

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 Which of the following fats/oils are classified as vegetable fats?
A cream and butter
B margarine and olive oil
C yoghurt and dripping
D suet and lard (1)
- 1.2 The process where oil (liquid) changes to fat (solid):
A Emulsification
B Oxidation
C Saturation
D Hydrogenation (1)
- 1.3 Another name for fat obtained from roasting meat.
A Dripping
B Suet
C Lard
D Butter (1)
- 1.4 A thin membrane, veined with fat, that encloses an animal's stomach.
Used in making "skilpadjies":
A suet
B caul
C lard
D dripping (1)
- 1.5 The off flavour and taste when fat is exposed to air:
A hydrogenation
B maturation
C barding
D rancidity (1)
2. Indicate whether the following statements are TRUE or FALSE:
- 2.1 Hydrogenation is the process where oil changes to fat.
True.
- 2.2 Lard is a type of vegetable fat.
False.
- 2.3 Spreads are emulsions of water and margarine.
True.
- 2.4 Spread shortening can be used in the preparation of dough mixtures.
False.
- 2.5 The correct ratio of oil to foods when frying should be: 1 part of food to 6 parts of oil.
True. (5 × 1) (5)

3. Butter is one of the popular fats used in cooking.
- 3.1 How is butter obtained? (1)
Butter is obtained by churning cream or sour cream.
- 3.2 What type of emulsion is butter? (water-in-oil/oil-in-water) (1)
Water-in-oil-emulsion.
- 3.3 Why is salt added to butter? (1)
To act as a preserving agent.
- 3.4 Describe clarified butter. (2)
Clarified butter is obtained by heating butter until the milk solids separate out and then skimmed off.
- 3.5 Give TWO reasons why butter is considered the best shortening to use in baking. (2)
Butter is considered the best shortening to use in baking because it has superior texture and flavour.
4. Describe the following types of fat:
- 4.1 Lard (3)
Is a solid fat melted out of firm pork fat by heating.
- 4.2 Suet (2)
It is the solid fat deposits from around the kidneys of various animals.
- 4.3 Spread (2)
Is an emulsion of water and margarine. It is unsuitable for baking, frying or general purpose cooking.
5. State ONE use for each of the following fats in cooking:
- 5.1 Butter
Used for most kitchen purposes where expense does not have to be considered. (any use acceptable)
- 5.2 Lard
Used for shallow- and occasionally deep frying and for making short crust and hot water pastry.
- 5.3 Suet
Generally used for suet puddings and mincemeat. This may also be used for barding liver or other meat cuts.
- 5.4 Margarine
Used instead of butter, but not as tasty as butter.
- (4 × 1) (4)

6. Name 4 ways in which rancidity can be decreased.
 Exclude exposure to air, don't leave fats and oils uncovered.
 Use fat with few impurities.
 Add antioxidants to food.
 Pack food in foil-lined paper or packets to prevent oxidation. (4)

7. Distinguish between a permanent emulsion and a temporary emulsion.

Permanent emulsion

An emulsifier (egg yolk) may be added to the liquids to make them mix more easily and also to make the emulsion more stable, e.g. mayonnaise.

Temporary emulsion

When two liquids usually not able to combine, e.g. oil and water, are put together. When beaten, the liquids will mix temporarily, e.g. vinaigrette.

(2 × 2) (4)

8. Tabulate the main differences between butter and margarine

Butter

Contains natural butterfat, water and emulsifiers

More flavoursome than margarine

More expensive

Contains saturated fats

Suitable for finishing sauces and dishes

Margarine

The fat and water need to be pressed together and emulsifiers must be added to form an emulsion

Less flavoursome than butter

Less expensive

Unsaturated fats – seen as healthier

Not as suitable for finishing sauces and dishes

(2 × 4) (8)

9. Give your assistant chef rules for deep frying:
 Be careful not to overheat oil; fry at the correct temperature.
 Avoid excessive heating and cooling – use only when necessary.
 Season food away from oil to prevent salt from falling into oil.
 Drain oil regularly to get rid of food particles in oil.
 Never overload the oil with water-rich food.
 Never over fill the pot with oil.
 Replace oil when it starts to fume in normal circumstances.
 Prepare foods correctly. Even-sized portions will ensure even browning.
 Ensure that the crumbs on crumbed foods are firmly attached to avoid too many crumbs ending up in the oil, which will burn and cause a smoking effect. (6)

10. Why should you keep to the following rules when deep frying?

10.1 Do not overheat the oil. (2)
 Too high a temperature will lead to rapid browning of food without it being cooked properly.

10.2 Do not put watery/frozen food in hot oil. (2)
 The food will spatter and may lead to injuries. Frozen food might not be cooked through.

- 10.3 Strain oil regularly. (2)
Prolongs the shelf life of the oil. Prevents leftover particles from starting to burn.
Skim the surface regularly to remove left-behind particles that can brown and cause smoke.
- 10.4 Never leave oil on heat with no one watching. (2)
The oil may catch fire or boil over; to prevent accidents from happening.
- 10.5 Do not season food prior to frying. (2)
Salt increases the breaking down of oil.
- 10.6 Always fry at the correct temperature. (2)
Too low a temperature will lead to the food absorbing lots of oil, higher costs, oily foods and prolonged frying time.

Too high a temperature will lead to burnt food or food not fully cooked on the inside
11. What may the reason be for manufacturers to add antioxidants to food? (1)
To limit the chance of rancidity
12. Why would you never use margarine, instead of butter, when preparing choux pastry? (3)
The accuracy of measured ingredients is very important when preparing choux.
Margarine contains a high percentage of water, which will when used alter the ratio of fat to water in the recipe.