Roll No.		Signature of Invigilators
(Write Roll Number from left side exactly as in the Admit Card)		1 2
2318		Question Booklet Series X
	PAPER-II	Question Booklet No.
		(Identical with OMR

Subject Code: 23

(Identical with OMR Answer Sheet Number)

### **HOME SCIENCE**

Time: 2 Hours Maximum Marks: 200

### Instructions for the Candidates

- 1. Write your Roll Number in the space provided on the top of this page as well as on the OMR Sheet provided.
- 2. At the commencement of the examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and verify it:
  - (i) To have access to the Question Booklet, tear off the paper seal on the edge of this cover page.
  - (ii) Faulty booklet, if detected, should be got replaced immediately by a correct booklet from the invigilator within the period of 5 minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time will be given.
  - (iii) Verify whether the Question Booklet No. is identical with OMR Answer Sheet No.; if not, the full set is to be replaced.
  - (iv) After this verification is over, the Question Booklet Series and Question Booklet Number should be entered on the OMR Sheet.
- 3. This paper consists of One hundred (100) multiple-choice type questions. All the questions are compulsory. Each question carries *two* marks.
- 4. Each Question has four alternative responses marked: (A) (B) (C) (D). You have to darken the circle as indicated below on the correct response against each question.

Example: (A)(B)(D), where (C) is the correct response.

- 5. Your responses to the questions are to be indicated correctly in the OMR Sheet. If you mark your response at any place other than in the circle in the OMR Sheet, it will not be evaluated.
- 6. Rough work is to be done at the end of this booklet.
- 7. If you write your Name, Roll Number, Phone Number or put any mark on any part of the OMR Sheet, except in the space allotted for the relevant entries, which may disclose your identity, or use abusive language or employ any other unfair means, such as change of response by scratching or using white fluid, you will render yourself liable to disqualification.
- 8. Do not tamper or fold the OMR Sheet in any way. If you do so, your OMR Sheet will not be evaluated.
- 9. You have to return the Original OMR Sheet to the invigilator at the end of the examination compulsorily and must not carry it with you outside the Examination Hall. You are, however, allowed to carry question booklet and duplicate copy of OMR Sheet after completion of examination.
- 10. Use only Black Ball point pen.
- 11. Use of any calculator or mobile phone etc. is strictly prohibited.
- 12. There are no negative marks for incorrect answers.

[ Please Turn Over ]

### **HOME SCIENCE**

### PAPER II

	1.	Body	Mass	s Inde	ex for	an in	dividu	al who	is 5	feet
6	inche	es tall	and l	nas a	weigh	nt of	78 kg i	S		

- (A) 29.8 kg/m<sup>2</sup>
- (B) 32.8 kg/m<sup>2</sup>
- (C) 27.8 kg/m<sup>2</sup>
- (D) 25.8 kg/m<sup>2</sup>

# **2.** Which one of the followings is not the function of the antioxidants?

- (A) Colour preservation
- (B) Preventing protein degradation
- (C) Minimizing rancidity
- (D) Preserving flavour

# **3.** Which vitamin can be synthesized in the body from non-dietary sources?

- (A) Vitamin B<sub>12</sub>
- (B) Vitamin D
- (C) Vitamin E
- (D) Vitamin A

### 4. Recognition site for amino acid is present in

- (A) Matured mRNA
- (B) Mitochondrial mRNA
- (C) tRNA
- (D) rRNA

# **5.** Conversion of oxaloacetate to phosphoenol pyruvate (PEP) is carried out by

- (A) Carboxylase
- (B) PEP carboxykinase
- (C) PEP carboxylase
- (D) Pyruvate dehydrogenase

- **6.** The percentage of fat present in heavy cream
  - (A) 30 40%
  - (B) 40 60%
  - (C) 35 50%
  - (D) 60 80%
- **7.** Which of the followings is not a micronutrient?
  - (A) Copper
  - (B) Boron
  - (C) Sulphur
  - (D) Manganese
- **8.** Pungent smell of raddish is due to the presence of
  - (A) Solanine
  - (B) Capsaicin
  - (C) Isothiocyanate
  - (D) Di amino compound
- 9. Typical aroma of butter is due to
  - (A) Salicylic acid
  - (B) Acetic acid
  - (C) Diacetyl compound
  - (D) Diethyl ether
- **10.** 'Juice boxes' would be an example of the preservation technique of
  - (A) Irradiation
  - (B) Freeze drying
  - (C) Sugaring
  - (D) Aseptic technique

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- **11.** Keto acidosis is frequently found among which category of patients?
  - (A) Hypertension
  - (B) Heart burn
  - (C) Alzheimer's disease
  - (D) Diabetes
- **12.** Which of the following compounds transport dietary lipids to the adipose tissue for storage?
  - (A) Chylomicrons
  - (B) Low density lipoprotein
  - (C) High density lipoprotein
  - (D) Peripheral proteins
  - **13.** What is the precursor of Vitamin D?
    - (A) Phytosterol
    - (B) Sitosterol
    - (C) 7 Dehydro Cholesterol
    - (D) Ergosterol
  - **14.** Sympathetic stimulation:
    - (A) Increases cellular metabolism
    - (B) Decreases cellular metabolism
    - (C) Has no effect on cellular metabolism
    - (D) Decreases body temperature
- **15.** Which of the following hormones regulates the basal state of metabolism?
  - (A) Vasopressin
  - (B) Thyroxin
  - (C) Insulin
  - (D) Estrogen

- 16. Entropy means
  - (A) Decrease in Free energy
  - (B) Increase in Free energy
  - (C) Disorder
  - (D) Enthalpy
- 17. Which is the important flavor enhancer?
  - (A) Aspartic acid
  - (B) Butyric acid
  - (C) Monosodium glutamate
  - (D) Aspartame
- **18.** Maillard reactions gives colour due to reaction between
  - (A) fats and amino acids
  - (B) fats and starch
  - (C) amino acids and reducing sugars
  - (D) fats and reducing sugars
  - 19. Botulism caused by Clostridium botulinum affects
    - (A) Heart beat
    - (B) Liver function
    - (C) Neuro muscular junction
    - (D) Spleen
  - 20. The process of digestion in human is completed in
    - (A) Oesophagus
    - (B) Small Intestine
    - (C) Stomach
    - (D) Large Intestine

21.	Fructo	se 2, 6	diphosphate	(Bisphosphate)	is	a
potent	regula	tor of				
	(A) P	FK-I				

- (A) PFK-I
- (B) PEP kinase
- (C) Phosphatase
- (D) Hexokinase
- 22. Breakdown of beta carotene to retinol takes place in
  - (A) Kidney
  - (B) Pancreas
  - (C) Gall Bladder
  - (D) Intestine
- 23. In which of the diseases the patients should not eat gluten?
  - (A) Gastrointestinal disorder
  - (B) Malabsorption syndrome
  - (C) Lipidosis disorder
  - (D) Celiac disease
- **24.** What is the ICMR recommendation (2017) for dietary intake of iron and folic acid for pregnant woman respectively?
  - (A) 38 mg/day and 400 µg/day
  - (B) 32 mg/day and 400 µg/day
  - (C) 35 mg/day and 450 µg/day
  - (D) 34 mg/day and  $400 \mu\text{g/day}$
- 25. Which of the followings is not a product of fermentation?
  - (A) Methane
  - (B) Hydrogen
  - (C) Oxygen
  - (D) Carbon dioxide

- 26. Lye which is alkaline in nature is chemically
  - (A) Potassium hydroxide
  - (B) Sodium hydroxide
  - (C) Potassium chloride
  - (D) Sodium chloride
  - 27. Full form of DPPH is
    - (A) 2, 2 diphenyl-1-phenyl-hydrazyl-hydrate
    - (B) 2, 2 diphenyl-1-phenyl-hydroxyl
    - (C) 2, 2 diphenyl-1 picryl hydrazyl
    - (D) 2, 2 diphenoxy-1 picryl hydrazyl
- 28. Human colostrum is rich in \_\_\_ responsible for antibacterial and antiviral property.
  - (A) Lactose
  - (B) Glycosides
  - (C) Lactoferrin
  - (D) Maltose
  - **29.** Parboiling of rice leads to the formation of
    - (A) Type I resistant starch
    - (B) Type II resistant starch
    - (C) Type III resistant starch
    - (D) Type IV resistant starch
- **30.** Which of the followings is primarily digested in the mouth?
  - (A) Carbohydrates
  - (B) Proteins
  - (C) Fats
  - (D) Vitamins

- **31.** Salmon fish contains 2260 mg of omega 3 fatty acid per 3·5 oz. How much omega 3 fatty acid can be obtained from a food containing 50 gms of serving of Salmon?
  - (A) 1260 mg
  - (B) 1130 mg
  - (C) 4520 mg
  - (D) 3260 mg
  - **32.** Approximately at which pH casein precipitates?
    - (A) 3.70
    - (B) 4·60
    - (C) 7·00
    - (D) 9·40
- **33.** Potassium/Sodium ratio of banana per 150 gms of serving will be
  - (A) 308
  - (B) 406
  - (C) 358
  - (D) 256
  - **34.** Total phenolic content is represented in terms of
    - (A) Catechinic acid equivalent
    - (B) Gallic acid equivalent
    - (C) Tannic acid equivalent
    - (D) Quercetic acid equivalent
- **35.** Physical activity helps a person in all of these except
  - (A) Loss of belly fat
  - (B) Constant weight loss
  - (C) Retain muscle mass
  - (D) Loss of toxin through sweat

- **36.** Bottled milk exposed to strong sunlight causes loss of
  - (A) Protein
  - (B) Fat
  - (C) Carbohydrate
  - (D) Riboflavin
  - 37. Yellowish tinch of milk is due to
    - (A) Sodium
    - (B) Potassium
    - (C) β carotene
    - (D) Vitamin B<sub>2</sub>
- **38.** During third trimester of pregnancy BMR increases by
  - (A) 5%
  - (B) 12%
  - (C) 18%
  - (D) 8%
  - 39. Coli form bacteria are
    - (A) Gram ve rod
    - (B) Gram + ve rod
    - (C) Gram ve spherical
    - (D) Gram + ve spherical
  - **40.** The functionally active form of vitamin D is
    - (A) Cholecalciferol
    - (B) Ergocalciferol
    - (C) Dehydrocholesterol
    - (D) 1, 2, 5 Dihydroxy cholecalciferol

<b>41.</b> Match <i>List I</i> with <i>List II</i>	41.	Match	List I	willi	List	1.
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List I

List II

- (a) Selenium
- (i) Garlic
- (b) Vitamin E
- (ii) Tomato
- (c) Flavonoids
- (iii) Sunflower seeds
- (d) Lycopene
- (iv) Sea foods
- (v) Green leafy vegetables

#### Codes:

- (a) (b) (c) (d)
- (A) (iv) (iii) (i) (ii)
- (B) (iii) (iv) (ii) (v)
- (C) (ii) (iii) (v) (i)
- (D) (iv) (v) (ii) (iii)
- **42.** Which of the followings is not a method of nutritional assessment using anthropometry?
  - (A) Skinfold thickness
  - (B) Waist circumference
  - (C) Blood pressure and pulse rate
  - (D) Midupper arm circumference
  - **43.** Acetyl CoA is converted into sugar by
    - (A) Halophytes
    - (B) Xerophytes
    - (C) Ruminants
    - (D) Photosynthetic bacteria
  - **44.** A dye must contain:
    - (A) At least one chromophore group and one auxochrome group
    - (B) No chromophore group
    - (C) No auxochrome group
    - (D) One chromophore but no auxochrome group
- **45.** During muscle contraction, the reaction occurs between
  - (A) Actin and Albumin
  - (B) Actin and Tropomyosin
  - (C) Actin and Myosin
  - (D) Actin and Troponine

- **46.** During autoclaving, the temperature inside usually remains
  - (A) 119°C at 15 psig
  - (B) 122°C at 15 psig
  - (C) 121°C at 15 psig
  - (D) 123°C at 15 psig
  - **47.** Selenium is used as cofactor of
    - (A) Glutathione reductase
    - (B) Glutathione peroxidase
    - (C) Glutathione oxidase
    - (D) Catalase
- **48.** Which of the followings is not normally considered to be a food additive?
  - (A) Salt
  - (B) Artificial sweeteners
  - (C) Antioxidants
  - (D) Artificial colour
  - **49.** Name the hormone secreted by  $\alpha$  cells of pancreas:
    - (A) Insulin
    - (B) Glucagon
    - (C) Epinephrine
    - (D) Non-epinephrine
  - **50.** Porin is present in
    - (A) Gram + ve bacteria
    - (B) Gram ve bacteria
    - (C) Methanogens
    - (D) Eubacteria

<ul><li>51. Management is a discipline of</li><li>(A) Talent</li><li>(B) Science</li><li>(C) Intelligence</li><li>(D) Art</li></ul>	<ul> <li>56. Deficiency of Iodine leads to a condition called</li> <li>(A) Hyperthyroidism</li> <li>(B) Hypothyroidism</li> <li>(C) Cretinism</li> <li>(D) Deafmutism</li> </ul>
<ul> <li>52. Who among the followings does not necessarily require iron rich food on routine basis?</li> <li>(A) Pregnant women</li> <li>(B) Infant and toddlers</li> <li>(C) Teenage girls</li> <li>(D) Post-menopausal women</li> </ul>	57. A balanced diet should provide% of energy from proteins.  (A) 50-60  (B) 30-50  (C) 20-40  (D) 10-15
<ul> <li>53. Successful dieter include the following qualities except</li> <li>(A) Excercise (heavy or light) on daily basis</li> <li>(B) To skip breakfast</li> <li>(C) To have consistent diet plan</li> <li>(D) To minimize fat and carbohydrate from diet</li> </ul>	58. Which one of the followings has the best chemical score/calorie?  (A) Wheat  (B) Egg  (C) Milk  (D) Pulses
54. Non-digestible food ingredients that stimulate the growth and activity of certain bacteria in the colon are called  (A) Insoluble fibre (B) Probiotics (C) Prebiotics (D) Symbiotics	59. The dye which is developed during textile manufacturing and processing itself from a chemical reaction is  (A) Vat dye  (B) Sulphur dye  (C) Acid dye  (D) Azo dye
<ul><li>55. Protein malnutrition leads to a condition called</li><li>(A) Marasmus</li><li>(B) Anaemia</li><li>(C) Stroke</li><li>(D) Kwashiorkor</li></ul>	60. A white coloured sidecap pointed at both ends made of khadi is known as  (A) Hat  (B) Turban  (C) Gandhi cap  (D) Beret

- 61. The colour of clothing which express the symbol of good luck for bride is

  (A) Blue
  (B) Yellow
  (C) Green
  (D) Red
- **62.** Nauvari style of draping saree is common with women from which state?
  - (A) Maharastra
  - (B) Assam
  - (C) Andhra Pradesh
  - (D) Rajasthan
- **63.** How many beds can be accommodated in a flat bed knitting machine?
  - (A) Only One
  - (B) Only Two
  - (C) One or Two
  - (D) More than two
- **64.** Which part of the jute plant is used for extraction of jute fiber?
  - (A) Stem
  - (B) Root
  - (C) Branch
  - (D) Leaves
- **65.** For which of the following plants cultivations warm climate and black soil is required?
  - (A) Jute
  - (B) Coconut
  - (C) Cotton
  - (D) Hemp

- **66.** Misunderstanding between Britishers and Indians was due to which of the following items?
  - (A) Dhoti and hat
  - (B) Turban and shoes
  - (C) Saree and frock
  - (D) Dhoti and shirt
- **67.** Which strategy does influence internal communication?
  - (A) Organization strategy
  - (B) A strategy of its own
  - (C) Combination of both organization strategy and a strategy of its own
  - (D) Depends upon the media
  - **68.** The act of communication is also known as
    - (A) Affiliation
    - (B) Teleporation
    - (C) Transmission
    - (D) Fortification
- **69.** \_\_\_\_\_ is a type of education imparted in a free atmosphere without rigidity of rules and regulations governing the formal schools and colleges.
  - (A) Non-formal education
  - (B) Formal education
  - (C) Distance education
  - (D) Classroom education
- **70.** An act of stage craft in which a person changes his or her voice so that it appears that the voice is coming from elsewhere, usually done by a puppeteered "dummy" is called
  - (A) Ventriloquism
  - (B) Spiritualism
  - (C) Silappadikaram
  - (D) Bommalattam

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- **71.** The movement of information to the general public from the media is known as
  - (A) Awareness
  - (B) Reality
  - (C) Publicity
  - (D) Rage
- **72.** Outdoor advertisement can be advertised in everything except
  - (A) Guerrilla advertising
  - (B) Radio
  - (C) TV
  - (D) Educational Institution
- **73.** Simple random sampling offers which of the following benefits?
  - (A) Calculation of accuracy of results
  - (B) Representative results
  - (C) Respondents are choosen by interviewers
  - (D) Informants practice freedom
  - **74.** Smallest element in sample selection is
    - (A) Sample interval
    - (B) Sampling unit
    - (C) Sample cells
    - (D) Respondents
- **75.** Difference of observed frequencies from expected frequencies can be determined by
  - (A) t-test
  - (B) f-test
  - (C) t-test for independent sample
  - (D) Chi-square test for independence

- **76.** Casual questions asked during an interview are known as
  - (A) Filter question
  - (B) Response
  - (C) Probe
  - (D) Pilot
- **77.** Which of the followings is true for psychomotor study?
  - (A) It deals with psychology
  - (B) It measures feelings
  - (C) It deals with physical skills such as movement, strength and speed
  - (D) It measures intellectual capability
  - **78.** Assertion (T): In theory "Y" the attitude held by the manager is optimistic.

Reason (R) : He believes that employees under proper condition need to be guided and supervised.

- (A) T is true and R is false.
- (B) Both *T* and *R* are true.
- (C) Both T and R are false.
- (D) T is false and R is true.
- **79.** Identify the sequence for starting up a business:
  - (i) Research
  - (ii) Writing a business plan
  - (iii) Registration
  - (iv) Seeing an accountant
  - (v) Funding for business start up
  - (vi) Setting up a business account
  - (A) (i) (ii) (v) (vi) (iv) (iii)
  - (B) (i) (iii) (v) (vi) (iv) (ii)
  - (C) (i) (ii) (iii) (iv) (v) (vi)
  - (D) (ii) (i) (iii) (vi) (v) (iv)

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- **80.** What is the most important criteria for a successful entrepreneurship?
  - (A) Employ less no. of employee
  - (B) Internal rate of return (IRR) should be more than 12%
  - (C) Providing minimum wages to the employee
  - (D) Selection of the raw material
- **81.** Which of the followings is not a characteristic of extension education?
  - (A) Adaptability
  - (B) Happiness
  - (C) Collaboration
  - (D) Satisfaction
- **82.** Which of the followings is not a characteristics of non-formal education?
  - (A) It is well planned and no need of any agency's involvement
  - (B) Age, Time and Curriculum flexibility
  - (C) No involvement of public and private sector in the process
  - (D) No need for structured course and curriculum
- **83.** "Education is the manifestation of the perfection already in man". ... This famous quote had been opined by
  - (A) Rabindranath Tagore
  - (B) Swami Vivekananda
  - (C) Mahatma Gandhi
  - (D) Indira Gandhi

- **84.** When Jagriti was 5 years old, she met with a terrible car accident with her parents and she was trapped within the car for 5 hours. Later in her life she developed claustrophobia. This can be explained by that area of research where it is predicted that how early childhood experiences may act as risk factors for later diagnosable psychological disorders. Name the concerned area of research.
  - (A) Clinical psychopathology
  - (B) Developmental psychopathology
  - (C) Applied psychopathology
  - (D) Cognitive psychopathology
- **85.** Enuresis, one of the symptoms based disorder faced by a child means \_\_\_\_\_.
  - (A) Bed wetting
  - (B) Stammering
  - (C) Sleep talking
  - (D) Sleep walking
- **86.** Which of the followings is the example of fine motor skill for a child?
  - (A) Kicking
  - (B) Drawing
  - (C) Running
  - (D) Climbing
- **87.** Which scientist was of this opinion that the social interactions are the driving force in cognitive development?
  - (A) Skinner
  - (B) Dixon
  - (C) Vygotsky
  - (D) Piaget

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<ul> <li>88. Children with down syndrome are at higher risk of which of the followings?</li> <li>(A) Visual and hearing problem</li> <li>(B) Congenital heart disease</li> <li>(C) Sleep apnoea</li> <li>(D) Asthma</li> </ul>	93. Developmental communication refers to combination of actions by  (A) Governments (B) Donors (C) Civil Society (D) Governments, Donors and Civil Society
<ul> <li>89. Which of the followings is True for Treacher-Collin's syndrome?</li> <li>(A) Conductive hearing loss</li> <li>(B) Hyperthyroidism</li> <li>(C) Anaemia</li> <li>(D) Congenital heart disease</li> </ul>	<ul> <li>94. Which method is used in qualitative sampling?</li> <li>(A) Random digital dialling</li> <li>(B) Quota</li> <li>(C) Stratified random</li> <li>(D) Simple random</li> </ul>
<ul> <li>90. Attention deficit hyperactivity disorder includes which one of the followings?</li> <li>(A) Hypokinetic disorder</li> <li>(B) Hyperactivity disorder</li> <li>(C) Hyperkinetic disorder</li> <li>(D) Hypoactivity disorder</li> </ul>	95. When research is done to understand an even from the past, it is called  (A) Historical research
91. Heridity is social structure.  (A) Primary  (B) Secondary  (C) Indispensable  (D) Static	(B) Replication (C) Archival research (D) Repetitive research
<ul><li>92. Thorndike's law of effect says</li><li>(A) Give praise if work done is outstanding.</li><li>(B) Give feedback if work done is incorrect.</li><li>(C) Give punishment if movement is incorect.</li><li>(D) Give satisfactory if movement is correct.</li></ul>	96. Lightness and drakness of colour is known as (A) Tint (B) Intensity (C) Tinge (D) Hue

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- **97.** The basic principle of interior design includes
  - (A) Unity, balance, rhythm, emphasis
  - (B) Unity, balance, rhythm
  - (C) Unity, balance, rhythm, emphasis, scale and proportion
  - (D) Rhythm, emphasis, scale and proportion, contrast
- **98.** State whether the following statements are true or false?
  - (i) Decision making is one time process to setup major family goal.
  - (ii) The course of action selected after analyzing all the alternatives should ideally satisfy all family members.
  - (A) (i) is true and (ii) is false.
  - (B) (i) is false and (ii) is true.
  - (C) (i) is true and (ii) is true.
  - (D) (i) is false and (ii) is false.

- **99.** There is an urgent need for resoruce management because:
  - (A) Resoruces are limited in supply
  - (B) Resources have alternate uses
  - (C) Resources can be substituted
  - (D) Resources identification

- **100.** Which one of the followings is a probability method?
  - (A) Judgement
  - (B) Quota
  - (C) Simple random
  - (D) Convenience

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# **ROUGH WORK**

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# **ROUGH WORK**

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# **ROUGH WORK**