

**ASSIGNMENT 3**  
**(TMA-3)**  
**Entrepreneurship and Food Service Management**

**Course Code: MFN-007**  
**Assignment Code: MFN-007/AST-3/TMA-3/2023-24**  
**Last Date of Submission: 28<sup>th</sup> February, 2024**  
**Maximum Marks: 100**

**This assignment is based on Units 1 -19 of the MFN-007 Course.**

**(80 marks)**

**Section A - Descriptive Questions**

There are eight questions in this part. Answer all questions.

1. a) Enlist the six functions of management and write against each at least one activity that a manager performs using the function. (6)  
b) How is the grading of hotels and restaurants done? (2)  
c) How important is a market survey for an individual to start a food service unit? (2)
2. a) Enumerate briefly the architectural plans you would bear in mind before setting up the food service unit. (4)  
b) What are the 4 P's of Marketing mix? Discuss them briefly. (4)  
c) List the labeling requirement of a food product. (2)
3. a) Elaborate the knowledge and skills required to plan a food menu? (2)  
b) What are the different types of menus and their uses in a food service establishment? (6)  
c) Enlist the steps involved in construction of a menu. (2)
4. a) What is formal or competitive bid buying? What are the different types of competitive bid buying? (4)  
b) What is standardized recipe? Discuss the methods used for recipe adjustment. (6)
5. a) Illustrate the activities involved in the process of food production using a flow chart. (2)  
b) Elaborate the different types of moist heat methods of cooking. (4)  
c) Highlight the factors that have led to the growth of disposables in the service area. Also, give any two advantages and disadvantages of disposables. (4)

6. a) What is the Ganymede system of service in hospitals? Discuss its advantages. (4)
- b) How is cold temperature maintained during distribution system in ready prepared food service system? (2)
- c) What are the benefits of using the following food service systems: (2+2)
  - i) Commissary
  - ii) Assembly / serve
7. a) Discuss the principles involved in the process of staff management. (4)
- b) What is an organization chart? Illustrate the hospital chart of a hospital kitchen. (1+3)
- c) What safety concerns need to be kept in mind before purchasing equipment? (2)
8. a) What do you understand by 3 E's of safety in a food service establishment? (3)
- b) List the common rules that a food service worker needs to adopt for hygienic storage and handling. (2)
- c) What measures should the employer observe to ensure good health and safe working condition for all employees working in a food service establishment? (5)

**Section B - OTQ (Objective Type Questions)**

1. a) Define the following: (10)
  - i. JIT approach
  - ii. Activity Analysis
  - iii. FOAP
  - iv. Requisition Slip
  - v. Appraisal
  
2. Differentiate between the following: (10)
  - i) Food poisoning and Food infection
  - ii) Refrigerated storage and Cold storage
  - iii) Recruitment and Selection
  - iv) Cleaning Agent and Sanitizer
  - v) Perpetual inventory and Physical inventory

# Entrepreneurship and Food Service Management

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*Disclaimer/Special Note: These are just the sample of the Answers/Solutions to some of the Questions given in the Assignments. These Sample Answers/Solutions are prepared by Private Teacher/Tutors/Authors for the help and guidance of the student to get an idea of how he/she can answer the Questions given the Assignments. We do not claim 100% accuracy of these sample answers as these are based on the knowledge and capability of Private Teacher/Tutor. Sample answers may be seen as the Guide/Help for the reference to prepare the answers of the questions given in the assignment. As these solutions and answers are prepared by the private Teacher/Tutor so the chances of error or mistake cannot be denied. Any Omission or Error is highly regretted though every care has been taken while preparing these Sample Answers/ Solutions. Please consult your own Teacher/Tutor before you prepare a particular Answer and for up-to-date and exact information, data and solution. Student should must read and refer the official study material provided by the university*

## Section A - Descriptive Questions

**There are eight questions in this part. Answer all questions.**

**1. a) Enlist the six functions of management and write against each at least one activity that a manager performs using the function.**

The six functions of management are as follows:

### 1. Planning:

- **Activity:** Setting organizational goals and objectives. For example, a manager might define the sales targets for the upcoming quarter and devise strategies to achieve them.

### 2. Organizing:

- **Activity:** Establishing the organizational structure and allocating resources. This includes assigning roles and responsibilities to employees, creating departments, and managing budgets.

### 3. Staffing:

- **Activity:** Recruiting, selecting, and training employees. Managers are involved in the hiring process, conducting interviews, and providing training and development opportunities for their team members.

### 4. Directing (or Leading):

- **Activity:** Providing guidance and motivation to employees. Managers lead by example, communicate goals effectively, and inspire their team to achieve the desired outcomes.
- 5. Coordinating:**
- **Activity:** Ensuring harmonious collaboration among various departments and team members. Managers coordinate efforts, facilitate communication, and resolve conflicts to achieve overall organizational goals.
- 6. Controlling:**
- **Activity:** Monitoring and evaluating performance. Managers track progress towards goals, assess results, and take corrective actions if deviations occur to keep the organization on track.

It's important to note that managerial activities may involve a combination of functions, and these functions are not necessarily performed in a linear sequence. Managers often engage in these functions simultaneously and iteratively to effectively manage their teams and organizations.

#### **b) How is the grading of hotels and restaurants done?**

The grading of hotels and restaurants is typically done through a rating system that evaluates various aspects of their services, facilities, and overall quality. These rating systems are often administered by government bodies, industry associations, or independent organizations. The evaluation criteria may include factors such as cleanliness, customer service, amenities, food quality, ambiance, and compliance with safety regulations. Inspectors or evaluators visit the establishments and assess them based on predefined standards. The establishments are then assigned a rating or grade, usually represented by stars or symbols, which indicates their level of quality and helps consumers make informed decisions when choosing accommodations or dining options.

#### **c) How important is a market survey for an individual to start a food service unit?**

A market survey is highly important for an individual looking to start a food service unit. It provides valuable insights into the target market, customer preferences, competitors, and potential demand. By conducting a market survey, an individual can gather data on the local food industry, identify trends, and understand the needs and expectations of the target audience. This information helps in making informed decisions about menu planning, pricing, location selection, and marketing strategies. A thorough market survey enables the individual to assess the viability of their food service unit, minimize risks, and increase the chances of success by aligning their offerings with the market demand.

**2. a) Enumerate briefly the architectural plans you would bear in mind before setting up the food service unit.**

When setting up a food service unit, several architectural plans should be considered to ensure the efficient and safe operation of the facility. Here are some key aspects to bear in mind:

1. **Layout and Flow:** Design a logical and efficient layout that facilitates a smooth flow of operations, from food preparation to service. Optimize the placement of workstations, equipment, and storage areas to minimize unnecessary movements and maximize productivity.
2. **Food Safety and Hygiene:** Incorporate proper ventilation systems to control odors and maintain a clean environment. Design separate areas for food preparation, cooking, and dishwashing to prevent cross-contamination. Implement appropriate drainage systems to facilitate easy cleaning and avoid water accumulation.
3. **Storage and Inventory:** Allocate adequate space for dry storage, refrigeration, and freezer units. Ensure proper shelving and organization to facilitate easy access and rotation of food items. Consider the proximity of storage areas to workstations to minimize unnecessary travel time.
4. **Plumbing and Utilities:** Plan for an efficient water supply system to meet the demands of the kitchen, including hot and cold water for cooking, handwashing, and cleaning. Install appropriate plumbing fixtures and drainage systems to handle wastewater effectively.
5. **Accessibility and Safety:** Ensure compliance with building codes and regulations, including accessibility for people with disabilities. Install appropriate fire suppression systems, emergency exits, and safety equipment. Consider ergonomic design principles to reduce the risk of workplace injuries.
6. **Energy Efficiency:** Incorporate energy-efficient equipment and lighting systems to reduce operational costs and minimize environmental impact.

It is crucial to consult with architects, engineers, and food service professionals to create a well-designed and functional space that meets all the necessary requirements for a successful food service unit.

**b) What are the 4 P's of Marketing mix? Discuss them briefly.**

The 4 P's of the marketing mix are a set of fundamental marketing elements that help businesses effectively plan and execute their marketing strategies. They are Product, Price, Place, and Promotion. Here's a brief discussion of each element:

1. **Product:** The product refers to the goods or services that a company offers to meet customer needs. It involves developing a product that satisfies customer

demands, ensuring its quality, features, design, and packaging. Product decisions also involve branding, differentiation, and product lifecycle management.

2. **Price:** Price refers to the amount customers are willing to pay for a product or service. Setting the right price is crucial as it affects sales volume, profit margins, and market positioning. Pricing strategies include cost-based pricing, value-based pricing, competitor-based pricing, or dynamic pricing. Factors such as production costs, market demand, competition, and customer perception of value influence price decisions.
3. **Place:** Place refers to the distribution channels and locations where customers can access and purchase the product. It involves selecting the appropriate distribution channels, such as direct sales, retailers, wholesalers, or e-commerce platforms. Additionally, decisions about inventory management, logistics, and supply chain are crucial to ensure the product reaches the target market efficiently.
4. **Promotion:** Promotion includes all the activities that communicate the value and benefits of the product to the target audience. It encompasses advertising, sales promotion, public relations, personal selling, and direct marketing. The goal is to create awareness, generate interest, and persuade customers to make a purchase. Promotional strategies should align with the target market, leverage various communication channels, and effectively convey the product's unique selling points.

By carefully considering and integrating these 4 P's, businesses can develop a comprehensive marketing strategy that effectively positions their products or services, attracts customers, and drives success in the market.

#### c) List the labeling requirement of a food product.

Labeling requirements for food products typically include the following information:

1. **Product Name:** The name of the food product or a description that accurately represents its nature or character.
2. **Ingredient List:** A list of all ingredients in descending order of their proportion by weight, including additives and allergens.
3. **Allergen Information:** Clear identification of common allergens such as milk, eggs, wheat, soy, peanuts, tree nuts, fish, and shellfish.
4. **Nutrition Facts:** Information on the nutritional content per serving, including calories, fat, carbohydrates, protein, vitamins, and minerals.
5. **Net Quantity:** The amount of the food product contained in the package, usually expressed in weight or volume.

6. **Country of Origin:** The country where the food product was manufactured or produced.
7. **Date Marking:** The date of manufacture, packaging, or expiration/use-by date, depending on the product.

It's important to note that these requirements may vary depending on the country and regional regulations where the food product is being sold.

### 3. a) Elaborate the knowledge and skills required to plan a food menu?

Planning a food menu requires a combination of knowledge and skills to create a balanced and appealing selection of dishes. Firstly, a deep understanding of culinary principles, including cooking techniques, flavor profiles, and ingredient compatibility, is essential. A grasp of nutritional guidelines and dietary restrictions is also crucial to accommodate various preferences and requirements. Additionally, creativity and an eye for presentation are necessary to design an aesthetically pleasing menu. Practical skills such as recipe development, portion sizing, and cost analysis enable effective menu planning. Finally, market research and trend analysis help stay current with evolving culinary preferences and consumer demands. The ability to blend these knowledge and skills ensures a well-rounded and enticing food menu.

### b) What are the different types of menus and their uses in a food service establishment?

In a food service establishment, menus play a crucial role in communicating the available food and beverage offerings to customers. They serve as a marketing tool, a means of informing customers about the variety of options available, and can influence their dining experience. There are several types of menus commonly used in food service establishments, each with its own unique purpose and benefits. Here are some of the different types of menus and their uses:

1. **À la carte Menu:** This is one of the most common types of menus, offering a wide range of individual food and beverage items listed separately with their respective prices. Customers can choose items independently, creating a customized dining experience. This menu type is commonly found in upscale restaurants or establishments that focus on offering a variety of choices.
2. **Table d'hôte Menu:** Also known as a fixed menu or a set menu, this type offers a pre-determined selection of courses at a set price. Customers have limited choices for each course, typically categorized as appetizer, main course, and dessert. Table d'hôte menus are popular in fine dining establishments or for special events, as they provide a structured dining experience.
3. **Prix Fixe Menu:** Similar to the table d'hôte menu, the prix fixe menu offers a fixed selection of dishes at a predetermined price. However, it typically includes multiple options for each course, allowing customers to choose from a

variety of combinations. This menu type is often used for promotions, special occasions, or themed dining experiences.

4. **Buffet Menu:** Buffet menus feature a self-service arrangement, where customers can choose from a wide variety of dishes laid out in a buffet line. This type of menu is popular in settings such as hotels, cruise ships, or large gatherings, as it offers a diverse range of options and allows customers to serve themselves.
5. **Tasting Menu:** Tasting menus are designed to showcase the culinary skills and creativity of the chef. They typically consist of several small courses, providing customers with a sample of the restaurant's signature dishes or seasonal specialties. Tasting menus are often offered in fine dining establishments to provide a unique and memorable dining experience.
6. **Beverage Menu:** This type of menu focuses solely on beverages, including alcoholic and non-alcoholic drinks. It may include a selection of wines, cocktails, beers, spirits, and specialty beverages. Beverage menus are commonly found in bars, lounges, or establishments with a strong emphasis on beverage offerings.

Each type of menu serves a specific purpose, catering to different customer preferences and dining occasions. By strategically designing and utilizing various menu types, food service establishments can effectively communicate their offerings, enhance customer satisfaction, and drive sales.

#### c) Enlist the steps involved in construction of a menu. CALL US:- 8006184581

The construction of a menu involves several key steps:

1. Identify the target audience and determine the restaurant's concept and cuisine.
2. Conduct market research to understand customer preferences and trends.
3. Create a list of potential dishes based on the concept and target audience.
4. Develop recipes and test them for taste, presentation, and feasibility.
5. Determine the pricing strategy considering ingredients, preparation time, and overhead costs.
6. Organize the menu layout, including sections, categories, and descriptions.
7. Consider the balance of dishes, offering variety in flavors, textures, and dietary preferences.
8. Design the menu, ensuring it is visually appealing, readable, and aligned with the restaurant's branding.
9. Proofread and edit the menu for accuracy, consistency, and clarity.



10. Print and distribute the final menu to customers or prepare it for digital platforms.
11. Regularly review and update the menu based on customer feedback, ingredient availability, and market trends.

#### 4. a) What is formal or competitive bid buying? What are the different types of competitive bid buying?

Formal or competitive bid buying refers to a procurement process in which multiple suppliers or vendors submit bids or proposals in response to a buyer's request for goods or services. The buyer evaluates the bids based on predetermined criteria, such as price, quality, delivery terms, and other relevant factors, and selects the most suitable supplier or vendor.

Competitive bid buying is commonly used in both public and private sectors to ensure transparency, fairness, and competitiveness in the procurement process. It allows buyers to obtain the best value for their money by encouraging suppliers to offer their most competitive prices and terms.

There are several types of competitive bid buying methods:

1. **Open Bidding:** This method involves publicizing the buyer's requirements and inviting all interested suppliers to submit their bids. It encourages a wide range of suppliers to participate, promoting competition and maximizing options for the buyer.
2. **Sealed Bidding:** In this method, suppliers submit their bids in sealed envelopes, ensuring confidentiality. The bids are opened at a designated time, and the buyer evaluates them based on predetermined criteria. This method is commonly used when the buyer has well-defined specifications and wants to select the lowest-priced bid.
3. **Request for Proposal (RFP):** Unlike sealed bidding, an RFP allows the buyer to consider factors beyond price alone. The buyer provides detailed requirements, and suppliers submit proposals that outline their technical capabilities, approach to the project, pricing, and other relevant information. The buyer evaluates the proposals based on both technical and commercial factors before making a selection.

Overall, competitive bid buying methods provide buyers with a structured approach to procure goods or services while promoting competition, transparency, and value for money. The specific method chosen depends on the buyer's requirements, the complexity of the purchase, and the desired evaluation criteria.

#### b) What is standardized recipe? Discuss the methods used for recipe adjustment.

A standardized recipe is a detailed set of instructions used in the culinary industry to ensure consistency and quality in food preparation. It provides a standardized format that includes precise measurements, ingredients, cooking methods, and other essential details to produce a specific dish.

The purpose of a standardized recipe is to establish a uniform standard that can be replicated consistently across different chefs, kitchens, or establishments. It helps maintain consistency in taste, portion sizes, and overall presentation of a dish, which is particularly important in restaurants, catering businesses, and food production facilities.

Recipe adjustment, also known as recipe scaling or recipe modification, refers to the process of modifying a standardized recipe to change the portion size, adjust ingredient quantities, or accommodate specific dietary needs. There are several methods used for recipe adjustment:

1. **Percentage Method:** This method involves adjusting ingredient quantities proportionally based on the desired yield. For example, if the original recipe yields four servings and the desired yield is eight servings, each ingredient quantity is multiplied by a factor of two.
2. **Factor Method:** Similar to the percentage method, the factor method involves multiplying each ingredient quantity by a specific factor. For example, if the desired yield is three times the original yield, each ingredient quantity is multiplied by a factor of three.
3. **Direct Measurement Method:** This method involves directly measuring the ingredient quantities required for the desired yield without using scaling factors. It is commonly used when adjusting recipes for small quantities or when precise measurements are critical.
4. **Yield Percentage Method:** This method is particularly useful when adjusting recipes for large quantities. It involves calculating the yield percentage of the original recipe and then applying the same yield percentage to the desired quantity. For example, if the original recipe yields 50 servings and the desired yield is 100 servings, the yield percentage is 2. Each ingredient quantity is then multiplied by 2 to obtain the adjusted quantities.
5. **Baker's Percentage Method:** This method is primarily used in baking, where ingredients are expressed as a percentage of the total flour weight. It allows for easy adjustment of recipes by modifying the percentages of individual ingredients while maintaining the overall balance.

When adjusting a recipe, it is essential to consider the characteristics of each ingredient and the desired outcome. Factors such as cooking time, oven temperature, seasoning, and texture should be taken into account to ensure the adjusted recipe maintains the original intent and quality.

In conclusion, a standardized recipe serves as a blueprint for consistent food preparation, while recipe adjustment methods allow for customization of portion sizes, ingredient quantities, and dietary requirements. These practices contribute to maintaining quality, consistency, and efficiency in the culinary industry.

### 5. a) Illustrate the activities involved in the process of food production using a flow chart.

Unfortunately, I am a text-based AI and cannot directly create or display visual content like flowcharts. However, I can describe the activities involved in the process of food production in a sequential manner.

1. **Crop cultivation:** This involves preparing the soil, sowing seeds, applying fertilizers, and managing pests and diseases.
2. **Harvesting:** When the crops are mature, they are harvested and collected for further processing.
3. **Processing:** The harvested crops undergo various processes such as cleaning, sorting, and packaging to ensure quality and safety.
4. **Distribution:** Processed food products are transported to distribution centers, warehouses, or directly to retailers.
5. **Retailing:** Food products are sold to consumers through grocery stores, markets, restaurants, or online platforms.
6. **Preparation and cooking:** Consumers buy the food products and prepare meals according to their preferences and recipes.
7. **Consumption:** Finally, the prepared meals are consumed by individuals or families.

This is a simplified overview of the food production process, and the specific activities may vary depending on the type of food and the production methods used.

### b) Elaborate the different types of moist heat methods of cooking.

Moist heat cooking methods involve using liquid or steam to cook food. These methods are known for their ability to tenderize tough cuts of meat, enhance flavors, and create succulent textures. Here are some of the different types of moist heat cooking methods:

1. **Boiling:** This method involves submerging food in a liquid, usually water or broth, and heating it to its boiling point. It is commonly used for cooking pasta, vegetables, and grains. Boiling is a fast and efficient way to cook, but it can lead to nutrient loss and can make some foods mushy if overcooked.
2. **Simmering:** Similar to boiling, simmering involves cooking food in a liquid, but at a lower temperature. The liquid is heated to a point just below boiling,

creating gentle, consistent heat. This method is suitable for preparing soups, stews, and braised dishes, allowing flavors to develop over longer cooking times while keeping the food tender.

3. **Steaming:** Steaming involves cooking food above boiling liquid, allowing the steam to cook the food. This method helps retain nutrients, colors, and flavors. Steaming is often used for vegetables, seafood, and delicate foods like dumplings. It preserves the natural texture and can be done using a steamer basket, a bamboo steamer, or an electric steamer.
4. **Poaching:** Poaching involves gently cooking food in a liquid kept at a low temperature. It is commonly used for cooking delicate foods like eggs, fish, and poultry. The liquid can be flavored with herbs, spices, or aromatics to enhance the taste of the food being poached.

These are just a few examples of moist heat cooking methods. Each method offers unique benefits and is suitable for different types of foods, allowing for a variety of flavors and textures to be created in the culinary world.

**c) Highlight the factors that have led to the growth of disposables in the service area. Also, give any two advantages and disadvantages of disposables.**

The growth of disposables in the service area can be attributed to several factors:

1. **Convenience:** Disposables provide a convenient solution for various service industries, such as food service, healthcare, and hospitality. They eliminate the need for cleaning and maintenance, saving time and effort for businesses and customers alike.
2. **Cost-effectiveness:** Disposables often have a lower upfront cost compared to reusable alternatives. For businesses, this can translate into reduced operational expenses, as they don't have to invest in washing, sterilizing, and replacing reusable items. Additionally, disposables can minimize labor costs associated with cleaning and dishwashing.

**Advantages of disposables:**

1. **Convenience:** Disposables offer a convenient solution for both businesses and customers. They eliminate the need for cleaning and maintenance, saving time and effort.
2. **Hygiene:** In industries where hygiene is critical, disposables provide a hygienic option. They can be used once and then discarded, reducing the risk of contamination and the spread of infections.

**Disadvantages of disposables:**

1. **Environmental Impact:** One of the significant drawbacks of disposables is their environmental impact. Most disposables are made from non-

biodegradable materials, such as plastic, which contributes to pollution and waste accumulation. Improper disposal can harm ecosystems and wildlife.

2. **Cost Over Time:** While disposables may have a lower upfront cost, they can become costlier over time. Constantly repurchasing disposable items can add up, making them less cost-effective in the long run compared to reusable alternatives.

It is crucial to strike a balance between the convenience and practicality offered by disposables and the need to reduce waste and environmental harm. Sustainable alternatives, such as biodegradable or compostable disposables, are emerging to address some of these concerns.

### 6. a) What is the Ganymede system of service in hospitals? Discuss its advantages.

As of my last update in September 2021, there is no widely known or established "Ganymede system" of service in hospitals. It's possible that developments or new terminologies have emerged after my last update, so I recommend consulting more recent sources to see if any updates or changes have occurred.

However, if we assume that "Ganymede system" refers to a hypothetical or fictional model, we can discuss potential advantages that a well-designed hospital service system might bring:

1. **Efficiency and Streamlined Workflow:** A thoughtfully designed system could optimize hospital workflows, reducing redundant tasks, minimizing paperwork, and enhancing overall efficiency. This might result in quicker response times and better utilization of resources.
2. **Patient-Centered Care:** The system could prioritize patient needs and experiences, ensuring that healthcare services are tailored to individual patients. It might incorporate personalized treatment plans, making patients feel more valued and enhancing patient satisfaction.
3. **Data-Driven Decision Making:** By utilizing data and analytics, the Ganymede system could aid healthcare professionals in making more informed decisions. This could lead to better diagnosis, treatment, and outcomes for patients.
4. **Improved Communication:** A well-integrated system could facilitate seamless communication between different departments, healthcare professionals, and even patients. This might reduce errors and misunderstandings, leading to better-coordinated care.
5. **Enhanced Patient Safety:** Implementing safety protocols and alerts within the system could help prevent medical errors and adverse events, ultimately enhancing patient safety.

6. **Resource Optimization:** The Ganymede system might assist in managing hospital resources more effectively, such as inventory, staff scheduling, and equipment allocation, potentially leading to cost savings.
7. **Accessibility and Telemedicine:** Integrating telemedicine features could expand access to healthcare services, especially for remote or underserved areas, increasing overall healthcare reach.
8. **Continuous Improvement:** With data collection and analysis capabilities, the system could identify areas for improvement, allowing hospitals to continually refine their services and adapt to changing healthcare needs.

Remember that the specific advantages of any system would depend on its actual implementation and design. As the "Ganymede system" is not a standard or established concept, the advantages listed here are speculative and meant to showcase potential benefits that an advanced hospital service system could offer. For the latest information on hospital service models and advancements, it's best to consult up-to-date sources in the medical and healthcare industry.

#### **b) How is cold temperature maintained during distribution system in ready prepared food service system?**

In a ready-prepared food service system, maintaining cold temperature during the distribution process is crucial to ensure food safety and quality. Several measures are typically taken to achieve this:

1. **Temperature-Controlled Packaging:** The food is packed in insulated containers or boxes that are designed to maintain a cold temperature. These containers are often lined with materials such as foam or gel packs to provide insulation and retain coldness.
2. **Refrigerated Vehicles:** Specialized refrigerated trucks or vans equipped with refrigeration units are used for transporting the food. These vehicles are designed to maintain a specific temperature range to prevent the food from reaching unsafe temperatures.
3. **Monitoring Systems:** Temperature monitoring devices, such as data loggers or real-time sensors, are used to track the temperature inside the distribution vehicles. This allows for continuous monitoring and ensures that the desired temperature is maintained throughout the journey.

By implementing these measures, the ready-prepared food service system can ensure that cold temperatures are maintained during the distribution process, reducing the risk of foodborne illnesses and preserving the quality of the food.

#### **c) What are the benefits of using the following food service systems:**

##### **i) Commissary**

A commissary is a centralized kitchen or food production facility that caters to multiple satellite locations, such as restaurants, cafeterias, or catering services. It serves as a hub where bulk food preparation, cooking, and storage take place. The food produced at the commissary is then distributed to the satellite locations for further finishing, reheating, or serving.

Commissaries offer several advantages, including economies of scale in purchasing ingredients, standardized recipes, centralized quality control, and efficient production processes. They enable consistent menu offerings across multiple locations, reduce operational costs, and ensure food safety and quality through centralized oversight. Commissaries are commonly used in industries such as healthcare, hospitality, and large-scale food service operations to streamline production and improve overall efficiency.

## ii) Assembly / serve

Assembly/serve refers to a food service model where meals or dishes are partially prepared or pre-portioned at a central kitchen or commissary and then assembled or served at satellite locations or outlets. In this model, the main cooking and preparation processes are done in advance, and the final steps of assembling or serving the food occur closer to the point of consumption.

This approach offers several benefits, including increased efficiency, faster service, and consistent portion control. It allows for streamlined operations, reduced wait times, and improved customer satisfaction. Assembly/serve models are commonly used in settings such as fast-food restaurants, cafeterias, and food courts, where speed, convenience, and consistent quality are important factors in food service.

## 7. a) Discuss the principles involved in the process of staff management.

Effective staff management involves various principles that contribute to the successful management of employees within an organization. Here are some key principles involved in the process of staff management:

1. **Clear Communication:** Communication is vital for staff management. It is essential to establish clear lines of communication, provide regular feedback, and ensure that expectations, goals, and roles are well-communicated to employees.
2. **Leadership and Guidance:** Effective staff management requires strong leadership. Managers should provide guidance, support, and direction to their staff, fostering a positive work environment and enabling employees to perform at their best.
3. **Performance Management:** Staff management involves monitoring and evaluating employee performance. It includes setting performance standards,

conducting regular performance reviews, recognizing achievements, and providing constructive feedback to help employees improve.

4. **Training and Development:** Investing in staff training and development is crucial for enhancing skills, knowledge, and performance. Providing opportunities for professional growth not only benefits individual employees but also improves overall organizational effectiveness.
5. **Motivation and Recognition:** Recognizing and rewarding employee contributions is essential for staff management. Motivated employees are more likely to be engaged and productive. Managers should acknowledge and appreciate their team members' efforts and provide incentives to encourage continued high performance.
6. **Conflict Resolution:** Staff management requires addressing conflicts and resolving disputes in a fair and timely manner. Managers should encourage open communication, mediate conflicts, and promote a harmonious work environment.
7. **Work-Life Balance:** Promoting work-life balance is vital for staff management. Encouraging flexible work arrangements, providing support for personal responsibilities, and fostering a healthy work environment can contribute to employee satisfaction and productivity.

By adhering to these principles, organizations can effectively manage their staff, promote employee engagement, and achieve their goals while fostering a positive and productive work culture.

**b) What is an organization chart? Illustrate the hospital chart of a hospital kitchen.**

Before purchasing equipment, it is crucial to consider the following safety concerns:

1. **Safety Standards:** Ensure that the equipment meets all relevant safety standards and certifications, such as electrical safety, fire safety, and occupational health and safety regulations.
2. **User Safety Features:** Check if the equipment has built-in safety features, such as emergency stop buttons, safety guards, proper insulation, and safety interlocks to protect users from potential hazards.
3. **Maintenance Requirements:** Evaluate the maintenance needs of the equipment to ensure safe operation. Consider factors like training requirements, availability of spare parts, and service support to maintain equipment safety over time.



4. **Ergonomics:** Assess the ergonomic design of the equipment to minimize the risk of physical strain, repetitive stress injuries, or other health issues for operators.
5. **Compatibility and Integration:** Ensure that the equipment can be safely integrated into the existing infrastructure, processes, and systems of the organization, considering factors such as power requirements, ventilation, and space constraints.

By considering these safety concerns before purchasing equipment, organizations can prioritize the well-being of their employees, minimize potential hazards, and maintain a safe working environment.

### c) What safety concerns need to be kept in mind before purchasing equipment?

An organizational chart, also known as an org chart or organization chart, is a visual representation of the structure and hierarchy of an organization. It depicts the relationships, reporting lines, and positions within the organization, providing a clear overview of how different roles and departments are interconnected.

In the context of a hospital kitchen, the organizational chart represents the staff positions and reporting structure within the kitchen department. Here is an example of a hospital kitchen organizational chart:

#### 1. Hospital Kitchen Director

##### ❖ Executive Chef

- Sous Chef
  - Line Cooks
  - Prep Cooks
- Pastry Chef
  - Pastry Cooks

##### ❖ Kitchen Supervisor

- Dishwashers
- Kitchen Assistants

##### ❖ Dietitian

- Nutritionists

In this chart, the Hospital Kitchen Director holds the top position and oversees the entire kitchen operations. Reporting directly to the Director is the Executive Chef, who manages the kitchen and supervises the Sous Chef, responsible for overseeing the Line Cooks and Prep Cooks.

The Executive Chef also works with the Pastry Chef, who oversees the Pastry Cooks. The Kitchen Supervisor reports to the Executive Chef and manages the Dishwashers and Kitchen Assistants.

Additionally, the organizational chart includes a Dietitian who collaborates with the kitchen staff to ensure the nutritional quality of the meals. The Dietitian may have a team of Nutritionists working under them.

This organizational chart provides a visual representation of the hierarchical structure and reporting relationships within the hospital kitchen. It helps staff understand their roles and responsibilities, facilitates effective communication, and ensures smooth coordination in the kitchen operations.

### 8. a) What do you understand by 3 E's of safety in a food service establishment?

The 3 E's of safety in a food service establishment refer to the fundamental principles that are crucial for ensuring a safe and hygienic environment in the food industry.

These principles are Education, Enforcement, and Engineering:

1. **Education:** This involves providing comprehensive training and education to all staff members involved in food preparation, handling, and service. Proper training ensures that employees understand the importance of hygiene, safe food handling practices, and potential hazards. It includes training on personal hygiene, proper cleaning procedures, and maintaining food storage at the correct temperatures. By empowering employees with knowledge, they become better equipped to identify and prevent potential risks.
2. **Enforcement:** Enforcement pertains to the strict adherence and implementation of food safety policies and procedures. This involves regular monitoring, inspections, and audits to ensure compliance with food safety regulations. Managers and supervisors play a critical role in enforcing these standards and holding employees accountable for maintaining a safe environment. Consistent enforcement helps create a culture of safety and reinforces the significance of following protocols.
3. **Engineering:** This aspect involves the design and implementation of facilities and equipment that promote food safety. This may include investing in proper ventilation systems, designing an efficient flow of food preparation, and using appropriate food-grade materials. Well-designed facilities and equipment minimize the risk of contamination and other potential hazards, enhancing overall food safety and customer well-being.

By prioritizing the 3 E's of safety, food service establishments can significantly reduce the likelihood of foodborne illnesses, uphold their reputation, and ensure the well-being of both staff and customers.

**b) List the common rules that a food service worker needs to adopt for hygienic storage and handling.**

1. Wash hands frequently and properly.
2. Wear clean and appropriate protective gear, such as gloves and aprons.
3. Store raw and cooked foods separately to avoid cross-contamination.
4. Keep perishable foods refrigerated at the correct temperatures.
5. Regularly clean and sanitize food preparation surfaces and equipment.
6. Use designated utensils and cutting boards for specific food types.
7. Check expiration dates and rotate stock to use older items first.
8. Avoid touching ready-to-eat food with bare hands.
9. Thaw frozen foods properly, either in the refrigerator or using a microwave.
10. Discard any food that appears spoiled or contaminated.

**c) What measures should the employer observe to ensure good health and safe working condition for all employees working in a food service establishment?**

Ensuring good health and safe working conditions is paramount in a food service establishment to protect employees and customers alike. The following measures should be observed by the employer to maintain a healthy and safe environment for all employees:

1. **Employee Training:** Properly train all employees in food safety practices, personal hygiene, and equipment handling. Regularly conduct refresher courses to keep them up-to-date with the latest guidelines and best practices.
2. **Hygiene Practices:** Enforce strict personal hygiene practices, including regular handwashing, proper use of gloves, and wearing clean uniforms to prevent food contamination.
3. **Sanitization and Cleaning:** Implement a thorough cleaning schedule for all surfaces, equipment, and utensils to prevent the growth and spread of harmful bacteria. Use food-grade cleaning agents and ensure employees follow the correct cleaning procedures.
4. **Food Handling Procedures:** Establish strict protocols for food handling, storage, and preparation to avoid cross-contamination and foodborne illnesses. Implement temperature controls and monitoring systems for perishable items.
5. **Allergen Awareness:** Train employees to identify and handle allergens properly to prevent accidental exposure to customers with allergies.
6. **Ergonomics:** Provide ergonomic workstations and equipment to minimize the risk of musculoskeletal injuries and promote overall well-being among employees.
7. **Fire Safety:** Conduct fire safety training and drills to ensure employees know how to respond quickly and effectively in case of an emergency. Install fire

extinguishers, smoke detectors, and emergency exits as required by local regulations.

8. **First Aid and Medical Assistance:** Have a well-equipped first aid kit readily available and train designated staff in basic first aid procedures. Develop a plan for medical emergencies and ensure access to medical assistance if needed.
9. **Workplace Security:** Maintain a safe and secure environment by implementing access controls and surveillance systems to prevent unauthorized access and protect both employees and customers.
10. **Staffing Levels:** Ensure adequate staffing levels to prevent overburdening employees and reduce the risk of fatigue-related accidents.

By diligently observing these measures, employers can create a safe and healthy working environment in their food service establishment, resulting in a more productive and content workforce while safeguarding the well-being of customers and the reputation of the business.

## Section B - OTQ (Objective Type Questions)

### 1. a) Define the following:

#### i. JIT approach

A production strategy that focuses on producing goods or delivering services at the exact time they are needed to reduce inventory costs and improve efficiency.

#### ii. Activity Analysis

A systematic process of examining tasks, processes, and workflows within an organization to identify areas for improvement, resource optimization, and cost reduction.

#### iii. FOAP

A coding structure used in financial systems to categorize and track financial transactions and budgets in organizations, enabling effective budget management and financial reporting.

#### iv. Requisition Slip

A document used in procurement processes to request the purchase of goods or services, providing essential details such as item descriptions, quantities, and budget codes.

#### v. Appraisal

A formal evaluation process where supervisors or managers assess an employee's performance, skills, and behaviors to provide feedback, identify strengths and weaknesses, and make decisions on promotions or development opportunities.

## **2. Differentiate between the following:**

### **i) Food poisoning and Food infection**

Food poisoning is caused by consuming food contaminated with toxins produced by bacteria or other harmful substances. Food infection, on the other hand, results from ingesting food containing live disease-causing microorganisms like bacteria, viruses, or parasites.

### **ii) Refrigerated storage and Cold storage**

Refrigerated storage involves maintaining temperatures above freezing to extend the shelf life of perishable goods. Cold storage, on the other hand, maintains temperatures below freezing and is typically used for long-term storage of goods, such as frozen foods.

### **iii) Recruitment and Selection**

Recruitment involves attracting potential candidates to apply for job openings within an organization. Selection is the process of assessing and choosing the most suitable candidate from the pool of applicants through interviews, assessments, and evaluations.

### **iv) Cleaning Agent and Sanitizer**

A cleaning agent is used to remove dirt, grime, and stains from surfaces. It may not necessarily kill all germs. A sanitizer, however, is a chemical substance that reduces the number of microorganisms on a surface to safe levels, helping to prevent the spread of infections.

### **v) Perpetual inventory and Physical inventory**

Perpetual inventory is a continuous and real-time recording of inventory levels using technology like barcode scanning or RFID. It allows for constant monitoring of stock levels. Physical inventory involves physically counting and verifying the actual quantities of products on hand in periodic audits.