3 Food focus

A television company is planning a food programme entitled ‘Re-use’. They aim to encourage viewers to reduce their food waste by providing innovative ideas for re-using leftover foods.

A sweet or savoury product made from leftover food items is required

The product must:
- be nutritionally sound;
- be able to be made at home with a range of additional ingredients.

Follow the instructions given on the four A3 answer sheets to complete the question.

2 Engineering focus

Cycling is a very popular pastime. Cyclists need to keep their bicycles well maintained at all times.

A service stand for bicycles is required.

The product must:
- hold the bicycle securely whilst being worked on;
- occupy minimum space when not in use.

Follow the instructions given on the four A3 answer sheets to complete the question.

4 Graphic Products

A Local Authority wishes to provide printed leaflets about career options for school leavers. The leaflets will be displayed in a school’s reception area.

A product to display and make available the leaflets is required.

The product must:
- be interchangeable to hold a range of different sized printed materials;
- be supplied to schools in flat pack form.

Follow the instructions given on the four A3 answer sheets to complete the question.
5 Manufacturing focus

PC and video games are very popular with all age groups. When games and related equipment are left lying around, it is easy for them to become lost or damaged.

A storage unit for video games and equipment is required.

The product must:
- be able to be produced as a batch of 10000;
- be available as a ‘flat pack’.

Follow the instructions given on the four A3 answer sheets to complete the question.

6 Resistant materials focus

A Primary School has a large after school club for children. The children enjoy playing outside.

A toy vehicle that children can sit on is required.

The product must:
- be pushed or pedalled by the child;
- be easily steered.

Follow the instructions given on the four A3 answer sheets to complete the question.

7 Systems and Control focus

Regular brushing of teeth using a toothbrush and toothpaste is essential for healthy teeth and gums.

A family bathroom product is required to dispense a measured amount of toothpaste onto a toothbrush.

The product must:
- be able to dispense different amounts of toothpaste for adults and for children;
- be able to be produced as a batch of 10000.

Follow the instructions given on the four A3 answer sheets to complete the question.

8 Textiles focus

A Nursery School for children aged 2 – 4 years is trying to encourage imaginative play.

A ‘play tent’ that can be used outside or inside is required.

The product must:
- be suitable for boys and girls;
- be easy to erect and pack away.

Follow the instructions given on the four A3 answer sheets to complete the question.
Circle the question number you are answering

1 2 3 4 5 6 7 8

(a) Give three justified specification points.

1

2

3

Instruction to candidates

ALLOCATION OF MARKS FOR PAPER F524/02

(a) specification points [6]
(b) range of developed ideas [33]
(c) final developed outcome [9]
(d) communication [6]

[Total: 54]

All dimensions are in millimetres

Where necessary, calculators may be used

For Examiners Use Only

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(b) Ideas with development

- A range of ideas [15]
- Consider manufacturing/construction detail [12]
- Evaluate ideas with reference to specification and volume production [6]

[Total: 33]
DO NOT USE THIS SIDE
(c) Final Developed Outcome

Sketch a final developed outcome. Justify key design features. [9]