

**Question 1.**

Please refer to the “**Events at The O<sub>2</sub>**” leaflet.

(a) Identify and describe two Design Elements used on the “**Events at The O<sub>2</sub>**” leaflet.

i) Design Element 1

\_\_\_\_\_

Description of Design Element 1

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ii) Design Element 2

\_\_\_\_\_

Description of Design Element 2

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**(4)**

(b) Identify and describe two Design Principles used on the “Events at The O<sub>2</sub>” leaflet.

i) Design Principle 1

\_\_\_\_\_

Description of Design Principle 1

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ii) Design Principle 2

\_\_\_\_\_

Description of Design Principle 2

\_\_\_\_\_

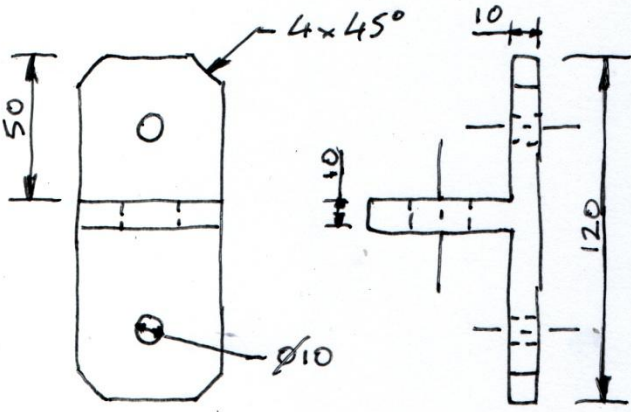
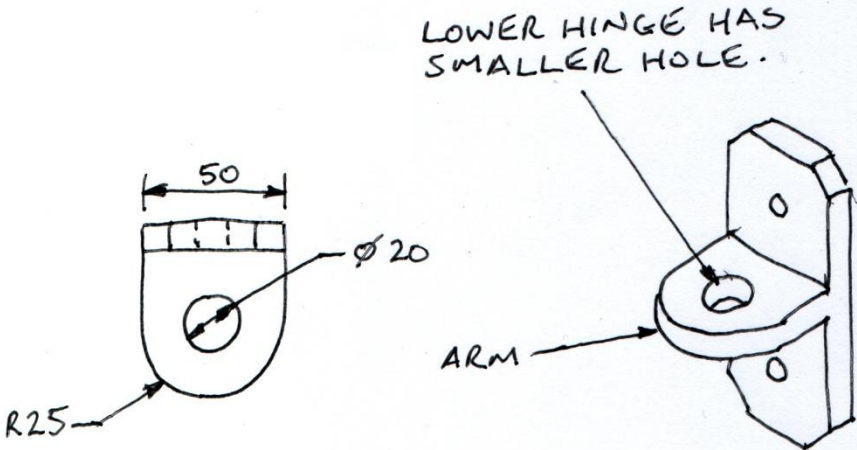
\_\_\_\_\_

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**(4)**

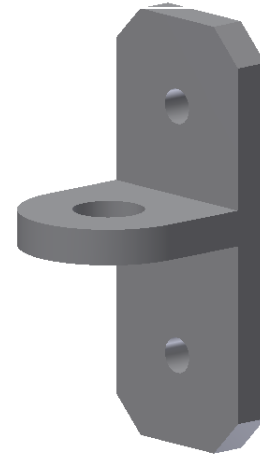
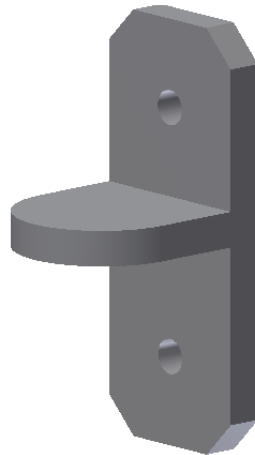
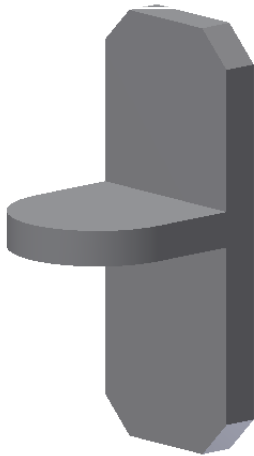
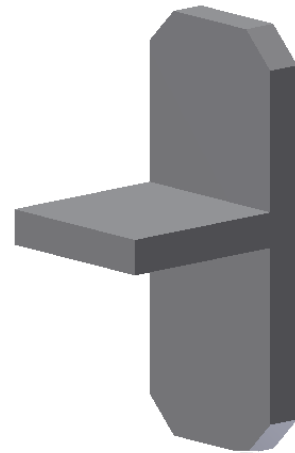
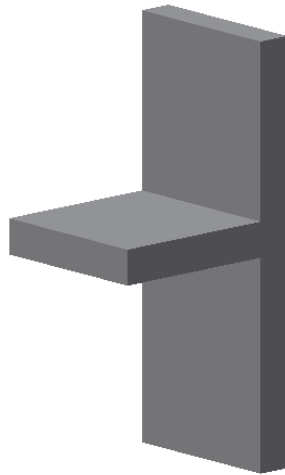
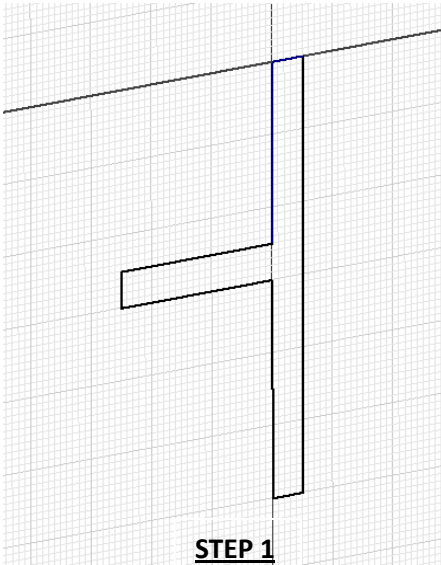
Question 2.

A hinge has been designed to attach a wooden gate to a wooden post. A 3D model was produced from **Preliminary** sketches (shown below) created at the design stage. The 3D model was then used to produce **Production** drawings for the manufacturing of the hinge. These 3D drawings were then used to create the **Promotional** graphics for the client to use for marketing purposes.



ORTHOGRAPHIC VIEW OF UPPER PART OF HINGE

Below are the steps taken to produce the *upper* part of the hinge using a commercial 3D modelling software pac



- a) Describe how you would use a 3D modelling package to get from **step 1** to **step 2** with reference to the dimensions in the preliminary sketches. You may use sketches in the space provided to support your answer. **(3)**

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- b) i) Name the editing command used to get from **step 2** to **step 3**.  
\_\_\_\_\_
- ii) Name the editing command used to get from **step 3** to **step 4**.  
\_\_\_\_\_ (2)

The **3p's (Preliminary, Production and Promotional)** that are highlighted at the start of the question involve the use of various graphics.

- c) Give an example of the types of graphics you are likely to see at each stage.  

Preliminary

Production \_\_\_\_\_

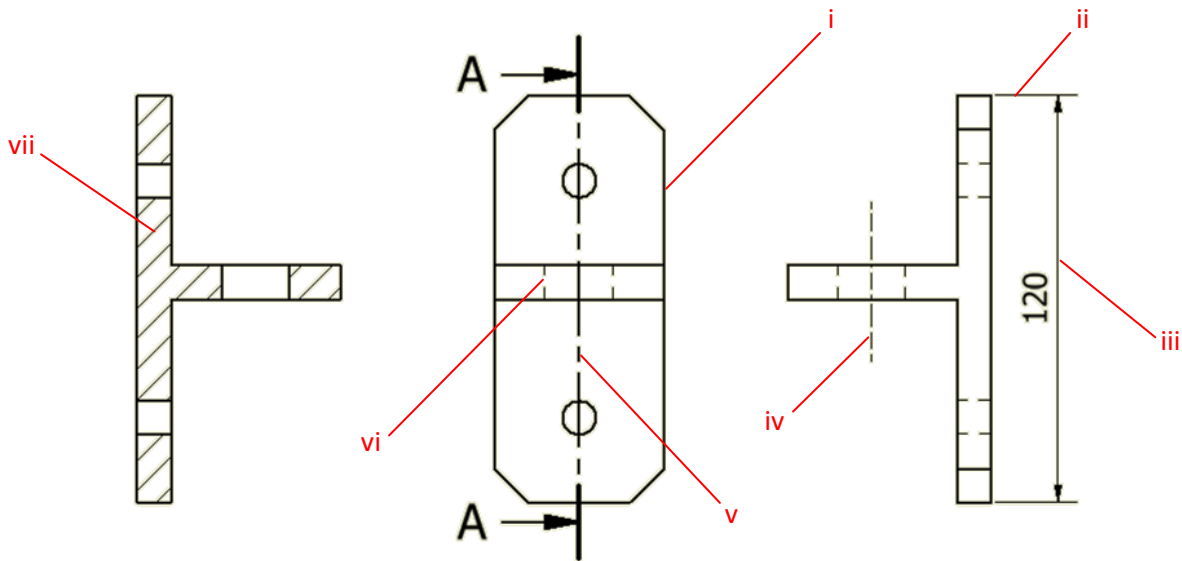
Promotional \_\_\_\_\_ (3)

The **lower** part of the hinge is identical in size and shape but has a smaller hole in the arm of the hinge.

- d) Give a reason as to why there needs to be a smaller hole in the **lower** part of the hinge.  
\_\_\_\_\_  
\_\_\_\_\_ (1)

- e) With the aid of dimensioned Orthographic sketches produce a design for the pin showing all functional dimensions. Use the space below for your sketches. You must show three Orthographic views (elevation, end elevation and plan) in your sketches. (3)

The Orthographic **Production** drawing of the **upper** part of the hinge is (shown below) has been dimensioned in accordance with BSI (British Standards Institute) standards.



f) In the spaces provided identify the line types shown on the drawing; the first one has been done for you.

- i) \_\_\_\_\_ OUTLINE \_\_\_\_\_
- ii) \_\_\_\_\_
- iii) \_\_\_\_\_
- iv) \_\_\_\_\_
- v) \_\_\_\_\_
- vi) \_\_\_\_\_
- vii) \_\_\_\_\_

**(6)**

**Question 3.**

Architects use BSI symbols to represent features on their drawings.

(a) State what each of the architectural symbols shown at **i), ii), iii), iv), v), vi), vii)** represent.

i) \_\_\_\_\_

ii) \_\_\_\_\_

iii) \_\_\_\_\_

iv) \_\_\_\_\_

v) \_\_\_\_\_

vi) \_\_\_\_\_

vii) \_\_\_\_\_

**(7)**



**i)**



**ii)**



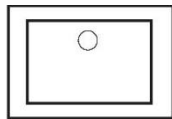
**iii)**



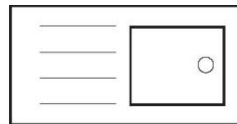
**iv)**



**v)**

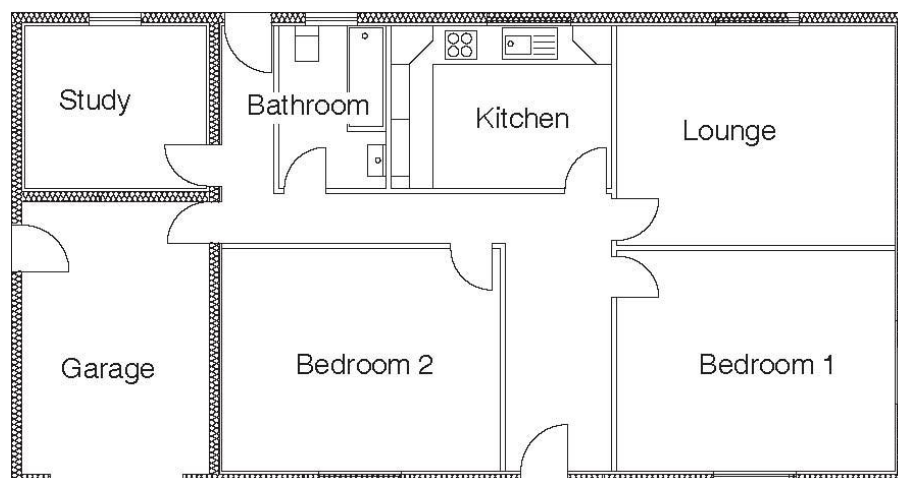


**vi)**



**vii)**

Architects also use several types of plans like the one shown below.



(b) i) State the name given to this type of plan.

\_\_\_\_\_

ii) State an appropriate scale for this type of plan.

\_\_\_\_\_

iii) State the names of two other types of plan commonly used by architects

Plan 1 \_\_\_\_\_

Plan 2 \_\_\_\_\_

**(4)**



**Question 4.**

In each of the following problems a circle indicates the position of the missing Orthographic view. For each problem enter the correct view number from the possible solutions numbered 1-10. The first one has been done for you.

					<b>(5)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	

**Question 5.**

A major high street confectioner is launching a new range of chocolates and is giving away free samples as a promotional exercise. These small samples will be contained in the packaging shown below. Each drawer will have one chocolate in it. The confectioner wishes to have each chocolate sample presented in the best possible way to ensure maximum impact for future sales.



Drawers



Chocolates

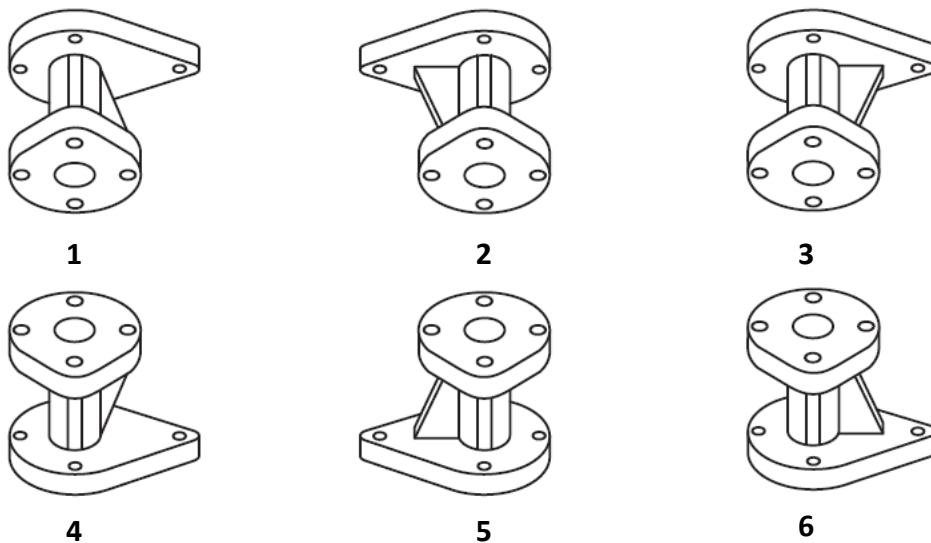
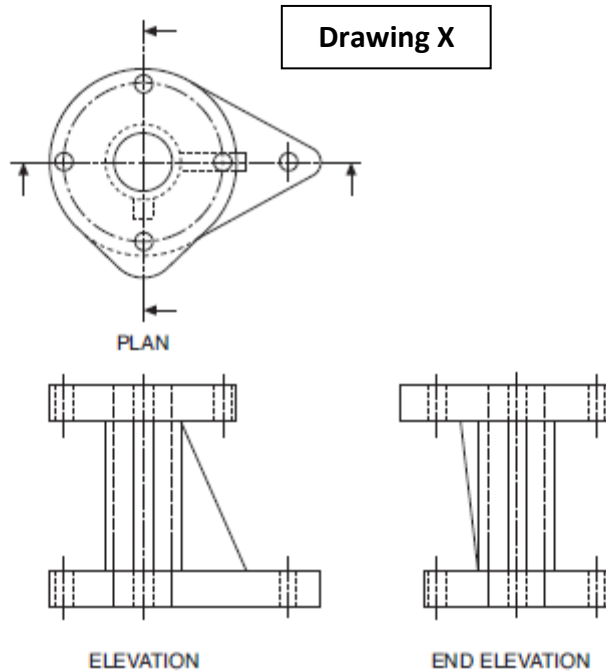
The size of the drawers when in the closed position is 50mm x 50mm x 50mm.

Each Pack will contain two chocolates with each drawer containing one sample chocolate.

Your task is to design a surface development package that will contain the drawers (shown above). You must remember that this is a promotional exercise therefore how the product looks is very important. You may use the space below for sketching and annotating your surface development idea. **(3+2)**

**Question 6.**

The Elevation, Plan and End Elevation of a coupling are shown in **Drawing X** below



(a)

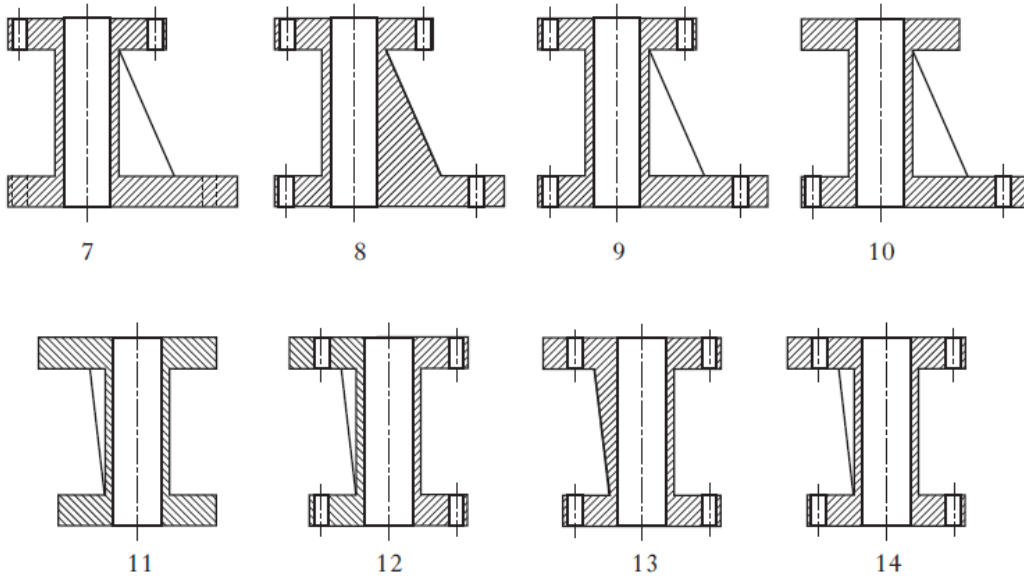
State which two Pictorial Drawings 1 – 6 (shown above) represent the coupling shown in **Drawing X**.

- i) \_\_\_\_\_ ii) \_\_\_\_\_ (2)

(b) State the names of two types of Pictorial drawings that could be used to draw the coupling shown above.

- i) \_\_\_\_\_ ii) \_\_\_\_\_ (2)

Eight sectional views 7 -14 are shown below



(c) State which two sectional views represent the coupling shown in **Drawing X**

- i) \_\_\_\_\_ ii) \_\_\_\_\_

(2)

**Question 7.**

**Product Title**

*AM Health Drinks*

**Slogan**

*Giving Yourself a Better AM*

**Background Box**



**Image**



**Product**



**Flashbar**



**Final DTP Poster**



The desktop publishing (DTP) poster opposite is used to promote the brand AM Health Drinks. The text and images used to create the layout are shown in their original form. The original set of images and text have been edited using a desktop publishing (DTP) package before being placed in the final poster.

(a) State the name of the desktop publishing (DTP) feature applied to each original item to prepare them for the final poster. State one DTP edit for each and ensure you don't use the same answer twice.

i) Background box \_\_\_\_\_

ii) Product \_\_\_\_\_

iii) Photograph of people \_\_\_\_\_

iv) Product title \_\_\_\_\_

v) Slogan \_\_\_\_\_

**(5)**

(b) Why do you think the designer has used the same colour in the flashbar, product and slogan.

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**(1)**

**Question 8.**

State the desktop publishing terms for each of the numbered elements. X has been done for you.

**New Course Opening**

We are delighted that the new course is almost ready and we will have the opening ceremony and the first competition on Saturday 21st June.

All members will receive their invite before the 1st of June and tee off times will be posted on the notice board.

The course is a full 18 holes with a total length of 6162 m. It has two par 5 holes, thirteen par 4 holes and three par 3 holes.

There will be competitions held on the first and third Saturday of each month on the course and all are welcome to participate.

The layout of the new course is inspiring with the burn

being used to create a natural barrier between holes. The full course layout is posted to the right of the members changing rooms. Hole 1 and hole 18 are shown below.

**Holes 1 and 18 of new course**

**Fees**  
Green fees will be reviewed annually for members and quarterly for non members. Two months notice will be given of any changes being made.  
We hope you enjoy the new course.

i) REVERSE

ii) \_\_\_\_\_

iii) \_\_\_\_\_

iv) \_\_\_\_\_

v) \_\_\_\_\_

vi) \_\_\_\_\_

vii) \_\_\_\_\_