



**FINAL**  
Examination Paper

(COVER PAGE)

Session : August 2014

Programme : Diploma In Culinary Arts (DCA)

Course : DCA2101 : Bread and Bread Making

Date of Examination : December 8, 2014 (Monday)

Time : 3:00 pm – 5:00 pm Reading Time: Nil

Duration : 2 Hours

Special Instructions :

**Section A: FIFTY (50) Multiple Choice questions. Answer ALL the questions.**

**Section B : Short answer questions. Answer ALL the questions.**

**IMPORTANT NOTE : THIS PAPER SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL**

Materials permitted :  
Nil

Materials provided :  
OMR Sheets

Examiner (s) : Chef Syamsul Idham

Moderator : Chef Eliezer Campuzano Lopez

INTI INTERNATIONAL COLLEGE PENANG

DIPLOMA IN CULINARY ARTS (DCA)  
DCA2101: BREAD AND BREAD MAKING  
FINAL EXAMINATION: AUGUST 2014 SESSION

**SECTION A: 50 marks**

Instructions: This section consists of **FIFTY (50)** multiple choice questions. Answer **ALL** questions. One **(1)** mark per question.

1. The following ingredients may be measured by volume:
  - a) Water, milk and eggs.
  - b) Butter, milk and eggs.
  - c) Water, flour and eggs.
  - d) Water, milk and sugar.
  - e) Oil, milk and fresh yeast.
  
2. All ingredients must be weighed and accuracy of measurement is critical in the bakeshop. Measurement is by weight rather than by \_\_\_\_\_ and it is much more accurate.
  - a) height
  - b) volume
  - c) kilogram
  - d) gram
  - e) metric
  
3. \_\_\_\_\_ express the amount of each ingredient used as a percentage of the amount of flour used.
  - a) Baking principles
  - b) Baking percentages
  - c) Bakers' percentages
  - d) Bakers' principles
  - e) Scaling
  
4. \_\_\_\_\_ is fat incorporated into the dough in many layers by means of a rolling and folding procedure.
  - a) Foled-out and rolled
  - b) Folded-in and rolled
  - c) Rolled-out or laminated dough
  - d) Rolled-out or laminated dough
  - e) Rolled-in or laminated dough

5. Gluten is a substance made up of proteins present in \_\_\_\_\_. It gives structure and strength to baked goods.
- wheat flour
  - corn flour
  - rice flour
  - tapioca flour
  - attar flour
6. \_\_\_\_\_ is the change in texture and aroma of baked goods is due to:
- Change in structure.
  - Loss of moisture by the starch granules.
- Scaling
  - Staling
  - Scraping
  - Sieving
  - Scoring
7. Mixing yeast dough's has three main purposes:
- To combine all ingredients into a uniform, smooth dough.
  - \_\_\_\_\_.
  - To develop gluten.
- To distribute the sugar evenly throughout the dough
  - To distribute the liquid evenly throughout the dough
  - To distribute the yeast evenly throughout the dough
  - To distribute the eggs evenly throughout the dough
  - To distribute the fats evenly throughout the dough
8. Three principal mixing methods are used for yeast dough's:
- The straight dough method.
  - The modified straight dough method.
  - \_\_\_\_\_.
- The single method
  - The double method
  - The soft method
  - The sponge method
  - The oven-spring method

9. Bakers generally talk about formulas rather than recipes. The bakeshop is much like a chemistry laboratory. Both in the scientific accuracy of all the procedures and in the complex reactions that take place during \_\_\_\_\_.
- a) portioning and shaping
  - b) fermentation and proofing
  - c) sieving and mixing
  - d) scaling and staling
  - e) mixing and baking
10. \_\_\_\_\_ is more than just a seasoning or flavor enhancer in basic baking production.
- a) Salt
  - b) Steam
  - c) Air
  - d) Baking ammonia
  - e) Baking powder
11. When water turns to \_\_\_\_\_, it expands to 1,600 times its original volume. This is because all baked products contain some moisture and it is an important leavening agent. Puff pastry, cream puffs, popovers, and pie crusts use it as their major or only leavening agent.
- a) Salt
  - b) Steam
  - c) Air
  - d) Baking ammonia
  - e) Baking powder
12. \_\_\_\_\_ is incorporated into a batter primarily by two methods: creaming and foaming. This is because it expands during baking and leavens the product. Creaming is the examples of the process beating fat and sugar together. Foaming also as another example of the process beating eggs, with or without sugar.
- a) Salt
  - b) Steam
  - c) Air
  - d) Baking ammonia
  - e) Baking powder

13. \_\_\_\_\_ are mixtures of baking soda plus an acid to react with it.
- Single-acting - require only moisture to be able to release gas.
  - Double-acting - release some gas when cold, but they require heat for complete reaction.
- a) Salt
  - b) Steam
  - c) Air
  - d) Baking ammonia
  - e) Baking powder
14. \_\_\_\_\_ is the chemical carbonate.
- It decomposes during baking to form carbon dioxide gas.
  - It can be used only in small products, like cookies, which allow the gas to be completely driven off.
- a) Salt
  - b) Steam
  - c) Air
  - d) Baking ammonia
  - e) Baking powder
15. \_\_\_\_\_ is the chemical bicarbonate.
- If moisture and an acid are present, it releases carbon dioxide gas, which leavens the product.
  - Products leavened with it must be baked at once, or the gases will escape and leavening power will be lost.
- a) Baking soda
  - b) Yeast
  - c) Eggs
  - d) Milk
  - e) Water
16. \_\_\_\_\_ is the basic liquid in baking, especially in breads and is normally suitable for most baking purposes.
- a) Baking soda
  - b) Yeast
  - c) Eggs
  - d) Milk
  - e) Water

17. \_\_\_\_\_ is natural sugar syrup. It consists largely of glucose and fructose, plus other compounds that give it flavor, also contains invert sugar. Stays smooth and resists crystallizing. Contains acid, which enables it to be used with baking soda as a leavening.
- Honey
  - Malt syrup
  - Corn syrup
  - Molasses
  - Sucrose
18. This \_\_\_\_\_ used primarily in yeast breads and serves as food for the yeast. This adds flavor and crust color to the breads.
- Honey
  - Malt syrup
  - Corn syrup
  - Molasses
  - Sucrose
19. \_\_\_\_\_ is a liquid sweetener consisting mainly of a sugar called glucose. It is made by converting cornstarch into simpler sugar compounds by the use of enzymes.
- Honey
  - Malt syrup
  - Corn syrup
  - Molasses
  - Sucrose
20. \_\_\_\_\_ is concentrated sugar cane juice.
- Sulfured - is a byproduct of sugar refining.
  - Unsulfured - is not a byproduct but a specially manufactured sugar product.
- Honey
  - Malt syrup
  - Corn syrup
  - Molasses
  - Sucrose
21. Milled from wheat kernels after the bran and the germ are removed, contains 63 to 73 percent starch and 7 to 15 percent protein. The remainder is moisture, fat, sugar, minerals and this is the source of the protein called gluten.
- Potato flour.
  - Corn flour
  - Rye flour
  - Whole wheat flour
  - White wheat flour

22. \_\_\_\_\_ is made by grinding the entire wheat kernel, including the bran and germ.
- a) Whole wheat flour
  - b) Rye flour
  - c) White wheat flour
  - d) Buckwheat flour
  - e) Barley flour
23. \_\_\_\_\_ does not develop much gluten and normally breads made with it are heavy unless some hard wheat flour is added.
- a) Whole wheat flour
  - b) Rye flour
  - c) White wheat flour
  - d) Buckwheat flour
  - e) Barley flour
24. \_\_\_\_\_ and other modified starches are used for products that are to be frozen.
- a) Cornstarch
  - b) Instant starches
  - c) Waxy maize
  - d) Potatoes
  - e) Sweet potatoes
25. Starches that set up almost like gelatin when cooled.
- a) Cornstarch.
  - b) Instant starches.
  - c) Waxy maize.
  - d) Potatoes.
  - e) Sweet potatoes.
26. \_\_\_\_\_ is precooked or pregelatinized; they thicken cold liquids without further cooking.
- a) Cornstarch
  - b) Instant starches
  - c) Waxy maize
  - d) Potatoes
  - e) Sweet potatoes
27. Fat with tough and waxy texture. Small particles of the fat tend to hold their shape in a dough or batter. Does not melt until a high temperature is reached.
- a) Emulsified shortening.
  - b) Butter and margarine.
  - c) Regular shortening.
  - d) Oil.
  - e) Pastry margarine.

28. This shortening was used whenever the weight of sugar in a cake batter is greater than the weight of flour.
- Emulsified shortening.
  - Butter and margarine.
  - Regular shortening.
  - Oil.
  - Pastry margarine.
29. This is also another type of shortening but it is especially formulated for puff pastry and other doughs that form layers.
- Emulsified shortening.
  - Butter and margarine.
  - Regular shortening.
  - Oil.
  - Pastry margarine.
30. These fats will turn into hard and brittle when cold, soft at room temperature and melt easily.
- Emulsified shortening.
  - Butter and margarine.
  - Regular shortening.
  - Oil.
  - Pastry margarine.
31. Liquid fats used in the bakery are limited primarily to:
- Greasing pans and proofing bowls.
  - Deep-frying doughnuts.
  - Serving as a wash for some kinds of rolls.
- Emulsified shortening.
  - Butter and margarine.
  - Regular shortening.
  - Oil.
  - Pastry margarine.
32. Bread to be served within 8 hours may be left on racks. For longer \_\_\_\_\_, wrap cooled breads in moisture proof bags to retard staling. Bread must be thoroughly cool before wrapping, or moisture will collect inside the bags.
- benching
  - makeup and panning
  - proofing
  - baking
  - storing

33. In the metric system, there is one basic unit for each type of measurement:

- The gram is the basic unit for weight.
- The liter is the basic unit for volume.
- The meter is the basic unit for \_\_\_\_\_.
- The degree Celsius is the basic unit for temperature.

- a) length
- b) foot
- c) inch
- d) pound
- e) ounce

34. Larger or smaller units are simply made by multiplying or dividing by 10, 100, 1000 and so on. These divisions are expressed by prefixes. The ones you need to know in the bakeshop are:

- Kilogram = \_\_\_\_\_.
- Deciliter = 1/10 or 0.1.
- Centimeter = 1/100 or 0.01.
- Millimeter = 1/1000 or 0.001.

- a) 10
- b) 100
- c) 1 000
- d) 10 000
- e) 100 000

35. Also called \_\_\_\_\_, this is the most common type of mixer used in baking as well as in cooking. The term is descriptive of the motion of the beater attachment. Just as a planet spins on its own axis while revolving around the sun, so the beater attachment spins on its axis while rotates in an orbit to reach all part of the stationary bowl.

- a) planetary mixer
- b) spiral mixer
- c) horizontal mixer
- d) proofer
- e) dough sheeter

36. A \_\_\_\_\_ rolls out portions dough into uniform thickness. It consists of canvas conveyor belt that feeds the dough through a pair or roller. To make thin, the dough usually must be passed back and forth through the rollers several times.

- a) dough sheeter
- b) planetary mixer
- c) spiral mixer
- d) horizontal mixer
- e) proofer

37. A \_\_\_\_\_ is a special box used to create the ideal condition for fermenting yeast dough. It does this by maintaining a preset warm temperature and humidity level appropriate to the specific dough.
- dough sheeter
  - planetary mixer
  - spiral mixer
  - horizontal mixer
  - proofers
38. Proper storage is essential for maintaining quality of fresh eggs. Eggs keep for weeks if held at \_\_\_\_\_ °C but lose quality quickly if held at room temperature. In fact, they can lose a full grade in one day at warm bakeshop temperatures.
- 0
  - 5
  - 4
  - 3
  - 2
39. Eggs perform the following function in baking:
- \_\_\_\_\_
  - emulsifying of fats and liquids
  - leavening
  - shortening action
  - moisture
  - flavors
  - nutritional value
  - color
- proofing
  - portioning
  - scaling
  - staling
  - structure
40. \_\_\_\_\_ is used primarily for hard – crusted products, such as French bread. It's also to help keep crust from drying too quickly and thus becoming too thick.
- Jelfix
  - Milk
  - Egg wash
  - Starch paste
  - Water

41. \_\_\_\_\_ is used to give shiny brown crust to soft breads and rolls and to rich dough and Danish. It is made by mixing beaten eggs with water or sometimes with milk. Proportions may vary greatly depending on how strong a wash is desired.
- a) Jelfix
  - b) Milk
  - c) Egg wash
  - d) Starch paste
  - e) Water
42. \_\_\_\_\_ resembles a puff pastry with the addition of yeast. It is based on dough made of milk, flour, a little sugar and yeast. The rolled-in butter gives the dough its flaky texture.
- a) Sourdough
  - b) Puff pastry dough
  - c) Brioche style dough
  - d) Danish pastry dough
  - e) Croissant dough
43. \_\_\_\_\_ is a richer dough containing eggs, although it is not as rich in eggs as regular brioche. This dough is also called flaky brioche.
- a) Sourdough
  - b) Puff pastry dough
  - c) Brioche style dough
  - d) Danish pastry dough
  - e) Croissant dough
44. A dough or batter that contains wild yeasts and bacteria, that has a noticeable acidity as a result of fermentation by these organisms and that is used to leaven other dough.
- a) Sourdough
  - b) Puff pastry dough
  - c) Brioche style dough
  - d) Danish pastry dough
  - e) Croissant dough
45. A type of biscuit or biscuit like bread.
- a) Bagel
  - b) Pullman
  - c) Shortbread
  - d) Strudel
  - e) Scone

46. To sprinkle thoroughly with sugar or another dry powder.
- a) Double-panning
  - b) Deci
  - c) Docking
  - d) Dropped
  - e) Dredge
47. The process by which proteins become firm, usually when heated.
- a) Croissant
  - b) Crystallize
  - c) Caramelization
  - d) Ciabatta
  - e) Coagulation
48. Flat Italian bread similar to thick pizza dough.
- a) Fritter
  - b) Frangipane
  - c) Fondant
  - d) Fougasse
  - e) Focaccia
49. \_\_\_\_\_ also called compressed yeast, is moist and perishable and is preferred by professional bakers. It is usually purchased in 450gm per packet.
- a) Leavening yeast
  - b) Fermentation yeast
  - c) Instant dry yeast
  - d) Active dry yeast
  - e) Fresh yeast
50. \_\_\_\_\_ is also a dry granular form of yeast, but it does not have to be dissolved in water before use. It can be added in its dry form because it absorbs water much more quickly than regular dry yeast. It also produces more gas than regular dry yeast.
- a) Leavening yeast
  - b) Fermentation yeast
  - c) Instant dry yeast
  - d) Active dry yeast
  - e) Fresh yeast

**SECTION B: 50 marks**

Instructions: This section consists of **TEN (10)** short answer questions. Answer **ALL** questions.

**Question 1**

The wheat kernel consists of three main parts. Explain bran, germ and endosperm.

(5 marks)

**Question 2**

Define "Scaling" and state the **TWO (2)** points of the advantage of using baker's percentages and **TWO (2)** methods for adjusting gluten development in mixing methods.

(5 marks)

**Question 3**

List any **FIVE (5)** purpose of sugar or sweetening agents in bread baking procedures.

(5 marks)

**Question 4**

A whole egg consists primarily of a yolk, a white and a shell. In addition, it contains a membrane that lines the shell and forms an air cell at the large end, and two white strands called chalazae that hold the yolk centered. Explain yolk, white and shell

(5 marks)

**Question 5**

Define "lean dough", "rich dough" and "straight dough method"

(5 marks)

**Question 6**

There are 12 basic steps in the production of yeast breads. These steps are generally applied to all yeast products, with variation depending on the particular product. List and describe only any **FIVE(5)** basic steps in the production of yeast goods.

(5 marks)

**Question 7**

Because of the complexity of bread production, many things can go wrong. What is the possible causes might happened when bread are poorly volume on their shape?

(5 marks)

**Question 8**

Describe how to distinguish bread, pastry and cake flour by touch and sight?

(5 marks)

**Question 9**

Explain what is Gluten? List any **THREE (3)** in order for gluten to be develop.

(5 marks)

**Question 10**

The changes to dough as it bakes are basically the same in all baked products, from rolls to breads. There have 7 stage changes in the baking process. List any **FIVE (5)** the stage changes in the baking process.

(5 marks)

~ The End ~