

Commentary on candidate evidence

Assessors awarded the candidate evidence the following marks for each question of the question paper.

Candidate 1

The candidate was awarded a total of **63 out of 90 marks**.

Question 1(a)

The candidate was awarded **1 out of 2 marks** because they have described the white text contrasting with the black background. Their second response incorrectly describes red contrasting with white.

Question 1(b)

The candidate was awarded **0 out of 2 marks** because they have not described rhythm in their responses; 'all headings are white' describes unity rather than rhythm.

Question 1(c)

The candidate was awarded **0 out of 2 marks** because in their first response they are not clear about which film they are referencing, and their second response (in the additional space for answers at the back of the booklet) is too vague.

Question 1(d)

The candidate was awarded **0 out of 2 marks** because neither of their responses correctly reference the use of depth.

Question 1(e)

The candidate was awarded **1 out of 2 marks** because their first response correctly references all the images in the 'coming soon' section as being centrally aligned. Their second response refers to text justification rather than alignment.

Question 1(f)

The candidate was awarded **0 out of 1 mark** because they have named a cause, but no effect. They have described emphasis but have not given a reason as to why it is used.

Question 1(g)(i)

The candidate was awarded **2 out of 2 marks** because they have described that a vector can be resized without losing quality, and that they have a smaller file size.

Question 1(g)(ii)

The candidate was awarded **2 out of 2 marks** because they have correctly described remote access and sharing between coworkers as being advantageous.

Question 1(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named 'full crop' and 'square crop'.

Question 1(h)(ii)

The candidate was awarded **0 out of 2 marks** because their answers are too vague in relation to the effects that the cropping creates.

Question 1(i)

The candidate was awarded **0 out of 1 mark** because they have only given a cause of using placeholder text, but no effect.

Question 2(a)

The candidate was awarded **1 out of 2 marks** because they have correctly described that bottom-up modelling involves creating components separately.

Question 2(b)

The candidate was awarded **0 out of 1 mark** because they have not provided an explanation; they have not referenced enlarging the view.

Question 2(c)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the stepped section.

Question 2(c)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the revolved section.

Question 2(d)(i)

The candidate was awarded **5 out of 5 marks** because they have correctly:

- generated profile 1 (**1 mark**)
- described the workplane offset by 50mm (**1 mark**)
- generated profile 2 and used the 45mm dimension to reference the location of profile 2 in relation to profile 1 (**1 mark**)
- used the loft command (**1 mark**)
- used shell with the correct wall thickness and removed the correct surface (**1 mark**)

Question 2(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly stated the name of the radial array.

Question 2(e)

The candidate was awarded **3 out of 3 marks** because they have correctly:

- generated the dia. 6 circle profile in the correct location (**1 mark**)
- used the helix command (**1 mark**)
- stated the pitch and number of revolutions (**1 mark**)

Question 2(f)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly stated a STEP file.

Question 2(f)(ii)

The candidate was awarded **1 out of 1 mark** because they have given a correct explanation with a clear cause; 'Step files are the universal cad file' and effect; 'accepted by most programs'.

Question 2(g)

The candidate was awarded **1 out of 1 mark** because they have correctly reordered the modelling tree with the shell before either of the extrude subtracts.

Question 3(a)

The candidate was awarded **4 out of 4 marks** because they have correctly:

- hatched the clip (part 1) **(1 mark)**
- hatched the connector (part 2) **(1 mark)**
- hatched the antenna (part 3) **(1 mark)**
- omitted the hatching of the web on the clip (part 1) **(1 mark)**

Question 3(b)

The candidate was awarded **1 out of 3 marks** because they have correctly identified that the diameter symbol should be a radius symbol.

Question 4(a)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly described components should not overlap; 'Clear white space between parts' and that the components are in the order of assembly; 'moved in direction of realistic assembly'.

Question 4(a)(ii)

The candidate was awarded **2 out of 2 marks** because they have correctly described that it shows how parts are assembled as well as component quantities.

Question 4(b)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 **(1 mark)**

- not clearly shown that profile 1 is perpendicular to the path **(0 marks)**
- used the extrude along a path command **(1 mark)**
- created two 12 by 5 by 8mm extrusions **(1 mark)** with dia. 3 holes through them **(1 mark)**

Question 4(c)

The candidate was awarded **2 out of 4 marks** because:

- they have only used mate on the surfaces of the arm and handle **(0 marks)**
- they have not used the orientate constraint at the correct angle **(0 marks)**
- they have then used two of the three constraints required to assemble the arm to the rake **(2 marks)**

Question 4(d)(i)

The candidate was awarded **0 out of 1 mark** because they have not correctly calculated the distance from the centre of arc A to the centre of arc B as 7.5mm.

Question 4(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc B to the centre of arc C as 2.5mm.

Question 4(e)

The candidate was awarded **3 out of 5 marks** because they have correctly identified surfaces C, D and E.

Question 4(f)

The candidate was awarded **2 out of 2 marks** because they have described the application of materials and lighting.

Question 4(g)

The candidate was awarded **1 out of 2 marks** because they have described that the sited environment puts the object in a realistic environment. Their second response is not relevant to this question.

Question 5(a)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the registration mark.

Question 5(a)(ii)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the header.

Question 5(a)(iii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the drop cap.

Question 5(a)(iv)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the column rule.

Question 5(a)(v)

The candidate was awarded **1 out of 1 mark** because they have correctly named the crop marks.

Question 5(b)

The candidate was awarded **2 out of 2 marks** because they have correctly named both full and centre justification.

Question 5(c)

The candidate was awarded **1 out of 1 mark** because they have correctly described that bleed adds visual interest.

Question 5(d)

The candidate was awarded **2 out of 2 marks** because they have correctly described that layers can be turned on and off, and that individual layers can be edited separately.

Question 5(e)

The candidate was awarded **2 out of 2 marks** because they have correctly described no purchasing costs and that the company can capture images which suit their needs.

Question 5(f)

The candidate was awarded **1 out of 2 marks** because their second response gives a valid explanation in that 'videos can be placed' – cause, and 'for people to watch' – effect.

Question 5(g)

The candidate was awarded **3 out of 4 marks** because they have correctly identified three pieces of information communicated in the site plan. 'Where the entrance(s) may be located' was not specific enough.

Question 5(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named Symbol A as a radiator and Symbol B as a WC.

Question 5(h)(ii)

The candidate was awarded **2 out of 2 marks** because they have correctly described that its use speeds up production, and that symbols are to a recognised standard.

Candidate 2

The candidate was awarded a total of **57 out of 90 marks**.

Question 1(a)

The candidate was awarded **1 out of 2 marks** because their first response references the contrast between the white text and the black background. Their second response mentions 'the red against the black and white'. In this context, that does not create contrast.

Question 1(b)

The candidate was awarded **0 out of 2 marks** because their responses do not sufficiently describe rhythm.

Question 1(c)

The candidate was awarded **0 out of 2 marks** because their responses do not describe the use of value.

Question 1(d)

The candidate was awarded **1 out of 2 marks** because their first response mentions layering of elements. Their second response does not describe depth.

Question 1(e)

The candidate was awarded **1 out of 2 marks** because they have only given one example of alignment; 'central alignment of pictures under the coming soon title'.

Question 1(f)

The candidate was awarded **1 out of 1 mark** because they have given a clear cause and effect to explain why emphasis was used.

Question 1(g)(i)

The candidate was awarded **1 out of 2 marks** because they have mentioned a vector graphic 'takes up less storage space'. Their second response confuses vector with raster graphics where they mention 'high resolution'.

Question 1(g)(ii)

The candidate was awarded **2 out of 2 marks** because both of their responses were acceptable.

Question 1(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named the two types of crop.

Question 1(h)(ii)

The candidate was awarded **2 out of 2 marks** because they have accurately described the effects that the two types of cropping have created in the layout.

Question 1(i)

The candidate was awarded **1 out of 1 mark** because they have given a clear cause and effect as to why placeholder text is used.

Question 2(a)

The candidate was awarded **2 out of 2 marks** because they have accurately described the process of bottom-up modelling.

Question 2(b)

The candidate was awarded **0 out of 1 mark** because they have not described a detail view as being enlarged, or a closer view of the components.

Question 2(c)(i)

The candidate was awarded **0 out of 1 mark** because the correct term is 'stepped' section.

Question 2(c)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the revolved section.

Question 2(d)(i)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- described the workplane offset by 50mm (**1 mark**)
- generated profile 2 but did not correctly use the 45mm dimension to reference the location of profile 2 in relation to profile 1 (**0 marks**)
- used the loft command (**1 mark**)
- used shell with the correct wall thickness and removed the correct surface (**1 mark**)

Question 2(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly stated the name of the radial array.

Question 2(e)

The candidate was awarded **2 out of 3 marks** because they have:

- correctly generated the dia. 6 circle profile in the correct location (**1 mark**)
- said coil rather than helix (**0 marks**)
- stated the correct pitch and number of revolutions (**1 mark**)

Question 2(f)(i)

The candidate was awarded **0 out of 1 mark** because they have not provided a response to this question. They have scored out the response they had given and therefore, it cannot be accepted.

Question 2(f)(ii)

The candidate was awarded **0 out of 1 mark** because they have not given the cause of the file type being common or universal; they have only given the effect that it can be 'opened on any CAD software'.

Question 2(g)

The candidate was awarded **0 out of 1 mark** because they have not correctly rearranged the modelling tree.

Question 3(a)

The candidate was awarded **3 out of 4 marks** because they:

- have not correctly hatched the clip (part 1) (**0 marks**)
- have correctly hatched the connector (part 2) (**1 mark**)
- have correctly hatched the antenna (part 3) (**1 mark**)
- have correctly omitted the hatching of the web on the clip (part 1) (**1 mark**)

Question 3(b)

The candidate was awarded **1 out of 3 marks** because they have correctly identified that the diameter symbol should be a radius symbol.

Question 4(a)(i)

The candidate was awarded **1 out of 2 marks** because their first response describes not having components overlapping.

Question 4(a)(ii)

The candidate was awarded **2 out of 2 marks** because they have accurately described that an exploded isometric shows how parts assemble and shows parts that would normally be hidden.

Question 4(b)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- not clearly shown that profile 1 is perpendicular to the path (**0 marks**)
- used the extrude along a path command (**1 mark**)
- correctly created two 12 by 5 by 8 mm extrusions (**1 mark**) with dia. 3 holes through them (**1 mark**)

Question 4(c)

The candidate was awarded **3 out of 4 marks** because they have:

- only used centre axis on the holes on the arm and handle (**0 marks**)
- used the orientate constraint at the correct angle (**1 mark**)
- used two of the three constraints required to assemble the arm to the rake (**2 marks**)

Question 4(d)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc A to the centre of arc B as 7.5mm.

Question 4(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc B to the centre of arc C as 2.5mm.

Question 4(e)

The candidate was awarded **0 out of 5 marks** because they have not correctly identified any of the surfaces.

Question 4(f)

The candidate was awarded **2 out of 2 marks** because they have correctly described the application of a number of 3D rendering techniques.

Question 4(g)

The candidate was awarded **0 out of 2 marks** because their responses do not make sufficient reference to, or describe sufficiently, how a sited environment can improve an illustration.

Question 5(a)(i)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the registration mark.

Question 5(a)(ii)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the header.

Question 5(a)(iii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the drop cap.

Question 5(a)(iv)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the column rule.

Question 5(a)(v)

The candidate was awarded **1 out of 1 mark** because they have correctly named the crop marks.

Question 5(b)

The candidate was awarded **1 out of 2 marks** because they have only correctly identified the centre justification.

Question 5(c)

The candidate was awarded **1 out of 1 mark** because they have correctly described that it prevents a white border.

Question 5(d)

The candidate was awarded **2 out of 2 marks** because they have described that layers can be edited without affecting other layers and that they can be reordered.

Question 5(e)

The candidate was awarded **2 out of 2 marks** because they have correctly described no purchasing costs and that the company are not restricted to stock images.

Question 5(f)

The candidate was awarded **2 out of 2 marks** because they have given two accurate explanations; both have clear cause and effect.

Question 5(g)

The candidate was awarded **4 out of 4 marks** because they have given 4 acceptable descriptions of information communicated in the site plan.

Question 5(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named Symbol A as a radiator and Symbol B as a WC. Centres are reminded that only the terminology in the appendix of the Course Specification is acceptable for British Standard symbols.

Question 5(h)(ii)

The candidate was awarded **1 out of 2 marks** because their first and second responses are very similar and only describe pre-existing symbols.

Candidate 3

The candidate was awarded a total of **56 out of 90 marks**.

Question 1(a)

The candidate was awarded **2 out of 2 marks** because they have given two acceptable descriptions of contrast and have been clear about where these examples are.

Question 1(b)

The candidate was awarded **0 out of 2 marks** because their first response does not adequately describe rhythm and their second response describes unity rather than rhythm.

Question 1(c)

The candidate was awarded **2 out of 2 marks** because they have given two acceptable descriptions of value and have been clear about where these examples are.

Question 1(d)

The candidate was awarded **2 out of 2 marks** because they have given two acceptable descriptions of depth and have been clear about where these examples are.

Question 1(e)

The candidate was awarded **0 out of 2 marks** because they have not described how the items on the layout have been aligned. Simply stating 'All the genre pictures are aligned with each other' does not demonstrate sufficient understanding at Higher level; we would expect reference to left, right, centre alignment, etc.

Question 1(f)

The candidate was awarded **0 out of 1 mark** because they have not given the effect of 'made the word "independent" a different colour'. In an explain response, stating 'creating emphasis' in a question about emphasis does not give an effect.

Question 1(g)(i)

The candidate was awarded **2 out of 2 marks** because they have given two acceptable responses regarding the advantages of vector graphics.

Question 1(g)(ii)

The candidate was awarded **1 out of 2 marks** because they have only provided one acceptable response.

Question 1(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named both full and square crop.

Question 1(h)(ii)

The candidate was awarded **0 out of 2 marks** because neither of their responses give sufficient detail or description of the effects that the types of cropping create.

Question 1(i)

The candidate was awarded **0 out of 1 mark** because they have given a cause, but no effect in their response to an 'explain' command word.

Question 2(a)

The candidate was awarded **2 out of 2 marks** because they have correctly described two aspects of the process of bottom-up modelling.

Question 2(b)

The candidate was awarded **0 out of 1 mark** because they have given a cause, but no effect in their response to an 'explain' command word.

Question 2(c)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the stepped section.

Question 2(c)(ii)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the revolved section.

Question 2(d)(i)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- correctly described the workplane offset by 50mm (**1 mark**)
- correctly generated profile 2 and used the 45mm dimension to reference the location of profile 2 in relation to profile 1 (**1 marks**)
- correctly used the loft command (**1 mark**)
- have not used shell with the correctly; their wall thickness is correct, but they have not clearly described the correct surface to be removed – their sketch does not support this as they have hidden detail where it should be a visible edge (**0 marks**)

Question 2(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly stated the name of the radial array.

Question 2(e)

The candidate was awarded **3 out of 3 marks** because they have:

- correctly generated the dia. 6 circle profile in the correct location, 64 mm from the base would be correct when using the length of the helix plus the 4 mm from the bottom (**1 marks**)
- correctly used the helix command (**1 mark**)
- stated two out of three of the correct pitch and number of revolutions (**1 mark**)

Question 2(f)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly stated a STEP file format.

Question 2(f)(ii)

The candidate was awarded **0 out of 1 mark** because they have given a cause, but no effect in their response to an explain command word.

Question 2(g)

The candidate was awarded **0 out of 1 mark** because they gave no response to this question.

Question 3(a)

The candidate was awarded **2 out of 4 marks** because they have:

- correctly hatched the clip (part 1) **(1 mark)**
- correctly hatched the connector (part 2) **(1 mark)**
- not correctly hatched the antenna (part 3) as there is too much of a discrepancy from one side of the object to the other; though it is a sketch we would expect better quality at Higher level **(0 marks)**
- not correctly omitted the hatching of the web on the clip (part 1) **(0 marks)**

Question 3(b)

The candidate was awarded **0 out of 3 marks** because they have not correctly identified any errors in the drawing.

Question 4(a)(i)

The candidate was awarded **1 out of 2 marks** because their first response is acceptable. Their second response does not give a clear description of what their intent is and so, cannot be awarded a mark.

Question 4(a)(ii)

The candidate was awarded **2 out of 2 marks** because they have given two acceptable responses regarding the purpose of an exploded view.

Question 4(b)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- **not** clearly shown that profile 1 is perpendicular to the path (**0 marks**)
- used the extrude along a path command (**1 mark**)
- correctly created two 12 by 5 by 8 mm extrusions (**1 mark**) with dia. 3 holes through them (**1 mark**)

Question 4(c)

The candidate was awarded **0 out of 4 marks** because they gave no response to this question.

Question 4(d)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc A to the centre of arc B as 7.5mm.

Question 4(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc B to the centre of arc C as 2.5mm.

Question 4(e)

The candidate was awarded **3 out of 5 marks** because they have correctly identified surfaces C, D and E.

Question 4(f)

The candidate was awarded **2 out of 2 marks** because they have provided two valid descriptions under the additional guidance section of the marking instructions. While these are not expected responses as per the Course Specification knowledge and skills table for 3D rendering techniques, we will accept these responses.

Question 4(g)

The candidate was awarded **1 out of 2 marks** because they have correctly described a sited environment giving a sense of scale.

Question 5(a)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the registration mark.

Question 5(a)(ii)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the header.

Question 5(a)(iii)

The candidate was awarded **0 out of 1 mark** because they gave no response to this question.

Question 5(a)(iv)

The candidate was awarded **1 out of 1 mark** because they have correctly named the column rule.

Question 5(a)(v)

The candidate was awarded **1 out of 1 mark** because they have correctly named the crop marks.

Question 5(b)

The candidate was awarded **2 out of 2 marks** because they have correctly named centre justification.

Question 5(c)

The candidate was awarded **1 out of 1 mark** because they have correctly described the use of bleed to avoid a white margin.

Question 5(d)

The candidate was awarded **2 out of 2 marks** because they have correctly described two advantages of using layers.

Question 5(e)

The candidate was awarded **2 out of 2 marks** because they have correctly described two benefits to the company of using images created by their staff.

Question 5(f)

The candidate was awarded **2 out of 2 marks** because they have given two acceptable explanations, both with a cause and effect. For example, 'it can be viewed in the dark' – effect, 'due to the light emitted from the phone' – cause. Candidates will often write the effect before the cause which is acceptable.

Question 5(g)

The candidate was awarded **3 out of 4 marks** because they have provided three acceptable examples of information communicated in the site plan.

Question 5(h)(i)

The candidate was awarded **1 out of 2 marks** because they have correctly named Symbol A as a radiator, but they have not correctly named Symbol B as a WC. Where a candidate gives two responses for 1 mark, we must accept the first response; 'wash closet' is not the correct term as per the appendix at the end of the Course Specification.

Question 5(h)(ii)

The candidate was awarded **0 out of 2 marks** because the response they have given is not an accepted answer for this question.

Candidate 4

The candidate was awarded a total of **60 out of 90 marks**.

Question 1(a)

The candidate was awarded **1 out of 2 marks** because their first response 'red text contrasts from the black text' does not give an acceptable description of contrast. The contrast between text sizes is accepted.

Question 1(b)

The candidate was awarded **1 out of 2 marks** because the response related to the film reel is not accepted. The description of the 'evenly spaced images with titles' is an accepted description of rhythm.

Question 1(c)

The candidate was awarded **0 out of 2 marks** because their response does not describe value.

Question 1(d)

The candidate was awarded **2 out of 2 marks** because they have correctly described two examples of depth; the use of red as an advancing colour, and the overlapping of the film roll at the bottom.

Question 1(e)

The candidate was awarded **0 out of 2 marks** because they have not correctly described instances of alignment in the layout.

Question 1(f)

The candidate was awarded **0 out of 1 mark** because they have not sufficiently given causes of emphasis; they have not said what has been done to the word "indipendant" to 'draw the viewers attention'.

Question 1(g)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly described two advantages of using a vector graphic.

Question 1(g)(ii)

The candidate was awarded **2 out of 2 marks** because they have correctly described two advantages of cloud storage; 'work from home' and 'multiple users to work on the same file' being collaboration.

Question 1(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named full and square crop.

Question 1(h)(ii)

The candidate was awarded **0 out of 2 marks** because their descriptions are too vague. Simply saying the use of drop 'emphasises the lens' or 'emphasises the dogs face' does not sufficiently demonstrate knowledge at Higher level.

Question 1(i)

The candidate was awarded **0 out of 1 mark** because while they have stated an accurate effect in 'saves time', their cause is not clear in their intent.

Question 2(a)

The candidate was awarded **1 out of 2 marks** because they have correctly described components being modelled individually however, they have not mentioned the use of constraints in their description of assembly.

Question 2(b)

The candidate was awarded **0 out of 1 mark** because they have not given a full response to an 'explain' command word.

Question 2(c)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the stepped section.

Question 2(c)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the revolved section.

Question 2(d)(i)

The candidate was awarded **3 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)

- correctly described the workplane offset by 50mm **(1 mark)**
- correctly generated profile 2 but did not correctly use the 45mm dimension to reference the location of profile 2 in relation to profile 1 **(0 marks)**
- correctly used the loft command **(1 mark)**
- not used shell with the correct wall thickness, though their sketch is clear about which surface is to be removed **(0 marks)**

Question 2(d)(ii)

The candidate was awarded **0 out of 1 mark** because they have not correctly stated the name of the radial array.

Question 2(e)

The candidate was awarded **3 out of 3 marks** because they have:

- correctly generated the dia. 6 circle profile in the correct location **(1 mark)**
- correctly used the helix command **(1 mark)**
- stated two out of three of the correct pitch, number of revolutions or length/height **(1 mark)**

Question 2(f)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly stated a STEP file format.

Question 2(f)(ii)

The candidate was awarded **1 out of 1 mark** because they have given an acceptable response to the explain command word providing a cause – ‘standardised format’, and effect – ‘supported by almost every CAD package’.

Question 2(g)

The candidate was awarded **1 out of 1 mark** because they have correctly reordered the modelling tree with the shell before either of the extrude subtracts.

Question 3(a)

The candidate was awarded **4 out of 4 marks** because they have correctly:

- hatched the clip (part 1) **(1 mark)**
- hatched the connector (part 2) **(1 mark)**
- hatched the antenna (part 3) **(1 mark)**
- omitted the hatching of the web on the clip (part 1) **(1 mark)**

Question 3(b)

The candidate was awarded **1 out of 3 marks** because they have correctly identified that the 3rd angle projection symbol is wrong.

Question 4(a)(i)

The candidate was awarded **1 out of 2 marks** because their second response mentions not having components overlapping.

Question 4(a)(ii)

The candidate was awarded **2 out of 2 marks** because they have given two acceptable descriptions as to the purpose of an exploded view.

Question 4(b)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 **(1 mark)**
- clearly shown that profile 1 is perpendicular to the path **(1 mark)**
- not used the extrude along a path command having only said 'sweep'; had they said 'sweep along a path' that would have been accepted **(0 marks)**
- correctly created two 12 by 5 by 8 mm extrusions **(1 mark)** with dia. 3 holes through them **(1 mark)**

Question 4(c)

The candidate was awarded **2 out of 4 marks** because they have:

- only used centre axis on the holes on the arm and handle **(0 marks)**
- not used the orientate constraint at the correct angle **(0 marks)**
- used two of the three constraints required to assemble the arm to the rake **(2 marks)**

Question 4(d)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc A to the centre of arc B as 7.5mm.

Question 4(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc B to the centre of arc C as 2.5mm.

Question 4(e)

The candidate was awarded **3 out of 5 marks** because they have correctly identified surfaces C, D and E.

Question 4(f)

The candidate was awarded **2 out of 2 marks** because they have provided two valid descriptions under the additional guidance section of the marking instructions. While these are not expected responses as per the Course Specification knowledge and skills table for 3D rendering techniques, we will accept these responses.

Question 4(g)

The candidate was awarded **1 out of 2 marks** because they have correctly described a sited environment giving a sense of scale.

Question 5(a)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the registration mark.

Question 5(a)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the header.

Question 5(a)(iii)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the drop cap.

Question 5(a)(iv)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the column rule.

Question 5(a)(v)

The candidate was awarded **1 out of 1 mark** because they have correctly named the crop marks.

Question 5(b)

The candidate was awarded **2 out of 2 marks** because they have correctly named both full and centre justification.

Question 5(c)

The candidate was awarded **1 out of 1 mark** because they have correctly described that the use of bleed will allow for edge-to-edge printing.

Question 5(d)

The candidate was awarded **1 out of 2 marks** because their first response does not give enough detail about what they mean by 'edit specific parts'. Their second response is clear enough to be accepted for turning layers on and off when they say, 'allows layers to be hidden'.

Question 5(e)

The candidate was awarded **2 out of 2 marks** because they have provided two acceptable descriptions of the benefits of using images created by their own staff.

Question 5(f)

The candidate was awarded **1 out of 2 marks** because only their last response in this question is a valid explanation with the cause – 'design can also contain hyperlinks', and effect – 'to take viewers to their website'.

Question 5(g)

The candidate was awarded **4 out of 4 marks** because they have given 4 acceptable descriptions of information communicated in the site plan.

Question 5(h)(i)

The candidate was awarded **1 out of 2 marks** because they have correctly named Symbol A as a radiator but have not correctly named Symbol B as a WC.

Question 5(h)(ii)

The candidate was awarded **1 out of 2 marks** because their first response is correct however, their second response is inaccurate as the designer could still use the wrong symbol. Errors would be avoided by not having to redraw symbols which could lead to errors in the symbol, rather than the use of the wrong symbol.

Candidate 5

The candidate was awarded a total of **59 out of 90 marks**.

Question 1(a)

The candidate was awarded **1 out of 2 marks** because their description of the 'twisted film tape contrasts with the straight red lines' is accepted under contrasting shapes in the marking instructions.

Question 1(b)

The candidate was awarded **1 out of 2 marks** because 'and underlining every subheading in the "behind the scenes" section', was an accepted description of rhythm.

Question 1(c)

The candidate was awarded **1 out of 2 marks** because their first response clearly describes the change in value of the boxes that make the film reel.

Question 1(d)

The candidate was awarded **2 out of 2 marks** because they have correctly described two instances of a drop shadow creating depth.

Question 1(e)

The candidate was awarded **2 out of 2 marks** because they have clearly described two instances of two or more items on the page and how they have been aligned.

Question 1(f)

The candidate was awarded **0 out of 1 mark** because they have not given an accepted way of creating emphasis.

Question 1(g)(i)

The candidate was awarded **2 out of 2 marks** because they have given two accepted advantages of using a vector file format.

Question 1(g)(ii)

The candidate was awarded **1 out of 2 marks** because their first response is an accepted response for the advantages of cloud storage.

Question 1(h)(i)

The candidate was awarded **1 out of 2 marks** because they have correctly named full crop.

Question 1(h)(ii)

The candidate was awarded **1 out of 2 marks** because a follow on error has been applied for their description of the effect of square crop. They have called it 'box crop' which fits in the marking instructions under 'To allow the image to fit in the available space within the layout'.

Question 1(i)

The candidate was awarded **0 out of 1 mark** because they have given a cause, but no effect in their explain response.

Question 2(a)

The candidate was awarded **1 out of 2 marks** because they have correctly described 'parts have been made separately'.

Question 2(b)

The candidate was awarded **1 out of 1 mark** because they have given a clear cause – ‘Two show how the 2 parts fit together’, and effect – ‘at a bigger scale’, in their response.

Question 2(c)(i)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the stepped section.

Question 2(c)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the revolved section.

Question 2(d)(i)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- correctly described the workplane offset by 50mm (**1 mark**)
- correctly generated profile 2 but did not correctly use the 45mm dimension to reference the location of profile 2 in relation to profile 1 (**0 marks**)
- correctly used the loft command (**1 mark**)
- used shell with the correct wall thickness and removed the correct surface (**1 mark**)

Question 2(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly stated the name of the radial array.

Question 2(e)

The candidate was awarded **0 out of 3 marks** because they have:

- not correctly generated the dia. 6 circle profile in the correct location; they do not reference the centre axis being 25mm from the centre of the dia. 6 circle (**0 marks**)
- not correctly used the helix command and have instead said ‘coil’ (**0 marks**)

- not stated two out of three of the correct pitch, number of revolutions or length/height; they have stated the pitch of 15, but say '4 rotations' **(0 marks)**

Question 2(f)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly stated a STEP file format.

Question 2(f)(ii)

The candidate was awarded **0 out of 1 mark** because they have not given an appropriate response to the command word.

Question 2(g)

The candidate was awarded **1 out of 1 mark** because they have correctly reordered the modelling tree with the shell before either of the extrude subtracts.

Question 3(a)

The candidate was awarded **3 out of 4 marks** because they have:

- not correctly hatched the clip (part 1) **(0 marks)**
- correctly hatched the connector (part 2) **(1 mark)**
- have correctly hatched the antenna (part 3) **(1 mark)**
- have correctly omitted the hatching of the web on the clip (part 1) **(1 mark)**

Question 3(b)

The candidate was awarded **1 out of 3 marks** because they have correctly identified that the diameter symbol should be a radius symbol.

Question 4(a)(i)

The candidate was awarded **2 out of 2 marks** because their responses are accepted under 'correct alignment of components' and 'components do not overlap each other' in the marking instructions.

Question 4(a)(ii)

The candidate was awarded **2 out of 2 marks** because their responses are accepted

under 'to show how parts assemble' and 'to show component quantities' in the marking instructions.

Question 4(b)

The candidate was awarded **3 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- not clearly shown that profile 1 is perpendicular to the path (**0 marks**)
- not used the extrude along a path command (**0 marks**)
- correctly created two 12 by 5 by 8 mm extrusions (**1 mark**) with dia. 3 holes through them (**1 mark**)

Question 4(c)

The candidate was awarded **3 out of 4 marks** because they have:

- correctly used centre axis and mate to connect the arm to the handle (**1 mark**)
- not used the orientate constraint at the correct angle (**0 marks**)
- used two of the three constraints required to assemble the arm to the rake (**2 marks**)

Question 4(d)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc A to the centre of arc B as 7.5mm.

Question 4(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc B to the centre of arc C as 2.5mm.

Question 4(e)

The candidate was awarded **3 out of 5 marks** because they have correctly identified surfaces C, D and E.

Question 4(f)

The candidate was awarded **0 out of 2 marks** because they have not given descriptions of the 3D rendering techniques, instead stating only the names of them.

Question 4(g)

The candidate was awarded **1 out of 2 marks** because they have described a sited environment as 'Gives the items a sense of scale'.

Question 5(a)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the registration mark.

Question 5(a)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the header.

Question 5(a)(iii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the drop cap.

Question 5(a)(iv)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the column rule.

Question 5(a)(v)

The candidate was awarded **1 out of 1 mark** because they have correctly named the crop marks.

Question 5(b)

The candidate was awarded **1 out of 2 marks** because they have correctly named centre justification.

Question 5(c)

The candidate was awarded **1 out of 1 mark** because they have described bleed preventing a white border.

Question 5(d)

The candidate was awarded **2 out of 2 marks** because their responses are accepted

under 'text and images can be edited separately' and 'layers can be ordered by either moving backwards or forwards' in the marking instructions.

Question 5(e)

The candidate was awarded **1 out of 2 marks** because their second response is accepted under 'the company can capture images which suit their needs exactly' in the marking instructions.

Question 5(f)

The candidate was awarded **1 out of 2 marks** because when taken in its entirety, their response is in line with the marking instructions; 'can view linked material (social media platforms) allowing better user engagement'.

Question 5(g)

The candidate was awarded **3 out of 4 marks** because three out of four of their responses were accepted. 'What direction the company is facing' was not accepted.

Question 5(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named Symbol A as a radiator and Symbol B as a WC.

Question 5(h)(ii)

The candidate was awarded **2 out of 2 marks** because their responses were accepted under 'no need to redraw repeated symbols' and 'symbols to a recognised standard' from the marking instructions.

Candidate 6

The candidate was awarded a total of **76 out of 90 marks**.

Question 1(a)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses regarding use of contrast.

Question 1(b)

The candidate was awarded **1 out of 2 marks** because their first response is accepted under 'repeated alteration of red and green lines on the confectionary prices' in the marking instructions.

Question 1(c)

The candidate was awarded **1 out of 2 marks** because their first response is accepted under 'change in value of vertical film reel on page 2' in the marking instructions.

Question 1(d)

The candidate was awarded **2 out of 2 marks** because they have given an accepted response with regards to the transparent red lines and the use of drop shadow to create depth.

Question 1(e)

The candidate was awarded **1 out of 2 marks** because their first response regarding the left alignment of the images is accepted. The second response is incorrect as these items are not left aligned.

Question 1(f)

The candidate was awarded **1 out of 1 mark** because they have given a clear cause – 'The lines surrounding the pull quote', and effect – 'which helps draw attention'.

Question 1(g)(i)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses regarding the advantages of using a vector file format.

Question 1(g)(ii)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses regarding the advantages of using cloud storage.

Question 1(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named full and square crop.

Question 1(h)(ii)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses regarding the effects that the two types of crop have created in the layouts.

Question 1(i)

The candidate was awarded **1 out of 1 mark** because they have given a clear cause and effect in their response to the 'explain' command word.

Question 2(a)

The candidate was awarded **2 out of 2 marks** because they have clearly described components being created separately and the use of constraints to assemble.

Question 2(b)

The candidate was awarded **1 out of 1 mark** because they have given a clear cause and effect in their response to the 'explain' command word.

Question 2(c)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the stepped section.

Question 2(c)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the revolved section.

Question 2(d)(i)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- correctly described the workplane offset by 50mm (**1 mark**)

- correctly generated profile 2 but did not correctly use the 45mm dimension to reference the location of profile 2 in relation to profile 1 **(0 marks)**
- correctly used the loft command **(1 mark)**
- used shell with the correct wall thickness and removed the correct surface **(1 mark)**

Question 2(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly stated the name of the radial array.

Question 2(e)

The candidate was awarded **3 out of 3 marks** because they have:

- correctly generated the dia. 6 circle profile in the correct location **(1 mark)**
- correctly used the helix command **(1 mark)**
- stated two out of three of the correct pitch, number of revolutions or length/height **(1 mark)**

Question 2(f)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly stated a STEP file format.

Question 2(f)(ii)

The candidate was awarded **0 out of 1 mark** because they have not given the cause of a universal file format.

Question 2(g)

The candidate was awarded **1 out of 1 mark** because they have correctly reordered the modelling tree with the shell before either of the extrude subtracts.

Question 3(a)

The candidate was awarded **3 out of 4 marks** because they have:

- correctly hatched the clip (part 1) **(1 mark)**
- correctly hatched the connector (part 2) **(1 mark)**

- not correctly hatched the antenna (part 3); their sketched hatching has too many inconsistencies across the length of the object **(0 marks)**
- correctly omitted the hatching of the web on the clip (part 1) **(1 mark)**

Question 3(b)

The candidate was awarded **2 out of 3 marks** because they have correctly identified that the diameter symbol should be a radius symbol and the projection symbol is wrong.

Question 4(a)(i)

The candidate was awarded **2 out of 2 marks** because their responses are accepted under 'components do not overlap each other' and 'order of assembly is correct' in the marking instructions.

Question 4(a)(ii)

The candidate was awarded **1 out of 2 marks** because their first response is accepted under 'to show component quantities' in the marking instructions. Their second response is not an accepted response for this question.

Question 4(b)

The candidate was awarded **4 out of 5 marks** because they have:

- not correctly generated profile 1; the 15 dimension is too low **(0 marks)**
- clearly shown that profile 1 is perpendicular to the path **(1 mark)**
- used the extrude along a path command **(1 mark)**
- correctly created two 12 by 5 by 8 mm extrusions **(1 mark)** with dia. 3 holes through them **(1 mark)**

Question 4(c)

The candidate was awarded **3 out of 4 marks** because they have:

- correctly used the centre axis and mate to connect the arm to the handle **(1 mark)**
- not used the orientate constraint at the correct angle **(0 marks)**

- used two of the three constraints required to assemble the arm to the rake (**2 marks**)

Question 4(d)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc A to the centre of arc B as 7.5mm.

Question 4(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc B to the centre of arc C as 2.5mm.

Question 4(e)

The candidate was awarded **5 out of 5 marks** because they have correctly identified surfaces A to E.

Question 4(f)

The candidate was awarded **2 out of 2 marks** because they have correctly described two 3D rendering techniques.

Question 4(g)

The candidate was awarded **2 out of 2 marks** because they have correctly described two ways a sited environment can improve an illustration.

Question 5(a)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the registration mark.

Question 5(a)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the header.

Question 5(a)(iii)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the drop cap.

Question 5(a)(iv)

The candidate was awarded **1 out of 1 mark** because they have correctly named the column rule.

Question 5(a)(v)

The candidate was awarded **1 out of 1 mark** because they have correctly named the crop marks.

Question 5(b)

The candidate was awarded **2 out of 2 marks** because they have correctly named both full and centre justification.

Question 5(c)

The candidate was awarded **1 out of 1 mark** because they have correctly described the use of bleed to avoid a white margin from appearing.

Question 5(d)

The candidate was awarded **2 out of 2 marks** because their responses were accepted under 'layers can be turned off and on to improve clarity during the production of the layout' and 'layers can be locked to prevent them from being edited or moved by mistake' in the marking instructions.

Question 5(e)

The candidate was awarded **2 out of 2 marks** because their responses were accepted under 'no purchasing costs' and 'the company can capture images which suit their needs exactly' in the marking instructions.

Question 5(f)

The candidate was awarded **2 out of 2 marks** because they have given two accepted explanations under 'easy to zoom in or increase size of font to improve accessibility' and 'built-in accessibility features such as text to speech allows more people to access content' in the marking instructions.

Question 5(g)

The candidate was awarded **3 out of 4 marks** because three of four responses were accepted. 'It shows the materials of the building & surroundings' was not accepted.

Question 5(h)(i)

The candidate was awarded **1 out of 2 marks** because they have correctly named Symbol A as a radiator but have not correctly named Symbol B as a WC.

Question 5(h)(ii)

The candidate was awarded **1 out of 2 marks** because their first response references 'modelling parts'. In this context, we are expecting candidates at Higher level to know that this is 2D CAD rather than 3D. Their second response is accepted.

Candidate 7

The candidate was awarded a total of **71 out of 90 marks**.

Question 1(a)

The candidate was awarded **2 out of 2 marks** because they have correctly described the contrast between the green and red text. They have also described the contrast between the straight diagonal lines and the curved shape of the film reel.

Question 1(b)

The candidate was awarded **0 out of 2 marks** because both of their responses describe unity rather than rhythm.

Question 1(c)

The candidate was awarded **0 out of 2 marks** because neither of their responses describe value.

Question 1(d)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses that describe depth through the use of layering.

Question 1(e)

The candidate was awarded **2 out of 2 marks** because they have described the left alignment of the boxes that create the film reel and the horizontal alignment of the red text across the bottom of pages 1 and 2.

Question 1(f)

The candidate was awarded **0 out of 1 mark** because they have not given the effect of their causes in the 'explain' question.

Question 1(g)(i)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses for the use of vector graphics.

Question 1(g)(ii)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses for the advantages of using cloud storage.

Question 1(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named full and square crop.

Question 1(h)(ii)

The candidate was awarded **1 out of 2 marks** because they have given an accepted response for the effect that square cropping gives to the layout. Their response regarding full cropping did not give a clear enough description of the effect that the use of full cropping gives.

Question 1(i)

The candidate was awarded **1 out of 1 mark** because their response was an effective response to the 'explain' command word where they had the cause – 'does not need to source the real text', and effect – 'time is saved'.

Question 2(a)

The candidate was awarded **2 out of 2 marks** because they have correctly described components being modelled separately and then assembled using constraints.

Question 2 (b)

The candidate was awarded **1 out of 1 mark** because they have given an effective response to the 'explain' command word.

Question 2(c)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the stepped section.

Question 2(c)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the revolved section.

Question 2(d)(i)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- correctly described the workplane offset by 50mm (**1 mark**)
- correctly generated profile 2 but did not correctly use the 45mm dimension to reference the location of profile 2 in relation to profile 1 (**0 marks**)
- correctly used the loft command (**1 mark**)
- used shell with the correct wall thickness and removed the correct surface – their sketch supports their written answer to allow for the mark to be awarded (**1 mark**)

Question 2(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly stated the name of the radial array.

Question 2(e)

The candidate was awarded **2 out of 3 marks** because they have:

- not correctly generated the dia. 6 circle profile in the correct location; there is no reference to 25mm from the centre axis (**0 marks**)
- correctly used the helix command (**1 mark**)
- stated two out of three of the correct pitch, number of revolutions or length/height (**1 mark**)

Question 2(f)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly stated a STEP file format.

Question 2(f)(ii)

The candidate was awarded **1 out of 1 mark** because they have explained sufficiently that 'the STEP file type is not only used with one, or a specific software', for instance, a universal file type for their cause and the effect being 'it can be opened/edited in many different types'.

Question 2(g)

The candidate was awarded **0 out of 1 mark** because they have not correctly reordered the modelling tree with the shell before either of the extrude subtracts.

Question 3(a)

The candidate was awarded **4 out of 4 marks** because they have correctly:

- hatched the clip (part 1) (**1 mark**)
- hatched the connector (part 2) (**1 mark**)
- hatched the antenna (part 3) (**1 mark**)
- omitted the hatching of the web on the clip (part 1) (**1 mark**)

Question 3(b)

The candidate was awarded **1 out of 3 marks** because they have correctly identified that the leader line is touching the drawing.

Question 4(a)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly described correct alignment of components, and components do not overlap each other.

Question 4(a)(ii)

The candidate was awarded **2 out of 2 marks** because they have correctly described that the purpose is to show how parts assemble and to indicate the order of assembly.

Question 4(b)

The candidate was awarded **3 out of 5 marks** because they have:

- correctly generated profile 1 (**1 mark**)
- shown that profile 1 is perpendicular to the path however, they have not included sufficient dimensions for the path (**0 marks**)
- used the extrude along a path command (**1 mark**)
- correctly created two 12 by 5 by 8 mm extrusions (**1 mark**) but did not use the correct terminology to extrude subtract the dia. 3 holes through them (**0 marks**)

Question 4(c)

The candidate was awarded **2 out of 4 marks** because they have:

- only used centre axis on the holes on the arm and handle (**0 marks**)
- used the orientate constraint at the correct angle (**1 mark**)
- used one of the three constraints required to assemble the arm to the rake (**1 mark**)

Question 4(d)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc A to the centre of arc B as 7.5mm.

Question 4(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc B to the centre of arc C as 2.5mm.

Question 4(e)

The candidate was awarded **3 out of 5 marks** because they have correctly identified surfaces C, D and E.

Question 4(f)

The candidate was awarded **2 out of 2 marks** because they have described the application of materials and a light source.

Question 4(g)

The candidate was awarded **2 out of 2 marks** because they have described a sited environment as showing the objects in a realistic setting and stated that it gives an indication of scale.

Question 5(a)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the registration mark.

Question 5(a)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the header.

Question 5(a)(iii)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the drop cap.

Question 5(a)(iv)

The candidate was awarded **1 out of 1 mark** because they have correctly named the column rule.

Question 5(a)(v)

The candidate was awarded **1 out of 1 mark** because they have correctly named the crop marks.

Question 5(b)

The candidate was awarded **2 out of 2 marks** because they have correctly named both full and centre justification.

Question 5(c)

The candidate was awarded **1 out of 1 mark** because they have correctly described the use of bleed to avoid a white margin.

Question 5(d)

The candidate was awarded **2 out of 2 marks** because they have described the use of layers allowing layers to be edited separately and noted that layers can be turned on and off.

Question 5(e)

The candidate was awarded **2 out of 2 marks** because they have described no purchasing costs and the company can capture images which suit their needs exactly.

Question 5(f)

The candidate was awarded **1 out of 2 marks** because they have explained that 'They can zoom in/out in the places they want' – cause, 'to see bigger/smaller, meaning they can access larger text or images if they want to see it clearly' – effect.

Question 5(g)

The candidate was awarded **4 out of 4 marks** because they have given four accepted responses as to the information communicated by the site plan.

Question 5(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named Symbol A as a radiator and Symbol B as a WC.

Question 5(h)(ii)

The candidate was awarded **2 out of 2 marks** because they have described there being no need to redraw repeated symbols and that this speeds up production.

Candidate 8

The candidate was awarded a total of **66 out of 90 marks**.

Question 1(a)

The candidate was awarded **1 out of 2 marks** because they have described the 'reverse text ... contrast against the black'.

Question 1(b)

The candidate was awarded **0 out of 2 marks** because they have not given sufficient detail to describe rhythm in reference to the camera lens, or the use of red lines.

Question 1(c)

The candidate was awarded **0 out of 2 marks** because they have not given sufficient detail regarding the use of value.

Question 1(d)

The candidate was awarded **1 out of 2 marks** because they have correctly described the use of the transparent red lines to create depth. Their second point about the gradient fill does not refer to depth.

Question 1(e)

The candidate was awarded **0 out of 2 marks** because they have not mentioned how the items are aligned. At Higher level we would expect mention of left, right, centre, etc.

Question 1(f)

The candidate was awarded **1 out of 1 mark** because they have given a correct cause – 'The large scale of the word "cinemazy"', and effect – 'it stands out'.

Question 1(g)(i)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses with regards to the advantages of vector file types.

Question 1(g)(ii)

The candidate was awarded **2 out of 2 marks** because they have given two accepted responses as to the advantages of cloud storage.

Question 1(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named full and square crop.

Question 1(h)(ii)

The candidate was awarded **2 out of 2 marks** because they described full cropping being used to remove clutter; 'create focus on a particular important part of the image'. They have also described square cropping being used to allow the image to fit the available space in the layout; 'make lots of images the same size'.

Question 1(i)

The candidate was awarded **0 out of 1 mark** because they have not given an effect in their 'explain' response.

Question 2(a)

The candidate was awarded **2 out of 2 marks** because they have described components being modelled separately and then assembled using constraints.

Question 2(b)

The candidate was awarded **1 out of 1 mark** because they have given a cause; 'To show a close up of how two different parts are joined together', and an effect; 'making it more clear'.

Question 2(c)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the stepped section.

Question 2(c)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the revolved section.

Question 2(d)(i)

The candidate was awarded **5 out of 5 marks** because they have:

- correctly generated profile 1 **(1 mark)**
- correctly described the workplane offset by 50mm **(1 mark)**
- correctly generated profile 2 and used the 45mm dimension to reference the location of profile 2 in relation to profile 1 **(1 mark)**
- correctly used the loft command **(1 mark)**
- used shell with the correct wall thickness and removed the correct surface **(1 mark)**

Question 2(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly stated the name of the radial array.

Question 2(e)

The candidate was awarded **3 out of 3 marks** because they have:

- correctly generated the dia. 6 circle profile in the correct location **(1 mark)**
- correctly used the helix command **(1 mark)**
- stated two out of three of the correct pitch, number of revolutions or length/height **(1 mark)**

Question 2(f)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly stated a STEP file format.

Question 2(f)(ii)

The candidate was awarded **1 out of 1 mark** because they have given a cause – ‘This format is applicable for all CAD softwears’, and an effect – ‘therefore it can be shared and edited easily’.

Question 2(g)

The candidate was awarded **0 out of 1 mark** because they have not correctly reordered the modelling tree with the shell before either of the extrude subtracts.

Question 3(a)

The candidate was awarded **4 out of 4 marks** because they have correctly:

- hatched the clip (part 1) **(1 mark)**
- hatched the connector (part 2) **(1 mark)**
- hatched the antenna (part 3) **(1 mark)**
- omitted the hatching of the web on the clip (part 1) **(1 mark)**

Question 3(b)

The candidate was awarded **1 out of 3 marks** because they have correctly identified that the leader line is touching the drawing.

Question 4(a)(i)

The candidate was awarded **1 out of 2 marks** because their second response correctly describes components not overlapping.

Question 4(a)(ii)

The candidate was awarded **2 out of 2 marks** because they have described the purpose of an exploded isometric being to show how parts assemble and show component quantities.

Question 4(b)

The candidate was awarded **4 out of 5 marks** because they have:

- correctly generated profile 1 **(1 mark)**
- clearly shown that profile 1 is perpendicular to the path, but have not included the 30 degree dimension **(0 marks)**
- used the extrude along a path command **(1 mark)**
- correctly created two 12 by 5 by 8 mm extrusions **(1 mark)** with dia. 3 holes through them **(1 mark)**

Question 4(c)

The candidate was awarded **4 out of 4 marks** because they have:

- correctly used the centre axis and mate to connect the arm to the handle **(1 mark)**
- used the orientate constraint at the correct angle **(1 mark)**
- used two of the three constraints required to assemble the arm to the rake **(2 marks)**

Question 4(d)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc A to the centre of arc B as 7.5mm.

Question 4(d)(ii)

The candidate was awarded **1 out of 1 mark** because they have correctly calculated the distance from the centre of arc B to the centre of arc C as 2.5mm.

Question 4(e)

The candidate was awarded **3 out of 5 marks** because they have correctly identified surfaces C, D and E.

Question 4(f)

The candidate was awarded **1 out of 2 marks** because they have described the application of materials.

Question 4(g)

The candidate was awarded **1 out of 2 marks** because they have described a sited environment as showing how the object would fit into its surroundings.

Question 5(a)(i)

The candidate was awarded **1 out of 1 mark** because they have correctly named the registration mark.

Question 5(a)(ii)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the header.

Question 5(a)(iii)

The candidate was awarded **1 out of 1 mark** because they have correctly named the drop cap.

Question 5(a)(iv)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the column rule.

Question 5(a)(v)

The candidate was awarded **0 out of 1 mark** because they have not correctly named the crop marks.

Question 5(b)

The candidate was awarded **2 out of 2 marks** because they have correctly named both full and centre justification.

Question 5(c)

The candidate was awarded **1 out of 1 mark** because they have described that bleed will help prevent a white border.

Question 5(d)

The candidate was awarded **2 out of 2 marks** because they have described that layers can be edited separately, and that layers can be edited without effecting others.

Question 5(e)

The candidate was awarded **2 out of 2 marks** because they have described no purchasing costs and that the company can capture images which suit their needs exactly.

Question 5(f)

The candidate was awarded **0 out of 2 marks** because they have not given sufficient cause and effect responses to the 'explain' command word.

Question 5(g)

The candidate was awarded **4 out of 4 marks** because they have given four accepted pieces of information the site plan communicates.

Question 5(h)(i)

The candidate was awarded **2 out of 2 marks** because they have correctly named Symbol A as a radiator and Symbol B as a WC.

Question 5(h)(ii)

The candidate was awarded **1 out of 2 marks** because their first response references no need to redraw repeated symbols.