

1. Various options are provided as possible answers to the following questions. Choose the correct answer and mark only the letter (A–D) next to the question number.
- 1.1 The most popular method of poaching eggs, used by restaurants and hotels:  
**A Deep-poaching in acidulated water**  
B Poaching rings  
C Poaching pan  
D In the oven (1)
- 1.2 The volume of a large egg is approximately ... ml.  
A 20  
B 30  
C 40  
**D 50** (1)
- 1.3 When egg whites are required to make a soufflé, they are beaten to the following stage:  
A foamy  
**B soft peak**  
C stiff peak  
D dry (1)
- 1.4 The edible part of eggs cooked in water, milk or cream, just below boiling point, or over boiling water are called ... eggs.  
A boiled  
B steamed  
**C poached**  
D baked (1)
- 1.5 The type of meringue used for pavlova:  
**A hard, dry and crisp**  
B soft, dry and shiny  
C hard, moist and shiny  
D soft, moist and crisp (1)
- 1.6 If this ingredient is added to water used for poaching eggs, it will lead to better coagulation and you will get a better end product.  
A sugar  
B pepper  
C bicarbonate of soda  
**D vinegar** (1)
- 1.7 The volume of 1 dozen large eggs:  
A 0.36 litre  
B 0.48 litre  
C 0.5 litre  
**D 0.6 litre** (1)

- 1.8 Egg whites that have been beaten to the stiff peak stage are used in ...  
 A soup  
 B soufflés  
 C lemon meringue pie  
**D sponge cakes** (1)
- 1.9 If the beaten egg white is shiny and smooth, is very white with small air bubbles and forms firm peaks when the beater is lifted, it has reached the ... stage.  
 A foamy  
 B soft peak  
**C stiff peak**  
 D dry (1)
- 1.10 When eggs are checked for defects by passing them through a strong light:  
**A candling**  
 B breaking egg open  
 C floating egg in water  
 D trapping air (1)
- 1.11 Eggs must be stored ... in their packing trays.  
 A blunt end towards the opening side  
 B blunt end downwards  
**C blunt end upwards**  
 D blunt end towards the closed side (1)
- 1.12 The average standard weight of a large egg.  
 A 45 – 50 g  
 B 51 – 55 g  
**C 56 – 65 g**  
 D 66 – 71 g (1)

2. Eggs are used in food for different main reasons. Fit the main reasons listed in Column B to the dish listed in Column A. Write only the letter A–H in the provided space.

|      | COLUMN A            | ANSWER |   | COLUMN B               |
|------|---------------------|--------|---|------------------------|
| 2.1  | Crème caramel       | F      | A | Binding agent          |
| 2.2  | Consommé            | B      | B | Clarifying agent       |
| 2.3  | Pies                | H      | C | Emulsifying agent      |
| 2.4  | Chocolate mousse    | G      | D | Enriching              |
| 2.5  | Macaroni and cheese | A      | E | Garnishing             |
| 2.6  | Milk pudding        | D      | F | Thickening             |
| 2.7  | Mayonnaise          | C      | G | Aerating or lightening |
| 2.8  | Fish cakes          | A      | H | Glazing                |
| 2.9  | Potato salad        | E      |   |                        |
| 2.10 | Sponge cake         | G      |   |                        |

|      | COLUMN A          | ANSWER |  | COLUMN B |
|------|-------------------|--------|--|----------|
| 2.11 | Hollandaise sauce | C      |  |          |
| 2.12 | Soufflé           | G      |  |          |
| 2.13 | Rissoles          | A      |  |          |
| 2.14 | Vol-au-vent       | H      |  |          |
| 2.15 | Eclairs           | C      |  |          |

(15 × 1) (15)

- 3 Match the function of eggs in Column B that best suits each recipe instruction in Column A. Write only the letter A– E in the provided space.

|     | COLUMN A   | ANSWER |   | COLUMN B          |
|-----|--|--------|---|-------------------|
| 3.1 | VEGETARIAN BAKE<br>Add beaten egg to TPP, chopped onion and flavourings                                  | A      | A | Binding agent     |
| 3.2 | EGG SOUP<br>Gradually add lukewarm water extract to beaten egg and heat in a double boiler               | C      | B | Raising agent     |
| 3.3 | BAKED CHOCOLATE PUDDING<br>Mix melted chocolate and rum with flour mixture and fold in beaten egg whites | B      | C | Thickening agent  |
| 3.4 | ORANGE CAKE<br>Cream butter and sugar, add beaten egg yolks gradually                                    | E      | D | Glazing agent     |
|     |  |        | E | Emulsifying agent |

(4 × 1) (4)

### LONGER QUESTIONS

4. You are the owner of an elite guesthouse and responsible for training the staff that need to prepare breakfast for the guests.

Describe the following egg dishes that feature on your menu:

- 4.1 “Sunny side up” egg  
Customer wants a fried egg, yolk facing up, yolk soft and egg not flipped over.
- 4.2 “Over easy” egg  
Egg is fried and then flipped over. Egg yolk is still soft.
- 4.3 “Turned” egg  
Egg is fried and flipped over. Egg yolk is medium to hard.
- 4.4 Oeufs Clamart  
Poached eggs garnished with peas.
- 4.5 Oeuf Benedict  
Poached egg on English muffin, with ham and hollandaise sauce.

(5 × 2) (10)

5. Provide 4 guidelines to your staff to help them identify that the egg has been ideally cooked for the use in oeuf Benedict.  
 Firm white  
 Egg yolk covered by white layer  
 Soft and creamy, but set  
 A slight acidic taste (4)
6. Explain the differences between: “Egg en cocotte” and “Egg sur le plat”.  
 Egg en cocotte = egg baked in a ramekin  
 Egg sur le plat = egg baked on top of vegetables; firmer than egg en cocotte  
 (2 × 2) (4)
7. Give another name for each of the following: (1)
- 7.1 A plain omelette (1)  
 French omelette
- 7.2 A flat omelette (1)  
 Frittata
- 7.3 A puffy omelette (1)  
 Soufflé omelette
8. Describe a perfect plain omelette. (2)  
 Golden brown on outside  
 Soft and creamy on inside
9. Explain the difference between a ‘puffy omelette’ and a ‘plain omelette’:  
 Puffy omelette: the eggs are separated and the egg white foam is beaten to soft peak stage and folded into the egg yolk foam.  
 Puffy omelette is always folded double.  
 Plain omelette: eggs are beaten to a whole egg foam. Golden brown on the outside and soft and creamy on the inside.  
 (2 × 2) (4)
10. Distinguish between the terms *coagulation* and *syneresis*. (6)  
 Coagulation is the gradual process of forming new bindings, caused by heating, associated with food being cooked and edible.  
 Syneresis is the effect caused by overheating proteins. The proteins harden, become tough, unpalatable and shrink. Water is forced out of the formed network.
11. Describe the appearance of a raw, fresh, uncooked egg white and yolk. (5)  
 Prominent thick white  
 Little thin white  
 Compact egg yolk, situated in the middle of the egg white  
 Egg yolk is firm, round and a good yellow colour  
 Clear egg white

12. Name SIX functions of eggs in the preparation of food and give an example of an applicable dish for each function.
- Trapping air: meringue/soufflé/mousse  
 Thickening: crème caramel/milk tart filling/baked custards  
 Emulsifying: mayonnaise/hollandaise sauce  
 Binding: rissoles/croquettes, meat or fish cakes  
 Coating: coat fried food to form protective layer on outside of food  
 Glazing: brush over pastries to produce a golden brown shiny glaze  
 Enriching: added to sauces or milk puddings, to include extra proteins  
 Garnishing: hard-boiled eggs used on salads  
 Clarifying: egg white and shells are used to clarify liquids like consommé (6)

13. Identify the functions of eggs (as an ingredient) in each of the following dishes:

13.1 Crème caramel  
 Thickening

13.2 Cold chocolate soufflé  
 Trapping air

13.3 Bobotie  
 Binding

13.4 Fried fish  
 Coating (4)

14. You have to serve pavlova filled with summer fruit as dessert for a wedding.

The ingredients are as follows:

4 egg whites  
 2.5 ml white vinegar  
 250 ml castor sugar  
 15 ml boiling water  
 15 ml cornflour  
 Pinch of salt

14.1 Describe the term 'pavlova'.  
 Meringue nest with a filling (2)

14.2 Convert the amount of egg white to ml.  
 $4 \times 30 = 120 \text{ ml}$  (1)

14.3 State 8 quality points that will indicate that you are working with fresh eggs.

- Clean shell, undamaged and somewhat coarse
- A pleasant, fresh smell (no smell of sulphide)
- Egg yolk must be thick and clear
- Large proportion thick to thin white
- Egg yolk positioned in the middle of the egg white
- Egg yolk must be firm, round, good yellow colour
- Airbag small in size
- A fresh egg will sink to the bottom of a salt solution (8)

- 14.4 Why would you suggest that the eggs are at room temperature?  
Eggs at room temperature beat to a bigger volume (2)
- 14.5 Name and describe the foam stage to which the egg white needs to be beaten for the preparation of pavlovas. (1)
- Siff peak stage
  - Many even smaller air bubbles
  - Very white
  - Glossy, smooth appearance
  - not frothy anymore
  - forms stiff peaks that do not flop over
  - If the bowl is turned upside down, the egg white will remain in the bowl
  - When left to stand, liquid separates out (6)
- 14.6 There are various factors which influence foam quality.  
Recommend the type of utensils which should be used when beating egg white foam.  
The finer the blades, the finer the air bubbles  
Bowls with small round bottoms and angled, sloping sides are the best because the beater picks up the egg mixture (4)
- The bowls must be big enough because the whites increase a lot in volume  
Wire beaters in still-standing bowls give best results; when beater stands still and bowl rotates, the foam around the beater tends to harden
- The bowl and the beaters must be free from fat. Rather use glass or porcelain than plastic, since plastic tends to have a strong affinity for fat
- 14.7 Describe how to bake and finish off the pavlova for service.  
Bake the pavlova at 100 – 120 °C for 3 – 6 hours. Meringue nest is then filled with cream and fresh fruit. (4)
15. Name 3 possible uses for egg yolk.  
Making mayonnaise  
Making hollandaise sauce  
Making mustard  
Making lemon curd (3)
16. What effect will the following ingredients have on the foam formation?
- 16.1 Vinegar  
Delays the formation of a foam
- 16.2 Salt  
Delays the formation of a foam  
Increases the stability of the foam but decreases the volume
- 16.3 Castor sugar  
Increases the beating time and volume decreases slightly  
Very difficult to over-beat the mixture once sugar is added (3 × 2) (6)

17. How does the baking of a soft meringue differ from that of a hard meringue?

**Soft meringue**

Soft meringue

Bake for 4 min at 200 °C then 6–8 minutes at 180 °C

**Hard meringue**

Hard meringue

3–6 hours at 100–120 °C

(2 × 2) (4)

18. Name 3 methods that are used for testing the freshness of eggs. (3)

Candling

Breaking the egg open

Water placement test

19. You are preparing boiled eggs as part of the menu for a picnic for 50 people. Eggs can be boiled to THREE different stages. Name and explain the texture of each stage and state a use of each.

| Stage        | Texture                                     | Use   |
|--------------|---|---|
| *Soft boiled | Soft white and yellow<br>White slightly set | Serve in shell for breakfast                            |
| *Medium      | Firm white and soft yellow                  | Garnishing rice salad or eggs florentine                |
| *Hard        | Firm white and yolk                         | Pressed through sieve for garnishing sauces or fillings |

(3 × 3) (9)

20. Name FOUR preventive measures you can apply to ensure that there is no 'blue ring' in eggs.

After boiling, crack shell and place in cold water

Use fresh eggs, 2 days old

Don't over-boil

Add a little vinegar in the water

(4)

21. Make a suggestion to ensure that the yolk remains in the middle of boiled eggs. Stir eggs in water during boiling to prevent the yolk from setting to one side of the white (2)

22. Give an alternative name for "stuffed eggs".

Devilled eggs

(1)

23. The correct storage of eggs is important to maintain quality. Answer the following questions:

- 23.1 Eggs should not be washed before storing. Why not?

Eggs have a natural protective layer which will be removed if washed (1)

- 23.2 Where should you store eggs?

In a dry, cool place; the refrigerator (1)

- 23.3 Why is it not wise to store eggs near strong-smelling food?

The shell is porous and the egg will absorb strong odours (2)

- 23.4 Is it possible to freeze eggs? Explain. (3)  
Eggs cannot be frozen whole. The separated whites and yolks can be frozen separately
24. Sarah, the assistant chef at a 4-star guesthouse, cooked an egg custard sauce in a double boiler. The custard came out perfectly, but she left the top part of the double boiler on the bottom part. When she wanted to serve the custard it was watery with solid pieces in it.
- 24.1 Explain in detail what happened to the custard. (4)  
The proteins coagulated  
Due to further heating, the protein shrank rapidly, causing any liquid the egg contain to be squeezed out – syneresis  
The shrinkage caused the mixture to separate and the curdle is seen as the solid pieces
- 24.2 What do we call this occurrence? (1)  
Syneresis
- 24.3 What action can be taken so that this sauce still can still be used? (2)  
If mildly curdled, remove immediately from heat  
Whisk rapidly
25. When cooking an egg custard sauce, when will you know that the custard is ready? (2)  
When it covers the back of a dessert spoon  
When it tastes cooked
26. You have to prepare a 'baked custard' for a function. Answer the following questions on baked custards:
- 26.1 What is the standard proportion of egg to milk? (2)  
1½ eggs to 250 ml milk
- 26.2 Briefly describe the steps in the preparation of a baked egg custard. (4)  
1) Heat the milk  
2) Pour onto the lightly beaten eggs, while stirring  
3) Pour custard into greased mould, place in trays of water and bake in moderate oven until set  
4) Test with a skewer; if skewer comes out clean, custard is cooked
- 26.3 What are the ideal characteristics of baked custard? (3)  
Smooth, homogenous gel  
No signs of water seeping out  
No raw egg taste
27. Explain the difference between a crème brûlée and a crème caramel. (2 × 2) (4)  
Crème brûlée: baked custard has a caramelised sugar layer on top and is served in container (normally ramekin) custard was baked in.  
Crème caramel: sugar syrup is made and placed into dariole prior to adding custard and baking. Crème caramel is turned out onto a service plate



28. Name TWO savoury dishes where an egg custard is used in an oven-baked dish. (2)  
Bobotie, quiche
29. Ann prepared the following three dishes. She needed three different egg foams for the dishes. Name the type of foam used in each dish.
- 29.1 Meringue  
Egg white foam (1)
- 29.2 Swiss roll  
Whole egg foam (1)
- 29.3 Zabaglione  
Egg yolk foam (1)