. Basket Ball
5. Table - tennis
6. Base Ball

For Girls

Section - B

1. Kabbadi
2. Kho-Kho
3. Badminton
4. Table - tennis

(2) Field and Track Events :-

Out of the following events the students have to select one event from each group :-

Group A (Track events)

Boys

1. 4 x 400 m. relay
2. 110 m. hurdles
3. 1500 m.
4. 5000m.
5. 10,000 m.

Girls

1. 800 m.
2. 1500 m.
3. 4 x 100 m. relay
4. 80 m. hurdles

Group B (Field events) in connection with advanced skill

- | | |
|---------------------------|------------------------|
| 1. Long jump | 1. Long jump. |
| 2. High jump | 2. High jump |
| 3. Hop step and Jump | 3. Shot put (12 Ibs) |
| 4. Pole Vault | 4. javelin throw |
| 5. Shot put (16 Ibs) | 5. Discus throw (1Kg.) |
| 6. Discus throw (1.5 Kg.) | |
| 7. Hammer throw. | |
| 8. Javeline throw | |

3. General Activities :-

Out of the following activities the student have to select any one activities.

- (i) Calisthenics :- Free standing exercises and drill.
- (ii) light apparatus exercises :- Any one of the following.
(a) Dumbles (ii) Wands (iii) Log drill.
- (iii) Indian Activities :- Any one of the following.
(i) Lazim (ii) yogic asans (iii) Surya namaskar
(iv) Dands and baithaks.
- (iv) Wrestling OR swimming.
- (v) Health Education :- (Simple ways of lifesaving and artificial respiration).

(vi) Gymnastics :-

For Boy

1. Parallel bars
2. Horizontal bar
3. Vaulting box

For Girls

1. Mat work
2. Beam work
3. Floor exercises

N.B.:- For General activities series of exercises may be selected by the teacher. The activities of all the above groups will be taught under the following specific head.

1. GAMES :-

- (a) Conditioning
- (b) Fundamental skills and their practices
- (c) Lead up games
- (d) Team tactics.

2. Field and Track Events :-

- (a) Conditioning exercises
- (b) Techniques
- (c) practice (Periodical record of each pupil will be maintained by the teacher in respect of his achievement and participation of events.)

3. General Activities :-

1. Calisthenics - Part I Formal :- (i) Introductory and warmingup
(ii) head, trunk legs, arms and abdomen exercises.

Informal : (i) Agility group (Self testing activity)

- (ii) Recreational activities (Small area games).

The above syllabus may be taught with special emphasis on advance skills and techniques and the teacher should be conversant with the latest changes in each game and its activities.