

## SAMPLE QUESTION PAPER

Subject : Home Science  
Paper : Theory

Senior Secondary  
Marks : 80

1. Which standardisation mark will you look for while purchasing  
i) a bottle of jam 1  
ii) a packet of biscuits.
2. Define 'Work Centre' and give one example of the same. 1
3. A nine year old child who can control her emotions is - 1  
a) well brought up  
b) knows the importance of pretence  
c) understands that strong emotional expression can affect others negatively  
d) is deceiving others about her real emotions.
4. Which of the following is a wrong question for assessing the language development of an 8 year old? 1  
a) state the different meanings of the word "nail"  
b) state the meaning of 'umbrella'  
c) tell the meaning of "grass is greener on the other side of the hedge"  
d) till the difference between 'sail' and 'sale'.
5. Which of the following is a motor activity of a 10 yr. old involving balance and co-ordination? 1  
a) throwing a ball at a target  
b) skipping on one foot on a line drawn on the floor  
c) running for 100 m.  
d) catching a ball thrown from a distance.
6. The ability to arrange pencils of varying length according to decreasing length is known as- 1  
a) conservation  
b) seriation  
c) regression  
d) progression
7. Cognitive development refers to - 1  
a) feelings and moods  
b) thinking and reasoning  
c) interacting and conversing  
d) all of the above
8. Name the treatment given to man-made fabrics to make them curly, coiling, crimping and looping. 1
9. Name the finish : 1  
i) to make fabric shrink proof 1

- ii) applied on umbrella cloth
10. Mercerisation is a -
- 1 durable finish
  - 1 chemical finish
  - 1 finish applied to cellulose
  - 1 all of the above.
11. The most appropriate method of washing a pullover is :
- 1 suction washing with mild soap
  - 1 kneading and squeezing with mild soap
  - 1 kneading and squeezing with strong detergent
  - 1 friction ,using vinegar.
12. A selvedge is -
- 1 along the warp
  - 1 along the weft
  - 1 along a 45° angle on the fabric
  - 1 both along warp and weft.
13. List any two physiological functions of food. 1
14. Write two important problems children can suffer from in case of iodine deficiency. 1
15. Name two institutions your father can invest his retirement benefits in. Give two reasons for your selection. 2
16. Mention four different forms of environmental degradation. 2
17. Compare the classification ability of a 3 year old with that of an 8 yr. old child. 2
18. List two ways in which organising a school function will help in the social development of a 10 year old child. 2
19. Name the procedure used for giving Muslin fabric a permanent stiffening finish. Give two characteristics of this finish. 2
20. Suggest four points you will keep in mind while purchasing a ready-made dress for your working grandmother. 2
21. Mention the National Nutrition Programmes that help in - 2
- i) providing immunisation for pre-school children
  - ii) ensuring better school attendance
  - iii) preventing nutritional blindness
  - iv) decreasing the incidence of nutritional anaemia among women.

22. What is the importance of grouping foods into Five Food Group System? Which food group provides the maximum energy in your meal? 2
23. Suggest six appropriate measures a working mother can take to complete her cooking jobs before leaving for work. 3
24. State two reasons why cooking gas needs to be conserved. Suggest four ways in which you can do it. 3
25. Give one example each of interaction between a ten year old child and her parents and peers. Illustrate the significance of this interaction on the child's social development. 3
26. Why would you choose woven fabrics instead of knitted fabrics? 3
27. Differentiate between perishable and non perishable foods. How will you store milk and cereals at home? 3
28. Suggest six personal hygiene habits that could be adopted to control frequent occurrence of food related stomach problems in a family. 3
29. Suggest an eight point code of work ethics which a student must follow. 4
30. Describe the physical changes occurring during middle childhood. 4
31. Define fibre. Discuss the different types of natural fibres giving an example of each. 4
32. Justify the importance of eight factors essential for providing a balanced meal to your family. 4

#### OPTIONAL A (COMMUNITY NUTRITION)

33. The mid-upper arm circumference (MUAC) of a child is 12.5cm. Interpret this value in terms of normal and state one reason for your confusion. 1
34. Mention two ways in which you can maximise the nutritive value of cereals and pulses. 1
35. Suggest two measures each to control malnutrition due to shortage of food and ignorance. 2
36. As a nutrition educator, suggest four strategies you will adopt to improve the intake of green leafy vegetables among growing children. 2
37. What are Biochemical Tests? Name any 2 tissues on which the biochemical tests are conducted when one is unwell. List two drawbacks of using these 3

tests for nutritional assessment.

38. List any four clinical features of vitamin A deficiency. Mention one long term and one short term measure that can be taken to prevent diseases due to vitamin A deficiency. 3

39. Suggest four ways each for preventing and controlling Marasmus and Kwashiorkor among children. 4

**OPTIONAL B  
(HOME BASED CARE FOR UNDER FIVES)**

33. Advance planning for effective functioning of a home based care programme with temporarily only one teacher must focus on - 1  
a) group activities and indoor play  
b) reading and writing  
c) outings and outdoor play  
d) organised games of different kinds

34. State which two areas of development are enhanced when a child puts together a jigsaw puzzle. 1

35. Name two informal situations where teachers of a play centre can meet the parents. Mention two issues of common concern which can be part of their conversation. 2

36. In spite of the fact that young children are left unattended when the parents are working in the fields from 6.00AM to 11.00 AM, the local play centre is not popular with the parents. Give two reasons for this. 2

37. List two environmental factors that affect growth and development. Also point out four characteristics of cognitive development during early childhood. 3

38. In planning a programme for under fives what four points will you consider, keeping in mind the needs of children? Give two examples of creative activities. 3

39. List two objectives each that take into consideration the cognitive and social needs of pre schoolers. Name two behavioural problems which a 2-5 year old displays which can harm others and mention one way each to handle it. 4

**OPTIONAL C**  
**(LAUNDRY SERVICE)**

33. The choice of method of washing is done on the basis of - 1
- a) amount of dirt in clothes
  - b) colour of the fabric
  - c) number of items to be washed
  - d) all of the above.
34. Which method of washing will you choose for washing your silk georgette saree? What stiffening aid will be the most effective on it? 1
35. Classify the following into suitable categories for accounting purposes- 2
- i) washing machines and irons
  - ii) stain removing agents
  - iii) electricity
  - iv) goods procurement
36. If a small laundry service is not doing well, what aspects will you examine to locate the problem? 2
37. Define the two types of dirt. State how you will remove them. 3
38. Differentiate between the different types of cleansers. 3
39. How are oxidising bleaches different from reducing bleaches? Compare the action of bleaching agents with that of O.B.A.'s. 4

## MARKING SCHEME

1. I) Jam - FPO	ii) Biscuits - ISI	$\frac{1}{2} + \frac{1}{2}$
2. An area specified for an activity is known as work area/work centre.		
Ex: cooking, washing, sleeping, studying, entertainment (any one)		
3. (c)		$\frac{1}{2} + \frac{1}{2}$
4. (b)		1
5. (b)		1
6. (b)		1
7. (b)		1
8. Texturising		1
9. (i) sanforising	(ii) waterproofing	1
10. (d)		1
11. (b)		1
12. (a)		1
13. Physiological functions of food : (i) providing energy		
(ii) helping to build body (iii) protection against disease		
(iv) regulating body processes (any two)		
		$\frac{1}{2} + \frac{1}{2}$
14. Deficiency of iron among young children can lead to :		
i) growth retardation/cretinism		
ii) mental retardation/limited mental development		
iii) speech and hearing defects		
iv) disorders of nerves & muscles		
		(any two)
		$\frac{1}{2} + \frac{1}{2}$
15. Investing institutions : Banks/Unit-Trust/Post office (any two)		
Reasons : i) regular source of income can be obtained		
ii) high liquidity in time of need		
iii) money is safe		
		(any two)
		1+1
16. i) soil/land degradation		
ii) deforestation		
iii) degradation of air		
iv) degradation of water		
v) slum conditions		
		$\frac{1}{2} \times 4$
		(any four)

17. A three year old can classify on the basis of only one dimension . 1+1  
 Ex: colour of objects whereas an eight year old can classify on the basis of more than one dimension. Ex: Colour and size of objects.
18. - learns to do ones role with responsibility, 1+1  
 - gains self - confidence,  
 - learns to cooperate with peers,  
 - leans to carry out teacher's orders  
 - learns management skills (any two)
19. The process by which muslin can be made permanently stiff is 1+1/2 +1/2  
 parchmentisation'. Such a fabric not only becomes very stiff but remains transparent at the same time. This finish remains even after washing.
20. - It should be comfortable, 1/2 x 4  
 -it should be loóse without being ill fitting  
 -fabric should be soft,  
 -fabric should be light weight,  
 -it should preferably have a front opening,  
 -finishing should be neat  
 -require minimum care & maintenance (any four)
21. (i) ICDS (ii) Mid Day Meal Programme 1/2 x 4  
 iii) National Prohyllaxin Programme for Prevention of Blindness due to Vitamin-A deficiency.  
 iv) National Nutritional Anaemia Control Programme.
22. Importance of Five Food Group System : 1/2+1/2+1  
 -when you want a particular nutrient you know the foof group you should work for,  
 -it makes it easy to make food exchanges,  
 Maximum energy : Fats and sugars.
23. She can - 1/2 x 6  
 -use labour saving devices,  
 -use dove tailing,  
 -use short cuts  
 -plan her work in advance,  
 -keep things within easy reach,  
 -use appropriate work movements,  
 -change the work sequence (any six)
24. Reasons : - energy saved is energy generated,  
 -fuels are limited,

- reduce fuel bill,
  - make cylinder last longer,
  - demand for energy exceeds supply
- (any two)

- Ways : - avoid open cooking  $\frac{1}{2} \times 2 + \frac{1}{2} \times 4$
- use a pressure cooker
  - use separators in a pressure cooker
  - use copper bottom/sandwich bottom pans
  - switch on gas after putting pan on & switch off before removing pan
  - keep burner holes clean
  - use small burner for small vessels
  - switch off regulator switch at night
  - avoid reheating food
- (any four)

25. Interaction with parents : Any one of the following points should emerge out of the given example -  $(1 + \frac{1}{2}) \times 2$
- Parents - praise 1 mark for example
- discipline  $\frac{1}{2}$  mark for point
  - punish
  - provide opportunities
  - provide support/encouragement

26. Woven fabrics are preferred because they are : 1x3
- firm
  - smooth
  - stature
  - maintain their stiffness
  - available in variety of designs
  - requiring no special precautions in care & maintenance
- (any three)

27. Perishables : foods having shelf life of 1 to 2 days at room temperature.  $\frac{1}{2} + \frac{1}{2} + 1 + 1$

Non-perishables : Foods that can be stored for several months.

Storage of milk at home - boil & keep in cool place/refrigerator

- boil milk every 5-6 hours to keep it germ free.

Storage of cereals - store in clean, dry, airtight containers

- store with adding salt/turmeric/neem leaves/special Ayurvedic tablets tied in muslin cloth.

28. - wash hands before starting to cook  $\frac{1}{2} \times 6$
- keep nails trimmed and clean,
  - tie hair with scarf,
  - avoid licking/tasting food,
  - avoid dirty feet/slippers in the kitchen,
  - avoid handling of food by sick persons.

29. -be punctual at school  
 -be regular with school work  
 -acquire skill in doing school work  
 -be prepared to learn  
 -study hard  
 -be respectful and polite to teachers  
 -follow rules at school  
 -learn to manage time  
 -find more efficient ways of doing school work  
 -be neat  
 -have respect for the uniform  
 -maintain discipline while at school

$\frac{1}{2} \times 8$

(any eight)

30. - change in body proportion according to proximodistal principle,  
 -change in body proportion according to cephalocaudal principle  
 -in crease in height  
 -in crease in weight  
 -development of permanent teeth  
 -development of bones  
 -development of muscles  
 -development of sex organs

$\frac{1}{2} \times 8$

31. Definition : A fibre is a basic unit of a fabric : It is a single hair like strand.  
 Natural fibres are the ones obtained from natural sources. They can be obtained from three sources:

$$1 + (\frac{1}{2} + \frac{1}{2}) \times 3 = 4$$

- i) Vegetable fibres - these are fibres obtained from different parts of a plant like the seed, stems, leaves etc. They are all cellulose. E.g. -cotton, jute
- ii) Animal fibres - these are obtained from animal sources like outer hair covering or secretion of insects. They are all proteinous. E.g. Wool, silk
- iii) Mineral fibres - these fibres are obtained from earth minerals. E.g. asbestos.

32. Factors affecting meal planning :

$\frac{1}{2} \times 8$

- i) nutritional adequacy : means the nutrient requirement of all member should be met by the meal planned.
- ii) age : the meal planned should take care of the dietary needs of family members of all age groups e.g. -growing children need to eat more and often and older family members eat less.
- iii) sex : adolescent boys have a higher dietary intake as compared to adolescent girls
- iv) activity - food intake increases as the activity level increases, i.e., a labourer needs to eat more than a moderate worker.
- v) economic considerations - use measures to buy nourishing foods at economical prices.
- vi) time, energy & skill are needed to plan balanced meals. A one dish meal like paushtik pulao served with vegetable raita and mint chutney can be a balanced meal too.

- vii) seasonal availability: seasonal foods are cheap, tasty and more nutritious. Thus use of seasonal foods in meals provides nutrition at low cost.
  - viii) religion, region, cultural patterns, traditions & customs influence the meals planned. North Indians eat more of wheat and people in coastal belts eat more of rice, fish and coconut.
  - ix) variety in colour & texture make the meal more attractive, appealing and attractive.
  - x) likes and dislike makes the food acceptable or unacceptable. If milk is not liked as milk, then, paneer/curd/ice cream could be given instead.
  - xi) satiety value-meal planned should have sufficient satiety value. A meal with lower satiety value tends to lower the working capacity of an individual.
- (any eight)

### OPTIONAL A (COMMUNITY NUTRITION)

33. MUAC value of 12.5 cm is below the normal value which is 13.5 cm.  $\frac{1}{2} + \frac{1}{2}$   
The child is weak.
34. - by combination i.e. combine cereals and pulses,  $\frac{1}{2} + \frac{1}{2}$   
- by germination of cereals and pulses  
- by fermentation (any two)
35. Shortage of food can be overcome by  $(\frac{1}{2} + \frac{1}{2}) \times 2$   
- growing more food,  
- restricting population.  
Remove ignorance by - giving education to all  
- developing skills
36. The four strategies will be -  $\frac{1}{2} \times 4$   
-discuss the importance of green leafy vegetables in daily meals;  
-use dramatics to motivate children;  
-demonstrate easy to make dishes accepted by the child group;  
-ask children to keep a weekly record of actual consumption of green leaves.  
Give credit points to reinforce the habit of eating green leafy vegetables.
37. A biochemical test is one that is carried out on different tissues to  $1 + 1 + 1$   
detect any disease.  
Name of tissues-blood/urine/stool/liver/bone/kidney (any two)  
Drawbacks - costly/expensive; time consuming; requires laboratory facilities;  
requires technically trained personnel. (any two)
38. Clinical features of vitamin A deficiency -  $(\frac{1}{2} \times 4) + \frac{1}{2} + \frac{1}{2}$   
-night blindness; conjunctival xerosis; Bitot's spot; corneal xerosis; keratomalacia  
(any four)

#### Prevention-

- short term - giving large doses of vitamin A to children between 6 months and 5 years
- Long term - emphasise the consumption of animal and plant foods rich in vitamin A.

39. Prevention and control of Marasmus -

$(\frac{1}{2} \times 4) \times 2$

- promote breast feeding for all infants
- give frequent feeds to the child
- observe hygiene to control diarrhoea
- avoid dehydration in case of diarrhoea -give plenty of fluids.

Prevention and control of Kwashiorkor-

- introduce appropriate weaning foods from the age of 4-6 months onwards
- timely immunisation of children can prevent diseases that may lead to EPM.
- not to restrict food intake during period of infection and fever.
- avail of supplementary feeding programmes implemented by the Government.

### OPTIONAL B

#### (HOME BASED CARE FOR UNDER FIVES)

33. (A)

1

34. Motor development and cognitive development.

$\frac{1}{2} + \frac{1}{2}$

35. i) Picnic or any other outing

1+1

ii) when parents come to leave or take children away from the centre.

Concerns - any aspect of child's development

- facilities available at the centre
- teacher's interaction with children
- child's progress
- any complaints
- (any other relevant point)

36. Reasons - parents are not aware of such a centre

1+1

-timings of centre do not match working hours of parents

-activities at centre not meaningful for the social context of parents.

(any two)

37. Environmental factors-

$\frac{1}{2} \times 2 + \frac{1}{2} \times 4$

- nutrition
- emotional climate at home
- level of stimulation
- socio economic status of family

(any two)

Characteristics of cognitive development

- ego centric
- absence of logical thinking
- object permanence
- fantasises

- confused by appearance
- uneven attention
- limited memory
- confused about causal relationship
- acquires basic concept of colour & shape
- curious

(any four)

38 - programme should be flexible

$\frac{1}{2} \times 4 + \frac{1}{2} \times 2$

- introduce activity at an appropriate time
- give age appropriate activities
- programme should help in learning habits, concepts & values
- should provide first hand and concrete experiences
- associate old experiences with new one.

(any four)

Creative activities -

painting/thread painting/block printing/making flowers with paper/clay work/sand pla  
(any two)

39. Cognitive needs:

$\frac{1}{2} \times 4 + 1 + 1$

- to provide opportunities to explore & experiment
- to encourage active learning
- to structure the experience according to developmental level (any two)

Social needs:

- provide opportunities for rich & positive interaction with peer group & adults
- to provide secure & supportive environment
- to help in the transition from home to school
- to provide stress free learning environment (any two)

Behavioural problems

Ways of handling

- |                        |  |
|------------------------|--|
| 1. Hurt other children | <ul style="list-style-type: none"> <li>- divert attention</li> <li>-separate children</li> <li>-help child feel loved.</li> </ul>              |
| 2. Tell lies           | <ul style="list-style-type: none"> <li>- understand reason</li> <li>-give attention</li> </ul>   |
| 3. Steal               | <ul style="list-style-type: none"> <li>- be kind &amp; understanding</li> <li>-help make friends</li> <li>-provide creative outlets</li> </ul> |

(any two problems & any one way of handling the problems)

**OPTIONAL C  
(LAUNDRY SERVICES)**

33. (a) 1
34. Method of washing - kneading and squeezing 1/2+1/2  
Stiffening aid - gum or gelatin
35. i) durables (ii) non-durables 1/2x4  
iii) fuel iv) transport
36. Aspects to be examined - 1/2x4  
-advertising - to make people aware of the service  
-price structure - should be competitive  
-quality of work - should be satisfactory. Maintaining quality standards is important.  
-delivery schedules - delivery should be on time. Offering incentives like home delivery etc.
37. The two types of dirt are - 1+1+1/2 · 1/2  
-loose form of dirt i.e., dust commonly found in air  
-fixed form of dirt ie. Fixed with grease or perspiration  
Removal -  
-loose dirt or dust can be removed by shaking or brushing the fabric.  
-fixed form of dirt can be removed only with use of grease solvents/absor' ents combined with pressure.
38. Cleansers are of two types - soaps and syndets 1x3  
**Soap** **Syndets**  
i) Wets the fabric more readily than water i) wets the fabric more readily than soap.  
ii) Easily soluble in warm/hot water. ii) soluble even in cold water.  
iii) Leaves soapy deposits on fabrics which makes them dull in due course of time. iii) maintains the feel and look of fabrics better over a longer time.  
iv) Soap is obtained from natural fats & waxes. iv) these are produced synthetically from chemicals  
(any three)
39. Oxidising bleaches Reducing bleaches 1x4  
-Have an almost permanent bleaching effect. Commonly applied on vegetable fibres like cotton. -less strong in bleaching action. Can be applied on animal fibres like silk & wool.

OBA's are colourless dyes & fluorescent compounds which make the fabric look whiter and brighter. This is because when an OBA treated fabric is dried in the sun, the OBA will help to absorb the ultraviolet-rays of sun and reflect them back in visible region which adds to the brightness of the cloth.

Bleaching agents on the other hand are chemical compounds that whiten or lighten the fabric by the chemical breakdown of the colour of the fabric.