

SERIES: A



QP CODE: 24900054

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Reg No:.....

Name:.....

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

**FIRST SEMESTER MGU-UGP (HONOURS) REGULAR
EXAMINATION NOVEMBER 2024**

First Semester

Multi-Disciplinary Course - MG1MDCCHE100 - FOOD CHEMISTRY AND NUTRITION

(2024 ADMISSION ONWARDS)

Duration: 0.75 Hours

Maximum Marks: 35

**Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Interest (I),
Appreciation (Ap), and Skill (S)**

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

[Learning Domain][CO No(s)]

Part A

Multiple Choice Questions

Answer all questions.

Each question carries one mark.

- | | | | |
|---|--|----------------------------|-----|
| 1 | What is the primary function of carbohydrates in the body? | [U] | [1] |
| | a) Repair tissues | b) Provide energy | |
| | c) Regulate body temp | d) Produce hormones | |
| 2 | Thiamine is phosphorelated with ATP to form co enzyme known as | [U] | [1] |
| | a) Thiamine Pyrophosphate | b) Thiamine pentaphosphate | |
| | c) Thiamine phosphate | d) Thiamine hexaPhosphate | |
| 3 | In adults, Vitamin D deficiency causes a decease where bones become softer, called | [U] | [1] |
| | a) Rickets | b) Xerophthalmia | |
| | c) Beriberi | d) Ostoemalacia | |
| 4 | Which food is the rich source of Phosphorus | [U] | [1] |
| | a) Meat and dairy products | b) Leafy greens | |

	c) Whole grains	d) Citrus fruits		
5	Which carbohydrate is commonly known as "blood sugar"?		[U]	[1]
	a) Sucrose	b) Fructose		
	c) Glucose	d) Lactose		
6	What is the primary function of proteins in the body?		[U]	[1]
	a) Provide energy	b) Build and repair tissues		
	c) Store fat	d) Regulate temperature		
7	Which of the following proteins is involved in immune function?		[U]	[1]
	a) Insulin	b) Antibodies		
	c) Glucagon	d) Enzymes		
8	Which protein is most abundant in the human body?		[U]	[1]
	a) Myosin	b) Collagen		
	c) Keratin	d) Hemoglobin		
9	Which mineral is essential for oxygen transport in the blood?		[K]	[1]
	a) Calcium	b) Phosphorus		
	c) Iron	d) Sodium		
10	The additive which is used to increase the viscosity/thickness of food is known as		[K]	[2]
	a) Leavening agents	b) Thickeners		
	c) Gelling agents	d) Stabilizers		
11	Identify the primary function of food preservatives		[U]	[2]
	a) Enhance colour	b) Prevent spoilage		
	c) Add flavour	d) Thicken Food		
12	Identify a food color among the following		[K]	[2]
	a) Monosodium glutamate	b) Agar-agar		
	c) Benzoic acid	d) Sudan red		
13	Monosodium glutamate (MSG) is used as a:		[K]	[2]
	a) Sweetener	b) Flavour enhancer		
	c) Emulsifier	d) Preservative		
14	Which E-number corresponds to food colors?		[A]	[2]
	a) E250	b) E120		
	c) E330	d) E460		
15	What does the "E" in E numbers for food additives stand for?		[K]	[2]
	a) Essential	b) Edible		
	c) Europe	d) Enzyme		
16	Which of the following is an example of a natural emulsifier?		[K]	[2]
	a) Lecithin	b) Sodium lauryl sulfate		
	c) Polysorbate 80	d) Propylene glycol		
17	What is the taste of Ajinomoto called		[K]	[2]
	a) Salt	b) Umami		

	c) Sweet	d) Bitter		
18	What is the main benefit of using aspartame in food		[K]	[2]
	a) Thickening agent	b) Gelling agent		
	c) Sweetner	d) Emulsifier		
19	Select the primary function of stabilizers in food		[U]	[2]
	a) Add calorific value	b) Prevents separation and sedimentation of food		
	c) Preserves food from microbial attack	d) Gives a glazing feel to food		
20	Identify the substance which is used to provide gelling in soups and sauces		[K]	[2]
	a) Sucrose	b) Agar-agar		
	c) Beta-carotene	d) Anthocyanin		
21	Which of the following is a potential health effect of consuming ghee adulterated with animal fats?		[U]	[3]
	a) Increased risk of heart disease due to trans fats	b) Enhanced flavor with no major health issues		
	c) Lowered cholesterol due to higher fat metabolism	d) Improved digestion with slightly higher fat content		
22	What is a health effect of consuming sweets adulterated with non-edible colors?		[U]	[3]
	a) Liver toxicity	b) Nausea		
	c) Blindness	d) Low blood pressure		
23	Lactometer is used to check purity of		[U]	[3]
	a) Ghee	b) Milk		
	c) Tea	d) Sugar		
24	Which of the following is a major health risk of consuming chili powder adulterated with brick powder?		[U]	[3]
	a) Vision issues	b) High cholesterol		
	c) Gastrointestinal irritation	d) Increased risk of diabetes		
25	Which of the following is not a common cause of unintentional adulteration?		[U]	[3]
	a) Environmental contaminants	b) Microbial contamination		
	c) Deliberate addition of chemicals	d) Cross-contamination		
26	Indicate the kind of adulteration that occurs if synthetic colorants are found in a jar of pickles.		[U]	[3]
	a) Incidental adulteration	b) Nutritional enhancement		
	c) Natural contamination	d) Intentional adulteration		
27	Which of the following is NOT a common cause of intentional adulteration?		[U]	[3]
	a) Economic gain	b) Extending shelf life		
	c) Enhancing appearance or taste	d) Accidental contamination during processing		
28	In what way has modern food affected traditional eating habits?		[U]	[4]
	a) It has eliminated the need for	b) It has made traditional diets		

SERIES: A

- traditional cooking altogether more accessible to everyone
- c) It has reduced the consumption of fresh and natural foods d) It has increased the reliance on whole grains and vegetables
- 29 Modern food habits often prioritize [U] [4]
a) Nutritional balance b) Convenience and speed
c) Low-calorie diets d) Organic ingredients
- 30 Which is an artificial sweetener in soft drinks [K] [4]
a) Aspartame b) Saccharin
c) Cyclamate d) All of the above
- 31 What is a common alternative to traditional cooking methods in modern diets? [U] [4]
a) Wood-fired cooking b) Microwaving meals
c) Slow cooking d) Grilling outdoors
- 32 What is major reason for the rise in modern food habits? [U] [4]
a) Increased availability of fresh products b) Fast-paced lifestyle and convenience
c) Desire to reduce food costs d) Growing interest in cooking techniques
- 33 The Food Adulteration Act empowers the government to: [U] [4]
a) Inspect food manufacturing facilities b) Collect food samples for testing
c) Impose penalties on violators d) All of the above
- 34 What is the legal definition of food adulteration? [U] [4]
a) The addition of flavoring agents b) The reduction of nutritional value
c) The introduction of any harmful or inferior substance d) The modification of food texture
- 35 What is one of the main challenges in combating food adulteration? [A] [4]
a) Lack of awareness among consumers b) High costs of food testing
c) Limited government regulations d) All of the above

(35 × 1 = 35)

END OF THE QUESTION PAPER

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Multiple Choice Questions

Answer all questions.

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| 1 | The additive which is used to increase the viscosity/thickness of food is known as | [K] | [2] |
| | a) Gelling agents | b) Thickeners | |
| | c) Leavening agents | d) Stabilizers | |
| 2 | Modern food habits often prioritize | [U] | [4] |
| | a) Organic ingredients | b) Convenience and speed | |
| | c) Nutritional balance | d) Low-calorie diets | |
| 3 | Which of the following is a potential health effect of consuming ghee adulterated with animal fats? | [U] | [3] |
| | a) Lowered cholesterol due to higher fat metabolism | b) Enhanced flavor with no major health issues | |
| | c) Improved digestion with slightly higher fat content | d) Increased risk of heart disease due to trans fats | |
| 4 | Which mineral is essential for oxygen transport in the blood? | [K] | [1] |

- | | | | |
|----|--|--|---------|
| | a) Iron | b) Sodium | |
| | c) Phosphorus | d) Calcium | |
| 5 | Which protein is most abundant in the human body? | | [U] [1] |
| | a) Keratin | b) Collagen | |
| | c) Hemoglobin | d) Myosin | |
| 6 | In what way has modern food affected traditional eating habits? | | [U] [4] |
| | a) It has made traditional diets more accessible to everyone | b) It has increased the reliance on whole grains and vegetables | |
| | c) It has reduced the consumption of fresh and natural foods | d) It has eliminated the need for traditional cooking altogether | |
| 7 | What is one of the main challenges in combating food adulteration? | | [A] [4] |
| | a) All of the above | b) Lack of awareness among consumers | |
| | c) Limited government regulations | d) High costs of food testing | |
| 8 | Which is an artificial sweetener in soft drinks | | [K] [4] |
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