

**DIRECTORATE OF GOVERNMENT EXAMINATIONS CHENNAI - 6**  
**HSE SECOND YEAR EXAMINATIONS, MARCH - 2024**

**HOME SCIENCE (ANSWER KEY)**

**Marks: 70**

**PART I**

15)

(15 x 1 =

1. (c) Oats
2. (c) Heart attack
3. (a) August 21
4. (a) (1) – (iii), (2) – (i), (3) – (ii), (4) – (iv)
5. (c) Rural area
6. (b) Egypt
7. (b) Even tacking
8. (b) Neutral
9. (b) 3:5
10. (c) Physical, Social, Emotional, Intellectual Development
11. (d) Iodine
12. (d) 1 – (iv), (2) – (iii), (3) – (i), (4) – (ii)
13. (d) 1949
14. (b) Neutral
15. (b) Henri Fayol

**PART II**

ANSWER ANY SIX QUESTIONS:

(6 X 2 = 12)

**(QUESTION NO 24 IS COMPULSORY)**

16. The soft diet is made up of simple, easily digested food and contains no harsh fibre and no rich seasoned food. E.g.: cooked dhals, double cooked cereals, custard etc.
17. (i) Sedimentation—the settlement of impurities by adding chemicals like alum.  
(ii) Filtration – Slow sand filters and rapid sand filters are used.
18. Silk mark is a registered certification mark in India for silk textiles. It is used in all kind of silk products like dress materials garments etc.
19. Dipping: The stained material is dipped into the reagent. It is then scrubbed to remove the stain and rinsed with water.
20. Food contamination is defined as the presence of harmful chemicals and micro-organisms in food which can cause illness.
21. Prang colour chart is an organization of colours and shows the relationship between primary, secondary, intermediate, tertiary and quaternary colours.



22. Jaundice is the symptom common to many liver-disease. In this yellow discoloration of skin and mucous membrane occurs due to excessive bile pigments in the blood.
23. Marketing mix is referred to 4 Ps namely Product, Price, Promotion and Physical distribution. 3 Ps namely Packaging, People and Process.
24. Skills needed:- Patience, time management, on-time care provider, enthusiasm, communication skills and decision-making skills.

### PART III

ANSWER ANY SIX (QUESTION NO 33 IS COMPULSARY)

(6x3 =18)

25. Information found on a label:
- Registered brand name
  - Manufacturers name
  - Date of manufacturing
  - Retail sale price
  - Vegetarian/ Non vegetarian mark
  - Net weight
  - Certification mark
  - Best before use
  - Warning if any
26. Causes of physical contaminants are
- foreign bodies like dead rats, insects etc
  - undesirable substances in food
  - pieces of glass or staple pins used for packing.
27. Uses of cotton
- widely used fibre—inexpensive, easy-care, high absorbency.
  - excellent launder ability and colour fastness.
  - used as apparel, household and industrial applications.
28. Requirements of structural design:
- simple and beautiful
  - strengthen the shape
  - well proportioned
  - suited to its purpose
  - have originality.
29. Soil makes the school building strong, safe, congenial and educational. The soil condition of the preschool should have a raised area, dry and have natural drainage free from water-logging.



30. Women entrepreneur

- a group of women who initiate, organize and operate a business enterprise.
- innovate or adopt an economic activity.

31. Land-fills causes numerous contamination problems. It gives rise to air and water pollution which severely affects and prove fatal to the lives of humans and animals.

32. Risk factors for kidney disease

- old age, exposure to hot climate
- diabetes, hypertension
- urinary tract infection and stones
- chronic kidney failure, low birth weight.
- exposure to nephrotoxic drugs.

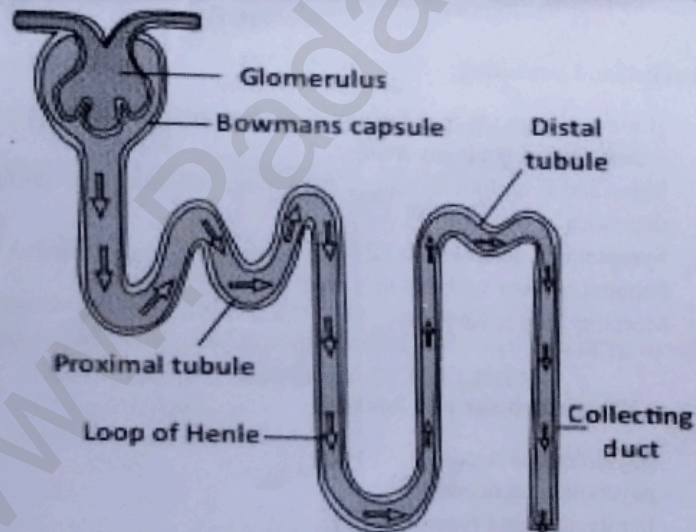
33. The walls can be painted with light colours as they give the feeling of spaciousness E.g. Banana yellow, light pink etc.

#### PART IV

ANSWER ALL

(5 X 5 =25)

34. (a) Structure of nephron. (2 ½ marks)



- The basic functional units of kidney (2 ½ marks)
- Consists of glomerulus -spherical mass of capillaries surrounded by Bowman's capsule.
- Tubule consists of proximal convoluted tubule, loop of Henle, and distal convoluted tubule
- Hydrostatic pressure results in the filtration of fluid
- Selective reabsorption and tubular secretion results in the production of 1.5 litres of urine per day.

(10)



**(b) Rights of consumer;**

- Right to safety
- Right to information
- Right to choose
- Right to be heard
- Right to seek redressal
- Right to consumer education (explain in detail)

## 35. (a) Differences between natural and man-made fibres

**Natural fibres:**

- From plant and animal source. Eg: Cotton, silk and wool
- Have excellent elasticity, density, absorbency and tenacity.
- Hygienic fabrics are made
- Comfortable to wear
- Manufacturing process is expensive
- Environment friendly

**Man-made fibres**

- Made by man with combination of natural products with chemicals. Eg: Nylon, Polyester
- Excellent elasticity and tenacity but poor in absorbency
- Uncomfortable to wear
- Making cost is less
- Not environment friendly

**(OR)****(b) Salmonella food poisoning:**

- Causative agents: S. enteritidis, S. typhimurium, S. Thompson
- alimentary tract is involved
- Signs and symptoms: - nausea, vomiting, abdominal discomfort, headache and diarrhoea
- Symptoms appear within 12 to 26 hours
- Patients recover within 6 to 8 days
- Mortality rate is very low

36. (a) **Factors affecting choice of a house**

- Physiological needs
- psychological needs
- family size, and type of family
- stage of family life-cycle
- permanence of residence
- cost of living and cost of building (explain points in detail)

**(OR)****(b) Different types of shapes and forms:**

- Naturalistic shapes/ forms
- Abstract shapes/ forms
- Geometric shapes/ forms (explain points in detail)



37 (a). **Terrace gardening:** -Growing greens, fruits and vegetables at the backyard or terrace

- use kitchen waste water and kitchen waste material
- neem oil can be used to protect plants

**Plants suitable for terrace garden**

Vegetables		Medicinal Plants		Flowers	Fruits	Spices
Tomato	Bottle gourd	Aloe vera	Pirandai	Rose	Guava	Turmeric
Brinjal	Amaranthus	Vasambu	Thoothuvelai	Jasmine	Papaya	Coriander
Chilly	Moringa	Vallarai	Ponnanganni	Hibiscus	Lemon	Fenugreek
Onion	Curry leaf	Mint	Poduthalai	Alari (Nerium)	Arnla	Ginger
Big Onion	Spinach	Basil	Manathakali		Pome granate	
Lady's finger	Cowpea	Thulsi	Vettiver		Sapota	
Bitter gourd	Cluster bean	Omavalli	Kandanth thippili			
Snake gourd	Beetroot	Karisilanganni	Thippili			
Ribbed gourd	Radish	Keela nelli				

(OR)

(b). **Types of preschools:**

- Day care
- Montessori school
- Kindergarten
- Nursery school
- Balwadi, Anganwadi
- Laboratory nursery school (explain any two in detail)

38. (a) **Principles of diet planning for peptic ulcer:**

- High energy, high protein, moderate fat and low fibre.
- Regular balanced diet for tissue healing and functional integrity of tissues.

**DIETARY GUIDELINES:**



Foods to be included	Foods to be avoided
Rice flakes, puffed rice, well-cooked cereals, Cooked pulses, dairy products like milk, cream, boiled eggs, steamed fish, Well cooked vegetables	Raw vegetables, raw unripe fruits, Beverages - strong tea, coffee, cola, processed foods- pickles, spices, pastries, sweets, all fried foods, Spices -Pepper, chillies
Desserts such as custard	

(OR)

(b) **Importance of Entrepreneurship:**

- Decreases unemployment
- Creates competition in the market
- Utility of the local resources available
- Improves the living standards
- Economic independence (Explain points in detail)

\*\*\*\*\*