

<p>Answer ONE question only.</p> <p>1 BUILT ENVIRONMENT AND CONSTRUCTION FOCUS</p> <p>The owner of a residential complex has identified a need for a cycle storage unit.</p> <p>A cycle storage unit is required.</p> <p>The unit must:</p> <p>be a permanent structure</p> <p>hold 20 cycles securely.</p> <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>3 FOOD FOCUS</p> <p>An increasing number of people choose not to eat meat or dairy foods.</p> <p>A product that would provide alternative sources of protein is required.</p> <p>The product must:</p> <p>provide a good source of protein to the daily diet without containing meat or dairy</p> <p>be suitable for college/university students.</p> <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
<p>2 ENGINEERING FOCUS</p> <p>Digital projectors are widely used in schools and colleges.</p> <p>A product to hold a digital projector is required.</p> <p>The product must:</p> <p>be easily adjustable to suit different rooms</p> <p>be suitable for use with all types and sizes of projectors.</p> <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>	<p>4 GRAPHIC PRODUCTS FOCUS</p> <p>Learning through play is an integral part of primary school education.</p> <p>A cardboard product that would encourage creative play is required.</p> <p>The product must:</p> <p>be lightweight and able to be flat-packed</p> <p>be suitable for use by children aged 5 to 7 years old.</p> <p>Follow the instructions given on the four A3 answer sheets to complete the question.</p>
<p>F524/02 PRODUCT DESIGN</p>	

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5 MANUFACTURING FOCUS

It is often difficult for students to find space in their accommodation to dry wet items of clothing.

A product that can be used to dry wet items of clothing is required.

The product must:

be able to be stored easily when not in use

be suitable for production in a batch of 1000.

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

7 SYSTEMS AND CONTROL FOCUS

Walking a dog along unlit roads on a dark winter night can be dangerous for both the owner and the dog.

A product to improve the safety of dogs and their owners is required.

The product must:

be fully adjustable

be easily attached and removed.

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

6 RESISTANT MATERIALS FOCUS

There is increasing concern over the general health and fitness of children.

A product that will enable children to exercise safely is required.

The product must:

be able to be used indoors and outdoors

be suitable for use by children aged 7 to 11 years old.

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

8 TEXTILES FOCUS

Moving a child from a cot into a bed can sometimes be a difficult transition.

A product that will encourage children to move into their own bed is required.

The product must:

be suitable for use with any bed

be suitable for children aged 2 to 5 years old.

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

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Circle the question number you are answering

A3 SHEET 1 OF 4

1 2 3 4 5 6 7 8

(a) Give THREE justified specification points.

1 _____

Instructions 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

2 _____

3 _____

[6]

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S	R	D	E	F	C	Total

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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]

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(c) Final developed outcome

Sketch a final developed outcome. Justify key design features.

[9]

END OF QUESTION PAPER

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