United Arab Emirates
Ministry of Education

الإمارات العربية المتحدة
وزارة التربية والتعليم

STUDENT SECTION					
Name				Class	
Student MOE number (SIS)		School MOE Number		STUDENT SIGNATURE	
School name					

PLEASE NOTE – This <u>SAMPLE</u> paper is to guide students on question types <u>ONLY</u>, not the content for the final assessed examination. Please refer to the coverage documents & revision notes.

Creative Design & Innovation

12 Advanced

Sample - Term 1

Date: November 2017

Time: TBC

Duration: 35 minutes

FOR ADMIN ONLY	
MARKING RECORD	
Section	Section TOTALS
Section 1	
Section 2	
Section 3	
MARKER SIGNATURE	TOTAL MARKS
MODERATOR SIGNATURE	

STUDENT INSTRUCTIONS –
Students must attempt **all** questions.
For this examination, you must have:

1. An ink pen – blue.
2. A pencil.
3. A ruler.

TEACHER NOTES & INSTRUCTIONS

Please tick ✓ the correct answers in **<u>RED INK</u>** and then write the mark awarded in the marking columns. With multiple mark answers highlight where the mark is awarded by **<u>underlining</u>** or by using an extra tick.

SECTION 1 – Multiple choice

Choose and circle the correct answer – A, B, C or D. (1 mark each)

Example: *To find and analyze information.*

A. sketch
B. evaluate
C. research
D. organize

1. A rough drawing often made to assist in making a more finished picture -
   A. symmetric
   B. opaque
   C. equality
   D. sketch

2. A description of measurement for length, width and height -
   A. radius
   B. tangent
   C. dimension
   D. geometry

3. A hard, protective outer case of an object or material -
   A. subtract
   B. shell
   C. symmetry
   D. system

4. The flat surface on which a straight line joining two points on it would wholly lie -
   A. plane
   B. parameter
   C. extrude
   D. perpendicular

5. The way that someone or something looks -.
   A. opaque
   B. extrude
   C. glossy
   D. appearance

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SECTION 2 – True or False

Choose and circle the correct answer TRUE or FALSE. **(1 mark each)**

Example:

- Rendering an image give it colour & texture. TRUE FALSE

1. Perspective is a form of 3D drawing. TRUE FALSE
2. A decal is an image that can be added to a surface. TRUE FALSE
3. A vanishing point is used to remove pencil marks. TRUE FALSE
4. Translucent means that the object reflects light. TRUE FALSE
5. GPU stands for Graphics Processing Unit. TRUE FALSE

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SECTION 3 – Core content

1a – Describe the meaning of the term written below.

Hydraulic system - _____

_____ **(2 marks)**

1b – State whether the terms below relate to a hydraulic system **<u>or</u>** a pneumatic system.

Choose and circle the correct answer either **<u>hydraulic</u>** or **<u>pneumatic system</u>**.

- Pressurized liquid is used to change power from one form to another in a hydraulic system / pneumatic system.
- Pascal's law refers to the principle of a hydraulic system / pneumatic system.
- Dental drills use the principle of a hydraulic system / pneumatic system.

(3 marks)

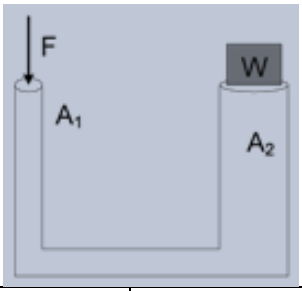
/ 5

2a – Describe the meaning of the compressibility of fluids.

_____

_____ **(2 marks)**

2b – The narrow piston area is 5 m^2 and the wide piston area is 50 m^2. If the force applied by the block is 1800 N, find the magnitude of force F to lift the block W. **(3 marks)**



Formula	Calculation

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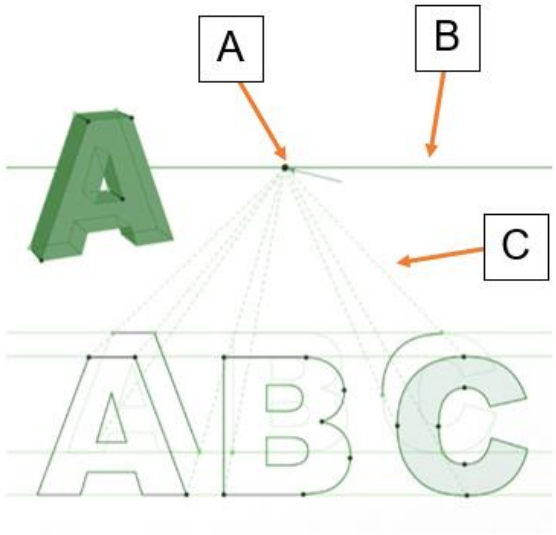
3a – Label each part of the drawing shown below. **(6 marks)**



A	
B	
C	

3b – What type of drawing is shown in the drawing in question 3a?

_____ **(2 marks)**

3c – Describe what Orthographic drawing is used for.

_____

_____ **(2 marks)**

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4a – Name the tool icons used in the software for designing your project. **(6 marks)**

	A	
	B	
	C	

4b – List two possible dimension tools –

Dimension tool 1 - _____

Dimension tool 2 - _____ **(4 marks)**

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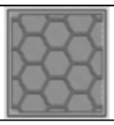
5 – Match the words with their definition or image. **(10 marks)** Write the matching letter in the correct box. The first one has been done for you.

COMPONENT	Symbol letter	SYMBOL / COMPONENT	
1. Save	F	To cause something to remain alone or apart from others.	A
2. Isolate		To adjust the size of an object.	B
3. Align			C
4. Scale			D
5. Refresh		To place or arrange something in a straight line.	E
6. Honeycomb			F

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TOTAL

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You have now finished the examination.