ICSE Class 10 Home Science Specimen Paper 1

Written by the Future Topper subject team on the CISCE examination pattern. Not an official CISCE paper.
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Maximum Marks: 100 | Time Allowed: Two hours | Reading Time: 15 minutes

Part I is compulsory. Attempt any four questions from Part II.

General Instructions

Write your answers on the separate answer paper provided. The first 15 minutes are for reading the paper, and you may not write during that time. Marks for each question, or part of a question, are shown in brackets. Part I carries 40 marks and must be attempted in full. Part II carries 60 marks, and you must attempt any four of the seven questions set in it. Where a question asks you to draw a stitch, a weave or a layout, draw it in pencil and label it clearly. No printed figures are supplied with this paper.

PART I (40 Marks)

Attempt all questions from this Part.

Question 1 [15]

Choose the correct answer for each part. Write only the option you choose.

(i) The step of home management in which the homemaker looks back at a finished job and judges how well the plan worked is:

(a) controlling (b) organising

(c) planning (d) evaluating

(ii) The household resource that cannot be stored or saved for later use is:

(a) money (b) time

(c) kitchen equipment (d) cooking fuel

(iii) Dovetailing of household tasks means:

(a) carrying two tasks forward within the same stretch of time

(b) finishing one task completely before beginning another

(c) putting off a task to the following day

(d) handing a task over to a paid helper

(iv) Middle childhood covers the years from about:

(a) birth to two years (b) two to six years

(c) six to eleven years (d) twelve to eighteen years

(v) The change in the mouth that belongs to middle childhood is the:

(a) eruption of the first milk tooth

(b) shedding of the milk teeth and arrival of the permanent set

(c) appearance of the wisdom teeth

(d) loss of the permanent teeth

(vi) A child who keeps to one fixed set of friends, guards their rules and swaps cards and collections with them is showing:

(a) solitary play (b) parallel play

(c) make believe play (d) gang behaviour

(vii) The food group included in a meal mainly to supply body building material is:

(a) cereals and millets (b) sugar and jaggery

(c) pulses, milk and eggs (d) fats and oils

(viii) The simplest way of improving the protein quality of a cereal based meal is:

(a) combining the cereal with a pulse

(b) serving a larger helping of the same cereal

(c) adding more oil to the dish

(d) adding sugar to the dish

(ix) The loss of a water soluble nutrient into the water in which a food is washed or boiled is called:

(a) fortification (b) leaching

(c) fermentation (d) germination

(x) The weave in which each filling yarn passes over one warp yarn and under the next is the:

(a) plain weave (b) twill weave

(c) satin weave (d) pile weave

(xi) The textile fibre obtained from the stem of a plant is:

(a) cotton (b) silk (c) wool (d) jute

(xii) A fabric that springs back into shape after being folded has been given a:

(a) crease resistant finish (b) sizing

(c) calendering (d) mercerising

(xiii) A message passed by a nod of the head, a smile or a raised eyebrow is an example of:

(a) verbal communication (b) written communication

(c) non-verbal communication (d) mass communication

(xiv) The part of the communication process that tells the sender whether the message has been understood is the:

(a) channel (b) feedback

(c) receiver (d) encoder

(xv) An extension worker who builds a smokeless chulha step by step in front of a group of village women is using:

(a) a lecture (b) a poster

(c) a method demonstration (d) a radio talk

Question 2 [10]

(i) State two ways in which a homemaker who goes out to work can save time in the kitchen. **[2]**

(ii) Give two reasons why a child in middle childhood needs plenty of outdoor play. **[2]**

(iii) State two reasons why variety in colour and texture matters in a planned meal. **[2]**

(iv) Give two reasons why a plain weave fabric is a sensible choice for a school uniform. **[2]**

(v) State two reasons why a poster is a useful aid in an extension programme. **[2]**

Question 3 [15]

(i) Explain what is meant by management of resources, and classify household resources as human and non-human, giving one example of each. **[3]**

(ii) State three changes in a child's thinking during middle childhood that make formal schooling possible. **[3]**

(iii) State three factors a homemaker takes into account while planning the day's meals, and give a reason for each. **[3]**

(iv) Describe how you would remove a fresh tea stain from a white cotton tablecloth, and state one precaution you would take. **[3]**

(v) Draw a simple labelled flow line to show the parts of the communication process, and name each part. **[3]**

PART II (60 Marks)

Attempt any four questions from this Part. Each question carries 15 marks.

Question 4 **[15]**

(a) Define home management. Explain the four steps of the management process in a household, giving one household example of each. **[5]**

(b) Explain what is meant by a work simplification technique. Describe three ways in which a homemaker can simplify work in the house. **[5]**

(c) Explain what is meant by family income, and distinguish between money income, real income and psychic income, giving one example of each. **[5]**

Question 5 **[15]**

(a) Explain the terms growth and development, and bring out three differences between them. **[5]**

(b) Describe the physical changes that take place in a child between six and eleven years of age. **[5]**

(c) Explain the part played by the group of friends in middle childhood, and state three ways in which a school can help a child to make friends. **[5]**

Question 6 **[15]**

(a) Define meal planning. State four aims a homemaker tries to meet when planning the family's meals. **[5]**

(b) Explain, with one example each, how the following affect meal planning: the age and occupation of the members, the money set aside for food, the season, the time and help the homemaker has, and the family's likes and dislikes. **[5]**

(c) Explain what is meant by a food group. Name the food groups used in planning meals, and state what each contributes to the meal. **[5]**

Question 7 **[15]**

(a) Classify textile fibres as natural and man made. Give two examples under each heading and state one property of each example. **[5]**

(b) Describe the plain weave and the twill weave. Draw each of them and name one fabric made by each. **[5]**

(c) Explain five points you would keep in mind while selecting clothes for a growing child. **[5]**

Question 8 **[15]**

(a) Explain what is meant by non-verbal communication. Describe five ways in which a person communicates without using words, and state why an extension worker must watch for them. **[5]**

(b) Explain what is meant by extension education, and state four of its objectives. **[5]**

(c) Describe any five audio visual aids used in extension work, stating one advantage of each. **[5]**

Question 9 **[15]**

(a) Explain what is meant by a family budget, and describe the steps a family follows in drawing one up for a month. **[5]**

(b) Explain why saving matters to a family, and describe three ways in which a family can save. **[5]**

(c) Explain what is meant by fatigue in household work. Name its kinds and describe three ways of reducing it. **[5]**

Question 10 **[15]**

(a) Describe how you would wash, dry and store a woollen sweater at the end of the cold season. **[5]**

(b) Explain the following terms as they are used in the finishing and care of fabrics: sizing, mercerising, bleaching, dry cleaning, starching. **[5]**

(c) Explain five ways in which parents can help a child of middle childhood to build good habits of work at home and at school. **[5]**

ANSWER KEY AND MARKING SCHEME

Marks shown in italics are the step marks an examiner would award. Accept any correct alternative that carries the same meaning, and accept answers in the candidate's own words. Where a question asks for a fixed number of points, mark the first points offered and ignore any extra ones. Drawings of stitches and weaves need not be to scale, but they must be labelled and must show the structure correctly.

Question 1 [15]

(i) (d) evaluating. Looking back at a finished job, judging the result against the plan and deciding what to change next time is the evaluating step.

(ii) (b) time. Money, equipment and fuel can all be kept for later, but time passes whether it is used or not and no part of it can be held back.

(iii) (a) carrying two tasks forward within the same stretch of time. The rice cooks while the vegetables are cut, so one stretch of time does the work of two.

(iv) (c) six to eleven years. These are the school years that lie between early childhood and adolescence.

(v) (b) shedding of the milk teeth and arrival of the permanent set. The change begins at about six years and runs through the stage, which is why it is sometimes called the toothless age.

(vi) (d) gang behaviour. The child of this age forms a tight group of friends of the same age and same sex, with its own rules, secrets and shared interests.

(vii) (c) pulses, milk and eggs. These foods are the chief sources of protein in the Indian diet, and protein is the nutrient that builds and repairs the tissues.

(viii) (a) combining the cereal with a pulse. The two proteins make up for each other's shortfalls, so the mixture is of better quality than either taken alone.

(ix) (b) leaching. The nutrient dissolves in the water and is thrown away with it.

(x) (a) plain weave. One up and one down, in a regular over and under order, is the plain weave.

(xi) (d) jute. Jute is a bast fibre taken from the stem of the plant, while cotton comes from the seed, silk from an insect and wool from an animal.

(xii) (a) crease resistant finish. The finish is applied to the cloth so that it does not hold a fold or a wrinkle.

(xiii) (c) non-verbal communication. The meaning is carried by the body and the face, with no word spoken or written.

(xiv) (b) feedback. Feedback is the response that travels back from the receiver and lets the sender know what has been taken in.

(xv) (c) a method demonstration. A method demonstration shows the people how a job is done, step by step, so that they can go home and do it themselves.

1 mark for each correct option. No marks are deducted for a wrong option.

Question 2 [10]

(i) She can do part of the work the night before, soaking the dal, kneading the dough or cutting and storing the vegetables, so that the morning stretch is shorter. She can also dovetail her tasks, letting the rice cook or the cooker come to pressure while she makes the salad and packs the tiffin, so two jobs move forward in one stretch of time.

Each of two ways 1 mark each, 2. Accept labour saving equipment, a weekly shopping list or keeping things of common use within reach.

(ii) Outdoor play gives the large muscles of the arms, legs and trunk the hard use they need, so strength, balance and coordination improve and the appetite and sleep settle. It also puts the child in a group where turns have to be taken and rules kept, and that is where give and take, fair play and the handling of winning and losing are learnt.

Physical reason 1. Social reason 1.

(iii) A plate that mixes colours and textures looks inviting, so the meal is eaten with interest instead of being left half finished. Variety in colour and texture also means the dishes have been drawn from different food groups,

so the meal turns out better balanced than one built around a single food.

Appeal and appetite 1. Better balance across food groups 1.

(iv) A plain weave is close and firm with no long floats, so it stands up to daily wear, rough handling and frequent washing without snagging or going out of shape. It is also the simplest weave to produce, which keeps the cloth cheap enough to replace as the child grows.

Strength and wear 1. Low cost or easy care 1.

(v) A poster carries one idea in a picture and a few words, so it is understood even by people who read very little. It can be put up where people already gather, at the well, the shop or the health centre, and it goes on carrying the message long after the extension worker has left the village.

Simple and easily understood 1. Works without the worker being present 1.

Question 3 [15]

(i) Management of resources is the thoughtful use of everything a family has, with planning, so that the family's goals are reached with as little waste as possible. Human resources are those that lie in the people themselves, such as the knowledge, skill, energy, health, interest and time of the family members. Non-human resources are those outside the people, such as money, the house, land, furniture, equipment and community facilities like the school, the park and the dispensary.

Meaning of management of resources 1. Human resources with an example 1. Non-human resources with an example 1.

(ii) The child can now hold a rule in mind and apply it, which is what reading, writing and number work demand. Thinking is no longer tied to what is in front of the eyes, so the child can work with ideas, arrange things in order of size and sort them into classes. Attention lasts much longer and memory improves, so a lesson begun in one period can be carried on to the next and homework can be remembered and finished.

Each of three changes 1 mark each, 3.

(iii) The age and occupation of the members, because a growing child, an older member and a member doing heavy outdoor work do not all need the same kind of meal. The money set aside for food, because the plan has to be met out of the family's purse and not out of a wish. The time, fuel, equipment and help the homemaker has, because a plan that asks for more cooking than she can manage will simply not be followed.

Each of three factors with its reason 1 mark each, 3. Accept the season, the market, family customs or likes and dislikes.

(iv) Treat the stain while it is fresh. Stretch the stained part over the mouth of a bowl and hold it in place, then pour hot water through it from a height until the brown colour is washed out of the cloth. Rub a little soap on what is left, wash the piece in the usual way and rinse well. If a faint mark remains, dab it with a weak borax solution, leave it a few minutes and wash again. Precaution: do not rub the stain with a hard brush and do not let it dry or press it, because a dried stain sets in the fibre and is far harder to shift.

Hot water poured through the stretched stain 1. Washing and rinsing, or the borax treatment for a remaining mark 1. Precaution 1.

(v) Sender, message, channel, receiver and feedback, drawn as five boxes joined left to right by arrows, with a further arrow running back from the receiver to the sender and labelled feedback. The sender is the person who has the idea. The message is that idea put into words, pictures or signs. The channel is the route the message travels by, such as speech, a letter, a poster or the radio. The receiver is the person the message is meant for. Feedback is the response that goes back and tells the sender how much was understood.

Correct flow line with the feedback arrow shown 1. All five parts named 1. All five parts explained 1.

Question 4 [15]

(a) Home management is the planning and use of the family's resources by the members themselves, so that the goals the family has set are reached with satisfaction and without waste. Planning is deciding beforehand what is to be done and how, for example writing out the week's menu before going to the market. Organising is arranging the money, time, equipment and helping hands so that the plan can actually be carried out, for example laying out the ingredients and the utensils before starting to cook. Controlling is watching the work while it is going on and bringing it back to the plan wherever it drifts, for example turning the flame down as the

milk starts to rise. Evaluating is looking back at the finished job and judging how far the plan worked and what should be changed next time, for example noting that the market list was short of one item.

Definition 1. Planning with an example 1. Organising with an example 1. Controlling with an example 1. Evaluating with an example 1.

(b) A work simplification technique is any deliberate change in the method, the body movements, the equipment or the place of work that gets the same job done with less time, less effort and less fatigue, without lowering the standard of the result. Three ways: change the hand and body motions, so that the two hands work together, the movements are smooth and curved rather than short and jerky, and nothing is lifted higher or carried further than it must be. Change the place of work, keeping the things used most often within easy reach, storing them at the point of first use and setting the working surface at a height that saves the worker from bending or stretching. Change the product or the method itself, so that a step drops out of the job altogether, as when ready cleaned pulses are bought, a pressure cooker is used or a one dish meal replaces three separate dishes on a busy day.

Meaning of work simplification 2. Each of three ways 1 mark each, 3.

(c) Family income is the whole of the money, goods and services that come to a family over a given period, usually a month, in return for the work, the skill and the property of its members. Money income is the cash that actually comes in, such as salary, wages, rent, interest, pension or profit from a shop. Real income is what that money and the family's own resources are turned into, that is the flow of goods and services the family really uses, such as the meals cooked at home, a house lived in rent free as part of a job, or the vegetables grown in the kitchen garden. Psychic income is the satisfaction and contentment the family draws from its money and real income, such as the pleasure of a meal eaten together or the pride taken in a well kept home.

Family income 2. Money income with an example 1. Real income with an example 1. Psychic income with an example 1.

Question 5 [15]

(a) Growth is the increase in the size of the body and of its parts, which can be seen and measured, as in height, weight, the length of the limbs and the size of the teeth. Development is the orderly series of changes through which the child becomes able to do more things and to do them better, taking in the working of the body, the mind, the feelings and behaviour with other people. Differences: growth can be set down in figures while development is judged by what the child is able to do. Growth comes to a stop at a certain age while development goes on through the whole of life. Growth is a change in quantity, whereas development is a change in quality and in the way the parts of the body and mind work together.

Growth 1. Development 1. Each of three differences 1 mark each, 3.

(b) Growth in height and weight settles into a steady and slower rate than in the early years, so the child looks taller and leaner and the rounded look of the baby years goes. The milk teeth are shed and the permanent set comes in, which changes the shape of the jaw and the look of the face. The trunk lengthens and the legs grow fast, so the head no longer looks large for the body and the whole frame is better balanced. The large muscles come under good control first, so running, climbing, cycling, skipping and swimming are managed well and with enjoyment, and the small muscles of the hand and fingers follow, so writing, drawing, sewing and handwork grow neat and quick. Towards the end of the stage girls commonly move ahead of boys in height and weight, and the first signs of the coming growth spurt appear.

Steady slower gain in height and weight 1. Change of teeth 1. Change in body proportions 1. Control of large muscles then small muscles 1. Girls moving ahead towards the end of the stage 1.

(c) In middle childhood the child steps out of the family circle and the group of friends of the same age becomes the centre of life outside the home. The child wants badly to belong, keeps the group's rules even where they cut across the family's, copies the way the group dresses, talks and plays, and learns from it what the family cannot teach: how to wait for a turn, how to lose a game without quarrelling, how to stand up for oneself and how to work with others towards a shared end. Being shut out of the group hurts more at this age than being scolded at home, so a child without friends should never be left to manage alone. Three ways the school can help: set small mixed groups to work on projects, duties and games so that every child has a place to fill; give

each child a task the class depends on, such as the library corner or the games box, so that the quiet child is drawn in and noticed; and watch the classroom and the play field for the child who is always alone or always teased, and place that child in a group rather than leaving the matter to the children to settle.

Part played by the group of friends 2. Each of three ways the school can help 1 mark each, 3.

Question 6 [15]

(a) Meal planning is deciding in advance what dishes will be served at each meal of the day, and from which foods, so that the needs of every member of the family are met within the family's means. Aims: to see that the day's meals taken together draw on all the food groups, so that the diet stays balanced; to suit the age, the occupation and the state of health of each member, since one meal has to serve a growing child, an adult at work and an older member; to keep within the money set aside for food, choosing cheaper foods of the same food group where they will do; and to fit the time, fuel, equipment and help the homemaker actually has, while respecting the family's customs, likes and dislikes so that the food is eaten and not thrown away.

Definition 1. Each of four aims 1 mark each, 4. Accept variety in colour, flavour and texture, or the saving of nutrients in cooking, as an aim in place of any of these.

(b) Age and occupation of the members: the meal must serve a school child, an adult doing office work and an older member at the same table, so the homemaker plans a common base and varies the helpings and the extras, for example adding a glass of milk for the child. Money set aside for food: the plan has to be met out of the purse, so the homemaker uses the cheaper foods of a group in place of the costly ones, as groundnut in place of cashew, or a seasonal green in place of an out of season one. Season: foods in season are fresher, cheaper and better in flavour, so summer menus lean on gourds, melons and curd while winter menus lean on green leafy vegetables, carrots and peas. Time and help available: on a day when she must leave early the homemaker plans a one dish meal such as khichdi or a pulao, or cooks the night before, rather than a menu of four separate dishes. Likes and dislikes: a dish nobody will eat is money and nutrients thrown away, so a disliked food is served in another form, as a vegetable worked into a paratha stuffing.

Each of five factors with its example 1 mark each, 5.

(c) A food group is a set of foods placed together because they give much the same main nutrients, so that any one food in the group can stand in for another when a meal is planned. The groups are: cereals, grains and their products, which are the main source of energy and also add some protein and fibre; pulses, nuts and oilseeds, which add protein of fair quality, energy, B group vitamins and minerals; milk and milk products together with egg, meat and fish, which give protein of good quality along with calcium, iron and some vitamins; fruits and vegetables, which supply vitamins, minerals, fibre and water, with the green leafy and yellow ones richest in them; and fats, oils, sugar and jaggery, which give concentrated energy and make the food palatable.

Meaning of a food group 1. Groups correctly named 1. Contribution of each group 3.

Question 7 [15]

(a) Natural fibres are those obtained ready formed from a plant, an animal or a mineral, while man made fibres are those built up in a factory, either by treating a natural material such as wood pulp or by putting the fibre together from chemicals. Natural: cotton, which comes from the seed boll of the cotton plant and is absorbent, cool and comfortable next to the skin; wool, which is the fleece of the sheep and traps air among its crimped fibres, so it is warm and resilient. Man made: rayon, made from wood pulp, which drapes well and takes dye readily but is weak when wet; polyester, built from chemicals, which is strong, holds its shape and dries quickly but absorbs very little moisture.

Classification explained 1. Two natural fibres with a property each 2. Two man made fibres with a property each 2.

(b) Plain weave: the filling yarn passes over one warp yarn and under the next, and the following filling row reverses the order, so the cloth looks the same on both faces and the yarns interlace as often as they possibly can. This makes the cloth firm, hard wearing and easy to launder, though it creases readily and has no sheen. One fabric: poplin, or mulmul. Twill weave: the filling yarn passes over two or more warp yarns and then under one or more, and the point of interlacing moves along by one yarn in each row, so a clear diagonal line, called

the twill line, runs across the face of the cloth. The longer floats make the cloth heavier, more pliable and better at hiding soil. One fabric: denim, or drill. Drawing: for the plain weave show a square grid with the filling row shaded over one and under one, alternating in the next row; for the twill show the shading stepped up by one square in each row so that the diagonal is plain to see. Both drawings should be labelled warp and filling.

Plain weave described 1. Twill weave described 1. Two correct labelled drawings 2. One fabric named for each 1.

(c) Growing room, so that a seam or a hem can be let out and the garment is not thrown away in a season; buy a little loose rather than exactly to measure. Comfort, with a soft absorbent fabric such as cotton for daily wear, armholes and necklines cut wide enough for free movement, and no tight elastic or stiff trimming. Easy care, because a child's clothes are washed very often, so the fabric should be colourfast, able to take rough washing and need little or no ironing. Self help features, such as large buttons, front openings and simple fastenings, so the child can dress and undress without being waited on and gains independence. Safety and suitability, which means no long trailing sashes, loose cords or beads that can catch or be swallowed, and a choice of colour, print and style that the child is glad to be seen in among friends.

Each of five points 1 mark each, 5.

Question 8 [15]

(a) Non-verbal communication is the passing of meaning without words, by the face, the body, the voice and the use of space and time, and it runs alongside speech whether the speaker intends it or not. Five ways: facial expression, since a smile, a frown or raised eyebrows tell the other person at once whether what is being said is meant warmly or not. Gesture and posture, such as a nod, a shake of the head, folded arms or a slumped back, which show agreement, refusal, impatience or loss of interest. Eye contact, since a steady look holds attention and shows confidence and honesty, while looking away suggests discomfort or something being held back. Tone, pitch and pace of the voice, together with silence and pauses, which can turn the same sentence into a question, an order or a joke. Use of space, touch, dress and punctuality, since how close a person stands, whether a hand is offered, how a person is dressed and whether the appointed hour is kept all carry a message before a word is said. An extension worker must watch for these because the people she works among will rarely contradict her openly, so their doubt, boredom or disbelief shows only in the face and the body, and that is her real feedback. Her own manner matters just as much, since an impatient tone, or a dress and bearing that set her apart from the people, will undo whatever her words are saying.

Meaning of non-verbal communication 1. Each of five ways 0.5 marks each, 2.5. Why an extension worker must watch for them 1.5.

(b) Extension education is education carried out outside the four walls of a school, among people of all ages in their own homes, fields and villages, taking what has been found out by research and putting it in a form that ordinary people can use in their daily living. It is informal, it has no fixed syllabus and no examination, and it works with the needs the people themselves feel. Objectives: to carry useful new knowledge in agriculture, health, nutrition, childcare and home management out to the people who need it; to change what people do and not merely what they know, so that practice in the home and the field actually improves; to help people find out their own needs and their own resources, and to plan and work for themselves rather than wait to be helped; and to develop local leadership and the habit of working together, so that the improvement continues after the extension worker has moved on.

Meaning of extension education 1. Each of four objectives 1 mark each, 4.

(c) Poster: a sheet carrying one idea in a bold picture and a few words, cheap to make and able to catch the eye of a passer by who would not sit through a talk. Flannel graph or cloth board: cut out pictures backed with sandpaper that cling to a cloth covered board, so the worker can build the story piece by piece and hold the group's attention as it grows. Charts and flip charts: a set of sheets shown in order, which keeps a talk to its sequence and lets a group of moderate size follow the steps of a process. Model or specimen: a small working model or the real article itself, which can be handled and turned over, so the people grasp a shape or a mechanism that a picture would leave unclear. Radio or recorded talk: carries the voice of an expert to very large numbers at once, including people who cannot read, and reaches them in their own homes at a time they are free. Film or short video: shows movement and sequence, so a whole process can be seen as it

happens and the message is remembered longer than a spoken one.

Each of five aids with its advantage 1 mark each, 5. Any five of these, or any other correct aid, earn full marks.

Question 9 [15]

(a) A family budget is a written plan of the income the family expects over a period, usually a month, set against the spending it proposes to make out of that income, drawn up so that the family lives within its means and still reaches the goals it has set itself. Steps: list the goals for the period, and decide which of them come first. Work out the total income expected in the month from every source, counting only what is reasonably certain. List the headings of spending, separating the fixed items such as rent, school fees and loan instalments from the flexible ones such as food, travel and clothing. Set a figure against each heading, starting with the fixed items, and provide for savings before the flexible items are filled in rather than after. Compare the total of the proposed spending with the expected income, and where the spending runs ahead, cut back the flexible headings until the two meet. Put the budget into use, keep a simple record of what is actually spent, and at the end of the month check the record against the plan so the next budget can be made more realistic.

Meaning of a budget 2. Steps of drawing it up 3.

(b) Saving matters because income is uncertain while needs are not: illness, an accident, a wedding, the loss of a job or a repair to the house all come without warning, and a family with something put by meets them out of its own resources instead of borrowing at heavy interest. Savings also buy the things no single month's income can buy, a house, a vehicle, a daughter's education, and they provide for old age when the earning years are over. Three ways: a recurring deposit or a savings account with a bank or the post office, into which a fixed sum goes every month before the rest of the money is spent. Life insurance or a provident fund, which combines saving with protection for the family and is deducted at source so the money is never in hand to be spent. Small regular purchase of a safe long term instrument such as a national savings certificate, a public provident fund account or a fixed deposit, and at the household level, simple thrift such as a kitchen garden, bulk buying of staples in season and the care and repair of what the family already owns.

Importance of saving 2. Each of three ways 1 mark each, 3.

(c) Fatigue is the tiredness that follows work, felt as a fall in the power to go on, in which output drops, mistakes creep in and interest in the job is lost. Kinds: physical fatigue, which comes from the use of the muscles and is felt as aching and heaviness in the body; mental fatigue, which comes from long concentration and is felt as inability to think clearly; and psychological or boredom fatigue, which comes from work that is dull, repeated and disliked, and which can appear even when very little energy has been spent. Three ways of reducing it: arrange short rest pauses within the work rather than one long rest at the end, because the body recovers far better from a rest taken before exhaustion sets in. Alternate heavy and light tasks, and put the heaviest work at the hour when energy is highest, so that no long stretch of the day is all hard work. Correct the method and the place of work, using good posture, a working surface of the right height, a seat where the job allows sitting, both hands together and labour saving equipment, and break the dullness of repeated work with a change of task, company or music.

Meaning of fatigue 1. Kinds of fatigue 1. Each of three ways of reducing it 1 mark each, 3.

Question 10 [15]

(a) Washing: shake the sweater free of dust and mend any small hole first, because washing makes a hole larger. Trace its outline on a sheet of paper so the shape can be checked later. Treat any stain, then wash it by hand in lukewarm water with a mild soap or a wool detergent, squeezing the lather gently through the garment and never rubbing, twisting or wringing it, since heat and friction make wool shrink and felt. Rinse in two or three changes of water of the same temperature as the wash water. Drying: press out the water between the palms or roll the sweater in a thick towel to take up the moisture, then lay it flat on a dry towel in the shade, pulling it back to the outline that was traced, and turn it over once midway. Never hang a wet woollen on a line or a hanger, as the weight of the water pulls it out of shape, and keep it out of direct sun and away from a heater. Storing: see that it is bone dry and perfectly clean, because a trace of food or perspiration attracts moths. Fold it loosely with sheets of paper between the folds, do not hang it, and put it away in a clean cloth bag, a tin or a trunk with a few naphthalene balls or neem leaves wrapped in paper so they do not touch

the wool. Keep the container in a dry place and air the garment once during the hot months.

Washing, including lukewarm water, mild soap and no rubbing or wringing 2. Drying flat in the shade and reshaping 1. Storing, including clean and dry, folded and protected from moths 2.

(b) Sizing: a filling of starch, china clay or gum put into a cloth to add weight, body and smoothness, which makes a thin fabric look better than it is and washes out in time. Mercerising: treating cotton yarn or cloth with a strong solution of caustic soda under tension, which makes the fibre swell and straighten, so the cotton becomes stronger, more lustrous and better able to take up dye. Bleaching: removing the natural colouring matter and any remaining stain from a fabric by sunlight or by a chemical such as hypochlorite or hydrogen peroxide, to leave it white and ready for dyeing or printing. Dry cleaning: cleaning a garment in an organic solvent in place of water, used for wool, silk and tailored or stiffened garments that water would shrink, spot or pull out of shape. Starching: stiffening a washed cotton or linen article by working a thin starch paste into it before drying, so that it holds a crisp shape, irons smoothly and takes up less soil, the starch being washed out and renewed at each wash.

Each of five terms 1 mark each, 5.

(c) Give the child a fixed place and a fixed hour for study, with good light, a clear surface and the radio and television switched off, so the habit of sitting down to work does not have to be fought for every day. Set work the child can actually finish, and break a long task into small steps, so the child ends with the satisfaction of having completed something instead of the memory of having failed. Give regular jobs about the house, laying the table, feeding the pet, putting away the shoes, and expect them to be done to a standard, since responsibility at home carries straight over into work at school. Praise the effort and the finishing rather than only the marks, and correct mistakes quietly and at once, because at this age the child is working to be thought capable and will repeat whatever is noticed. Set the example and keep the routine steady, since a child of middle childhood copies the adults it admires, and parents who keep their own time, finish what they begin and show interest in the child's school work teach the habit more surely than any amount of telling.

Each of five ways 1 mark each, 5.