

## Yr 12 past hsc questions – food technology

### 2022 paper

1 An individual is diagnosed with anaemia. Which dietary supplement would best address this disorder?

- A. Vitamin C
- B. Iron tablet
- C. Dietary fibre
- D. Sodium powder

2 What is the process of removing moisture from a food product?

- A. Drying
- B. Freezing
- C. Fermentation
- D. Pasteurisation

3 A food product developer has completed the product specifications in the development of a new food product. What is the next step?

- A. Market research
- B. Feasibility study
- C. Development of a prototype
- D. Production process development

4 For which of the following is seasonal employment an expected working condition?

- A. Fruit pickers
- B. Forklift drivers
- C. Horticulturalists
- D. Production line engineers

5 Which food category is most likely to prevent the development of type 2 diabetes when regularly consumed?

- A. Fats and oils
- B. Meat and dairy
- C. Breads and cereals
- D. Fruits and vegetables

6 What is the purpose of an emulsifier in food manufacturing?

- A. To prevent drying
- B. To prevent oxidation
- C. To combine oil and water
- D. To extend the product's shelf life

7 During times of strong economic growth, many food manufacturers expand their product range. What is the best explanation for this?

- A. Market concerns
- B. Consumer demands
- C. Company profitability

D. Technological developments

**8** Peeled, sliced and frozen potatoes that are sold in the food retail sector are an example of

- A. Functional food.
- B. value-added food.
- C. low-cost nutritious food.
- D. food to be consumed on the go.

**9** Athletes consume food products with increased protein to enhance their performance. These products are an example of

- A. supplements.
- B. enriched foods.
- C. functional foods.
- D. active non-nutrients.

**10** A small sachet is inserted into a food package to remove gases during storage. What type of packaging is this?

- A. Active
- B. Vacuum
- C. Sousvide
- D. Barrier specific

**11** An apple producer has redesigned their fruit punnets to include a convenient carry handle. Which of the following is most likely to have influenced this development?

- A. Market concerns
- B. Decreasing costs
- C. Technological developments
- D. Concerns for the environment

**12** Producers can use technology to monitor irrigation remotely. Which sector of the food industry is using this technology?

- A. Food retail
- B. Agriculture and fisheries
- C. Food service and catering
- D. Food processing and manufacturing

**13** An individual is producing protein-destroying antibodies. What is the individual most likely to be experiencing?

- A. Food poisoning
- B. Allergic reaction
- C. Diabetic episode
- D. Food intolerance

**14** Which method of preservation relies on lactic acid to extend the shelf life of a food product?

- A. Chilling
- B. Dehydration
- C. Fermentation

D. Freezing

**15** A honey producer has applied to maintain the use of their product name based on flora that is unique to their geographic region.

What aspect of a SWOT analysis would have identified the need for this application?

A. Strength

B. Weakness

C. Opportunity

D. Threat

**16** Two Australian dairy manufacturers have merged their operations and will make use of multiple processing plants across the country. As a result, their production capabilities will increase.

Which level of operation is represented in this merger?

A. Household

B. Multinational

C. Small business

D. Large company

**17** The health of which specific group in Australia is most likely to be affected by geographic location, high mortality rates, predisposition to obesity, hypertension and cardiovascular disease?

A. Athletes

B. Middle-aged men

C. Pregnant and lactating women

D. Aboriginal and Torres Strait Islander People

**18** During a quality control inspection at a manufacturing facility, mould has been identified in a batch of freeze-dried pineapple.

What is the most likely cause of the growth of mould?

A. Enzymatic activity

B. High moisture content

C. Inappropriate packaging

D. Incorrect storage conditions

**19** A sustainable seafood partnership was developed in response to unethical aquaculture practices.

What is the primary external factor that has influenced the development of this partnership?

A. The political environment

B. The economic environment

C. The ecological environment

D. The technological environment

**20** A team of researchers investigates the use of electric motors for agricultural machinery in order to reduce carbon emissions associated with food production.

Which government body is most likely to be responsible for this research?

- A. CSIRO
- B. FSANZ
- C. NSW Food Authority
- D. Department of Agriculture, Water and the Environment

2021 paper

1 What is the name of the group of additives used to replace sugar in food manufacturing?

- A. Emulsifiers
- B. Preservatives
- C. Flavour enhancers
- D. Artificial sweeteners

2 A food manufacturer introduces a new packaging size for an existing product they produce.

This product is known as a

- A. me-too.
- B. copy-cat.
- C. line-extension.
- D. new-to-the-world.

3 The main purpose of food dehydration in food manufacture is to

- A. Rehydrate food.
- B. prolong the shelf life of food.
- C. concentrate the flavour of the food.
- D. reduce the size for ease of packaging.

4 An individual who does not eat any food derived from animals or animal-sourced products is most likely to be considered

- A. vegan.
- B. vegetarian.
- C. pescatarian.
- D. lactose intolerant.

5 Which of the following is a breach of the *Work Health and Safety Act 2011* (Cth)?

- A. Serving expired food
- B. Not reporting faulty equipment
- C. Not declaring allergens on food labels
- D. Providing inaccurate weight on food packaging

6 Which of the following may be a consequence of consuming a high salt diet?

- A. Obesity
- B. Dental caries
- C. Hypertension
- D. Vitamin deficiency

7 Industrial food production equipment is required to be

- A. durable, fast and efficient.
- B. precise, consistent and large.
- C. sturdy, manually operated and large.
- D. durable, manually operated and efficient.

- 8** Which sector of the Australian food industry would get the greatest benefit from an increase in people using apps to order take-away food?
- A. Food retail
  - B. Agriculture and fisheries
  - C. Food service and catering**
  - D. Food manufacture and processing
- 9** A person working in food retail is successful in obtaining a scholarship for a course in management training. This is an example of
- A. An employee right.
  - B. a career opportunity.**
  - C. Enterprise bargaining.
  - D. improving company image.
- 10** Which set of factors is required to successfully market a new food product?
- A. Popularity, planning, product and price
  - B. Product, product features, price and placement
  - C. Place, price, product and promotional program**
  - D. Planning, promotional program, place and distribution system
- 11** A fast food company is sponsoring a major sporting event. This is an example of
- A. Direct selling.
  - B. Cross promotion.**
  - C. Consumer testing.
  - D. Competition give-away.
- 12** A child complains of tingling in the mouth, swelling of the face and feeling dizzy. These symptoms are most likely to be caused by
- A. a food allergy.**
  - B. a diabetic reaction.
  - C. a diet high in fibre.
  - D. an excess vitamin intake.
- 13** The primary role of advisory groups in the Australian food industry is to
- A. market products to consumers.
  - B. place tariffs on new food products.
  - C. develop new food products for a food manufacturer.
  - D. provide guidance to government when developing policies.**
- 14** A food manufacturer is required to pay a tax on an imported ingredient. Which of the following is most likely to be responsible for this tax?
- A. Political decision**
  - B. Company profitability
  - C. Foreign trade partnerships
  - D. Technological advancements

**15** Food manufacturers have increased their use of biodegradable packaging materials. Which of the following has enabled this change?

- A. Personnel expertise
- B. Market concerns for health
- C. Technological developments**
- D. Consumer demands for convenience

**16** During which step of the food product development process would a food manufacturer determine if the product is likely to be a financial success?

- A. Market research
- B. Feasibility study**
- C. Product specifications
- D. Development of product prototype

**17** Which of the following is the best example of a functional, fortified food?

- A. Custard
- B. Sultanas
- C. Cake mix
- D. White bread**

**18** Lack of available fruit pickers has left Australian farmers with unpicked, rotting fruit. Which of the following is most likely to be affected?

- A. The economy**
- B. Quality assurance
- C. Working conditions
- D. Research and development

**19** A new yoghurt has been released which has added fibre and probiotics. These ingredients are

- A. laxatives.
- B. food additives.
- C. diet supplements.
- D. active non-nutrients.**

**20** A supermarket has introduced data embedded barcodes to their meat and poultry labels to help manage product recalls, food waste and sales of expired food products.

What is this an example of?

- A. Active packaging
- B. A preservation process
- C. A current development in technology**
- D. A legislated food labelling requirement

## 2020 paper

1 Which sector of the Australian food industry sells packaged frozen pizza?

- A. Food retail
- B. Agriculture and fisheries
- C. Food service and catering
- D. Food processing/manufacturing

2 An ice-cream manufacturer develops a lactose free variety of their most popular ice-cream.

Which type of food product development is this an example of?

- A. Me too
- B. Copycat
- C. New to world
- D. Line extension

3 An elderly person who consumes a low fibre diet is at risk of developing which dietary disorder?

- A. Anaemia
- B. Diverticulitis
- C. Dental caries
- D. Coeliac disease

4 A food product developer creates a single serve, ready-to-heat meal. Which is the most likely driver to have led to the creation of this food?

- A. Societal changes
- B. Market concerns for health
- C. Consumer demand for value
- D. Market concerns for the environment

5 Which of the following is an example of value adding in food manufacturing?

- A. Labelling on packaging
- B. Adding a profit margin to the price of the product
- C. Increasing the price of a product to reflect increased ingredient cost
- D. Packaging a variety of lettuce leaves in a convenient single serve bowl

6 In which step of food product development does the packaging design occur?

- A. Feasibility study
- B. Product specifications
- C. Idea generation screening
- D. Testing product prototype

7 A food manufacturer is conducting a SWOT analysis after a competitor releases a *me too* of one of its products.

In the SWOT analysis the *me too* product is considered

- A. a threat.
- B. a strength.
- C. a weakness.



D. an opportunity.

**8** A company wishes to ensure the consistency and safety of its products throughout production.

An example of a quality management system they might use to achieve this is

- A. CSIRO.
- B. FSANZ.
- C. HACCP.**
- D. NHMRC.

**9** One short-term benefit of using ecologically sustainable production methods is

- A. Improved yields.
- B. reduced labour costs.
- C. Lower production costs.
- D. Reduced carbon emissions.**

**10** Which food additive ensures the free flow of powdered products?

- A. Emulsifier
- B. Antioxidant
- C. Bulking agent
- D. Anti-caking agent**

**11** Which pricing structure involves selling a new product at a similar price to that of existing products?

- A. Break-even
- B. Competitive**
- C. Penetration
- D. Skimming

**12** In which list of career opportunities are all of the positions available in the food processing and manufacturing sector of the Australian food industry?

- A. Fruit picker, food merchandiser, market researcher
- B. Food technologist, agronomist, warehouse personnel
- C. Graphic designer, market researcher, food production line worker**
- D. Food technologist, food product developer, product demonstrator

**13** A government initiative promoting health to Australians is

- A. Dance4Diabetes.
- B. Jump Rope for Heart.
- C. Australia's Biggest Morning Tea.
- D. Australian Guide to Healthy Eating.**

**14** How are vegetables processed to deactivate enzymes prior to freezing?

- A. Peeled
- B. Chopped
- C. Blanched**
- D. Vacuum sealed

**15** Raw materials used in food manufacture primarily undergo quality control to ensure that they

- A. Minimise waste.
- B. are cost effective.
- C. comply to standard specifications.
- D. comply with work health and safety regulations.

**16** Which of the following diet-related disorders has the highest economic cost in Australia?

- A. Cardiovascular disease
- B. Gluten intolerance
- C. Type2diabetes
- D. Osteoporosis

**17** Omega 3 oils may be used as a

- A. probiotic.
- B. flavonoid.
- C. dietary fibre.
- D. nutritional supplement.

**18** In large factories, bulk dry ingredients are stored in a

- A. silo.
- B. hopper.
- C. retort.
- D. centrifuge.

**19** What is the effect on dried herbs of long-term exposure to light?

- A. Attracts pests
- B. Discolouration
- C. Change in texture
- D. Cultivates microbes

**20** Australian researchers have recently developed a new variety of plum which can reduce cholesterol levels within 30 minutes.

Which compound in the plum is most likely to deliver this health benefit?

- A. Insoluble fibre
- B. Low-density lipoproteins
- C. Phytochemicals
- D. Vitamin C

2019 paper

- 1 A food manufacturing company operating in many countries would be best classified as a
  - A. large company.
  - B. small business.
  - C. multinational.
  - D. household.
- 2 Which sector of the Australian food industry is significantly affected by severe drought?
  - A. Food retail
  - B. Agriculture and fisheries
  - C. Food service and catering
  - D. Food processing/manufacturing
- 3 What are the 'four Ps' of a food marketing plan?
  - A. Product, price, place and publicity
  - B. Product, price, place and promotion
  - C. Produce, price, place and promotion
  - D. Produce, price, position and promotion
- 4 Which of the following is an example of a food where its production involves pasteurisation?
  - A. Cheese
  - B. Fresh seafood
  - C. Savoury biscuits
  - D. Frozen cauliflower
- 5 An example of a community group that promotes health in Australian society is
  - A. CSIRO.
  - B. FSANZ.
  - C. Meals on Wheels.
  - D. NSW Food Authority.
- 6 Which of the following is the most significant benefit of using organic farming systems?
  - A. Less landfill
  - B. Cleaner waterways
  - C. Reduced cost to the consumer
  - D. Reduced cost to the manufacturer
- 7 Food sold in retail stores in Australia must comply with Country of Origin labelling laws that were introduced in 2016.

These labelling laws are most likely to benefit

  - A. local councils.
  - B. import markets.
  - C. primary producers.
  - D. people with allergies.
- 8 Which is an example of unethical food advertising?
  - A. Bundle pricing
  - B. A celebrity endorsement
  - C. Exaggerated nutritional claim
  - D. Marketing through cross-promotion

**9** A food company is considering introducing a line extension to their fresh pasta range. Where would this be represented in a SWOT analysis?

- A. Threat
- B. Strength
- C. Weakness
- D. Opportunity**

**10** Which of the following is a result of enzymatic activity?

- A. Fruit becoming over-ripe**
- B. Mould developing in jam
- C. Flour infested by weevils
- D. Savoury biscuits becoming stale

**11** Virtual supermarkets enable consumers to purchase grocery items by scanning barcodes with their smartphone.

What is this an example of?

- A. Product placement
- B. Emerging technology**
- C. A food marketing plan
- D. A value-added experience

**12** At which step of the food product development process would a beverage company conduct a sensory evaluation?

- A. Market research
- B. Feasibility study
- C. Testing product prototype**
- D. Production process development

**13** Which of the following includes ONLY functional foods?

- A. High-calcium milk, almonds, table margarine
- B. High-fibre breakfast drinks, brown rice, probiotic yoghurt
- C. Breakfast cereals containing folate, omega-3 bread with soy and linseed, organic apples
- D. Breakfast cereals containing prebiotic barley, orange juice containing iron, hi-maize muffins**

**14** In many religions people abstain from certain foods and have specific periods of fasting.

What is this an example of?

- A. Lifestyle and dietary practices
- B. Social and nutritional practices
- C. Nutritional and dietary practices
- D. Traditional and cultural practices**

**15** Product specifications for the development of a new food product are an essential component of the design brief because they

- A. provide the guidelines within which the developer must work.**
- B. enable the developer to have flexibility in the design outcome.
- C. include information about the considerations of the project but not any outcomes.
- D. include information about the constraints of the project but not any considerations.

**16** A food company is looking to extend their beverage line by producing a fermented probiotic drink.

The target market for this product is

- A. most likely to be all consumers.
- B. a specific group of consumers.**
- C. consumers in a particular age group.
- D. a group of consumers of the same gender.

**17** Which combination of medical conditions is most significantly related to cardiovascular disease?

- A. Atherosclerosis and stroke**
- B. Type 2 diabetes and anaemia
- C. Diverticulitis and osteoporosis
- D. Hypertension and dental caries

**18** A multi-pack of canned vegetables has been boxed and shrink-wrapped for distribution.

This is an example of

- A. tetra packaging.
- B. tertiary packaging.**
- C. primary packaging.
- D. modified atmosphere packaging.

**19** Which food additive is used by manufacturers to reduce moisture loss in foods?

- A. Acids
- B. Dextrins
- C. Emulsifiers
- D. Humectants**

**20** Which piece of equipment would a commercial manufacturer use to remove pulp from orange juice?

- A. Sieve
- B. Retort
- C. Centrifuge**
- D. Blast chiller

2018 exam

1 Which is the first step of the food product development process?

- A. Idea generation
- B. Feasibility study
- C. Market research
- D. Product specifications

2 A food company is considering an emerging technology to improve the shelf life of a product.

This is an example of

- A. quality assurance.
- B. a level of operation.
- C. a critical control point.
- D. research and development.

3 In which of the following are BOTH factors economic costs most likely to be associated with malnutrition?

- A. Decreased taxes and change in diet
- B. Increased medical costs and loss of income
- C. Increased absenteeism at work and weight loss
- D. Decreased health insurances and limited mobility

4 What is the most suitable level of operation for an independently-owned beachside cafe?

- A. Household
- B. Multinational
- C. Small business
- D. Large company

5 Which system is used to package UHT milk?

- A. Active packaging
- B. Aseptic packaging
- C. Vacuum packaging
- D. Modified atmosphere packaging

6 A soft-drink company packages its drinks with bottle tops that give consumers the chance to win a free product.

This is an example of

- A. a promotional program.
- B. a step in product planning.
- C. responding to consumer needs.
- D. testing consumer acceptance of packaging.

7 In which of the following are all items examples of raw materials used in food manufacture?

- A. Heat, filtered water and salt
- B. Steam, food additives and packaging
- C. Ingredients, electricity and fortifying vitamins
- D. Sterile packaging, refrigeration and detergents

**8** Pre-packaged cauliflower rice is an example of a new food product in the marketplace. What is a driver for this type of food product development?

- A. Feasibility
- B. Marketing
- C. Environment
- D. Convenience**

**9** Which of the following is an independent, not-for-profit, community-based organisation that promotes the health and wellbeing of all Australians?

- A. Nutrition Australia**
- B. The Australian Beverages Council
- C. The Australian Institute of Food Safety
- D. The Australian Food and Grocery Council

**10** Vegans are at risk of malnutrition if their diet is lacking which of the following nutrients?

- A. Folate, calcium and iodine
- B. Vitamin B12, iron and sodium**
- C. Vitamins A and D and magnesium
- D. Dietary fibre and vitamins C and E

**11** In order to prevent neural tube defects in infants, pregnant women are recommended to increase their intake of

- A. folate.**
- B. protein.
- C. calcium.
- D. vitamin D.

**12** The distribution system for supplying online groceries includes both

- A. warehousing and market research.
- B. transportation and sensory evaluation.
- C. order processing and inventory control.**
- D. materials handling and raw materials specifications.

**13** A stall-holder at a produce market only uses ingredients sourced from within a 50 km radius.

What are the reasons for sourcing ingredients in this way?

- A. Promoting the company image and technological environment
- B. Supporting local employment and reducing environmental impact**
- C. Increasing convenience and using available processing equipment
- D. Improving local employment opportunities and working conditions

**14** Who authorises registration of a food safety program and allows a food business to open?

- A. FSANZ
- B. Local council**
- C. State government
- D. Federal government

**15** In which of the following are all of the processes listed used to physically clean raw materials in a food production plant?

- A. Grinding, sieving and immersion
- B. Aspiration, filtration and blanching
- C. Sieving, high pressure spraying and flotation**
- D. Grading, sorting and high temperature sterilisation

**16** To which area of the Australian food industry do the following four qualities apply: strong, hygienic, durable and efficient?

- A. Processing techniques and equipment**
- B. Principles of food preservation and equipment
- C. Critical control points and functions of packaging
- D. Functions of packaging and principles of food preservation

**17** In general, which drink is the best option for athletes to use to rehydrate?

- A. Water**
- B. Isotonic drink
- C. Coconut water
- D. Electrolyte drink

**18** Initial product planning requires manufacturers to do which of the following?

- A. Comply with the Food Code and develop an online presence
- B. Analyse the product life cycle and establish the distribution system
- C. Be aware of market competitors and understand their target market**
- D. Conduct market research and improve the staff working conditions

**19** A tubular heat exchanger is used to cook

- A. breads and cakes.
- B. cereals and muesli.
- C. pasta and couscous.
- D. chutneys and sauces.**

**20** In which of the following are both products most likely to be the cause of an anaphylactic reaction?

- A. Gluten and milk
- B. Seafood and sesame seeds**
- C. Shellfish and phytochemicals
- D. Peanuts and red food colouring



2017 Exam

- 1 Mechanisation is used by sectors of the food manufacturing industry because it
  - A. meets consumer demands.
  - B. requires minimal maintenance.
  - C. provides employment opportunities.
  - D. assists in maintaining product consistency.
- 2 A company that delivers hot, ready-to-eat family meals belongs to which sector of the Australian food industry?
  - A. Food retail
  - B. Agriculture and fisheries
  - C. Food service and catering
  - D. Food processing/manufacturing
- 3 Which is the best nutritional advice for a teenager who wants to avoid developing osteoporosis in the future?
  - A. Eat dairy foods
  - B. Spend time in the sun
  - C. Take a calcium supplement
  - D. Increase consumption of red meat
- 4 At which stage of the food product development process would storage trials be conducted?
  - A. Technical feasibility
  - B. Product specifications
  - C. Testing product prototype
  - D. Development of a prototype
- 5 What is the role of anti-caking agents in packaged foods?
  - A. To allow the product to flow freely
  - B. To prevent food from drying out
  - C. To improve the nutritive value
  - D. To enhance the appearance
- 6 The best time to conduct a SWOT analysis is when
  - A. a design brief is written.
  - B. consumer needs are identified.
  - C. resources and anticipated returns are analysed.
  - D. the manufacturer analyses the opportunities in the marketplace.
- 7 A food processing company is experimenting with organic green bananas to produce gluten-free flour.  
What type of food product development is this?
  - A. Me too
  - B. Copycat
  - C. New to world
  - D. Line extension

**8** The agriculture and fisheries sector launches a smart phone application for consumers to identify ethically-sourced raw materials used in food production.

This is an example of

- A. Quality assurance.
- B. research and development.**
- C. idea generation and screening.
- D. emerging technologies in food production.

**9** Due to a disease outbreak, raw prawn imports into Australia have been suspended. Who has the responsibility for enforcing this legislation?

- A. Safe Work NSW
- B. NSW Office of Water
- C. Department of Immigration
- D. Department of Agriculture and Water Resources**

**10** A packaged frozen chicken is left on the kitchen sink at the start of the day to defrost in time for the evening meal.

Which of the following is most likely to cause the chicken to become unsafe for consumption?

- A. Light
- B. Infestation
- C. Temperature**
- D. Enzyme activity

**11** A food manufacturer launches a new product into the market. Initially they set the price quite high.

This is an example of

- A. Price skimming.**
- B. penetration pricing.
- C. promotional pricing.
- D. Discriminatory pricing.

**12** Which process do manufacturers use to ensure that raw materials are standardised?

- A. HACCP
- B. Quality control**
- C. Sensory testing
- D. Quality assurance

**13** Which dish could a vegan eat to assist in preventing anaemia?

- A. Macaroni and cheese
- B. Grilled fish and salad
- C. Fruit salad with coconut milk yoghurt
- D. Chickpea, spinach and citrus salad**

**14** Why is fibre classified as an active non-nutrient?

- A. It is essential in the diet.
- B. It provides fuel for energy.
- C. It is not absorbed in the digestive system.**
- D. It provides a range of vitamins and minerals.

**15** Which of the following is an example of a value-added product in the agriculture and fisheries sector?

- A. Barbequed chicken
- B. Frozen cooked prawns**
- C. Kids' snack pack of apples
- D. Cheese and bacon bread rolls

**16** Nut-free policies are becoming increasingly popular in institutions where food is consumed.

What is the reason for this?

- A. Nutritional concerns
- B. The risk of anaphylaxis**
- C. Workplace health and safety
- D. High levels of food intolerance

**17** Which piece of equipment would be suitable for the commercial manufacture of tomato sauce?

- A. Retort**
- B. Atomiser
- C. Centrifuge
- D. Tunnel oven

**18** Which piece of legislation regulates the labelling of free range eggs?

- A. Trade Practices Act 1974 (Cth)
- B. Competition and Consumer Act 2010 (Cth)
- C. Food Standards Australia New Zealand Act 1991 (Cth)**
- D. Protection of the Environment Operations Act 1997 (NSW)

**19** Which process uses the principles of fermentation?

- A. Drying
- B. Pickling
- C. Jam making
- D. Sourdough breadmaking**

**20** Which of the following contributes to the risk of cardiovascular disease?

- A. Omega 3 fatty acids
- B. Low density lipoproteins (LDL) cholesterol**
- C. High density lipoproteins (HDL) cholesterol
- D. A diet rich in sugar and monounsaturated fatty acids

2016 exam

1 Which of the following materials is most suitable for use in food-processing equipment?

- A. Glass
- B. Plastic
- C. Aluminium
- D. Stainless steel

2 A company produces a copy of an existing food product. What type of food product development is this?

- A. Me too
- B. Innovation
- C. New to world
- D. Line extension

3 A crop is produced without the use of synthetic chemicals.

This means it has been produced by

- A. mass production.
- B. organic farming.
- C. industrial agriculture.
- D. commercial cropping.

4 What is the best temperature for storing frozen goods?

- A. 0°C
- B. -4°C
- C. -18°C
- D. -100°C

5 Which of the following best describes a prototype?

- A. The final product
- B. The marketing plan
- C. A model of a product produced for testing
- D. A record of costs associated with a product

6 Vegetarians need to take particular care to include which of the following in their diet?

- A. Iron
- B. Sodium
- C. Vitamin D
- D. Dietary fibre

7 El Niño is a climate pattern that causes extreme weather conditions.

Which sector of the Australian food industry is directly affected by an El Niño cycle?

- A. Food retail
- B. Agriculture and fisheries
- C. Food service and catering
- D. Food processing/manufacturing

**8** Milk is heated to 72°C for 15 seconds before packaging. What is this process known as?

- A. Irradiation
- B. Fermentation
- C. Pasteurisation**
- D. High pressure processing

**9** A muffin-making chain produces a low-GI muffin.

Which driver of food product development is the company most likely responding to?

- A. Technological developments
- B. Consumer demand for convenience
- C. Increase in single parent households
- D. Market concerns such as dietary considerations**

**10** For which of the following groups is folate recommended as a supplement?

- A. Athletes preparing for events
- B. Women planning a pregnancy**
- C. Children who live in apartments
- D. Elderly people with sedentary lifestyles

**11** What is the main role of a design brief in food product development?

- A. To plan profit margins for the company
- B. To provide a possible solution to a problem
- C. To gather information about competitors' products
- D. To provide an outline of the purpose of the development**

**12** A food product contains the following ingredients: *soybean oil, whole eggs, water, sugar, white vinegar, vegetable gum (405), food acid (citric), natural colour (carrot extract), flavour, emulsifier (lecithin)*.

What is this product most likely to be?

- A. Ice-cream
- B. Margarine
- C. Carrot cake
- D. Mayonnaise**

**13** Which of the following most affects working conditions in the food service and catering sector of the Australian food industry?

- A. Penalty rates**
- B. Climate change
- C. Labelling legislation
- D. Self-service check-outs

**14** Which of the following organisations oversees approvals to produce genetically modified foods?

- A. National Food Authority
- B. Food and Grocery Council
- C. Food Standards Australia and New Zealand**
- D. National Association for Sustainable Agriculture Australia

**15** A retailer offers a prize as part of a marketing strategy. When customers try to claim the prize they are told it is not available.

Which piece of legislation is being breached?

- A. *Food Act 2003* (NSW)
- B. *Food Regulation Act 2015* (NSW)
- C. *Work Health and Safety Act 2011* (Cth)
- D. *Competition and Consumer Act 2010* (Cth)

**16** A large burger chain is trialling a process where customers can design their own burgers. Which of the following are internal factors that are most likely to have contributed to this trial?

- A. Company image and financial position
- B. Personnel expertise and market concerns
- C. Ecological and technological environments
- D. Financial position and economic environments

**17** Which of the following occurs when the body produces antibodies to destroy a food protein?

- A. Food poisoning
- B. A diabetic reaction
- C. A food intolerance
- D. An allergic reaction

**18** Which of the following is an example of a probiotic?

- A. Anthocyanin
- B. Cellulose
- C. *Lactobacillus*
- D. Lignin

**19** Which of the following ingredients, used in commercial bread-making, is required by law to be fortified with iodine?

- A. Salt
- B. Flour
- C. Butter
- D. Plant oils

**20** In which of the following preservation processes is an atomiser most likely to be used?

- A. Freezing
- B. Sousvide
- C. Dehydration
- D. Fermentation

