| Candidate | Centre | Candidate |  |
|-----------|--------|-----------|--|
| Name      | Number | Number    |  |
|           |        | 4         |  |



# **Entry Level**

725/05

# **GRAPHICAL AND MATERIAL STUDIES** (Core)

P.M. THURSDAY, 13 March 2008  $\frac{1}{2}$  hour

## **Examiner only**

| Total<br>Marks |  |
|----------------|--|

#### INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** the questions.

Underline the correct answer **or** sketch **or** write in the spaces provided in this booklet.

If you have difficulty in reading a question, put up your hand and the teacher-in-charge will read it to you.

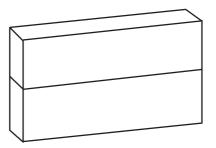
#### INFORMATION FOR CANDIDATES

Each question carries five marks.

### Answer all questions.

*Underline the correct answer* **or** *sketch* **or** *write in the spaces provided.* 

1. The joint shown below can be used in the Design and Technology room for joining Wood or Metal or Plastic.



The joint shown above is **one** (1) of the following:

- (a) Edge joint;
- (b) Butt joint;
- (c) Seam joint;
- (d) Flat joint.

Underline the correct answer.

[5]

2. The piece of equipment shown is used on a Drilling machine in the Design and Technology room.

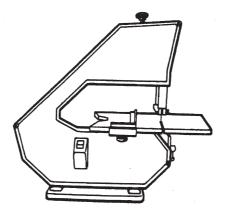


The piece of equipment shown above is **one** (1) of the following:

- (a) Key lock;
- (b) Drill lock;
- (c) Chuck key;
- (d) Twist key.

Underline the correct answer.

3. The mechanical saw shown below is used in the Design and Technology room.



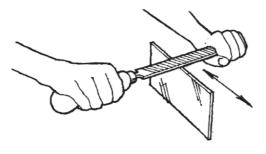
The mechanical saw shown above is **one** (1) of the following:

- (a) Band saw;
- (b) Circular saw;
- (c) Bow saw;
- (d) Hegner saw.

**Underline** the correct answer.

[5]

**4.** The method of cleaning up the edge of a piece of Metal and Plastic is shown below.



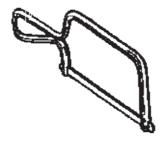
The method of cleaning the edge of the material is **one** (1) of the following:

- (a) edge filing;
- (b) sketch filing;
- (c) smooth filing;
- (d) draw filing.

**Underline** the correct answer.

[5]

**5.** The saw shown below is used in the Design and Technology room.



The saw shown above is **one** (1) of the following:

- (a) Tenon saw;
- (b) Hand saw;
- (c) Junior Hack saw;
- (d) Coping saw.

**Underline** the correct answer.

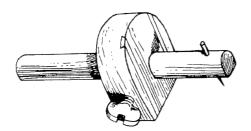
[5]

**6.** Pencil's are graded by the *hardness* or *softness* of the leads inside them.

On the line below, name **four** (4) types of Pencil lead and put them in the correct order of hardness.

[5]

7. The tools shown below are used for the same process in the Design and Technology room.





The tools shown above are used for **one** (1) of the following:

- (a) marking lines at right angles to an edge of the material;
- (b) copying shapes;
- (c) drawing circles;
- (d) marking lines parallel with the edge of the material.

Underline the correct answer.

[5]

**8.** Many different types of *holding devices* are used in the Design and Technology room.

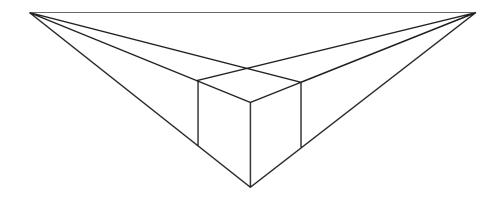
On the lines below name **three** (3) different types of *holding devices* that you have used in your coursework.

Holding device 1: [1]

Holding device 2: [2]

Holding device 3: [2]

**9.** The type of drawing shown below is often used when drawing pictures.



The type of drawing shown above is for **one** (1) of the following:

- (a) Two Point perspective drawing;
- (b) Isometric projection;
- (c) Orthographic projection;
- (d) Working drawing.

**Underline** the correct answer.

[5]

**10.** On the lines below, **complete** the sentence.

Abrasive paper is used for

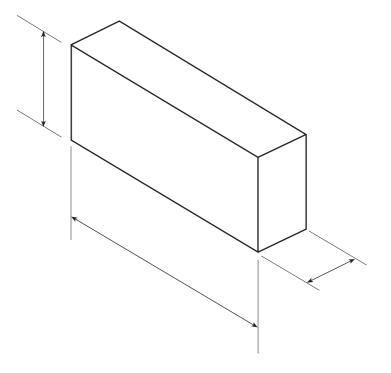
[5]

11. A piece of Metal is shown below.

Put the dimensions (sizes) in correct places on the dimension lines.

[2]

The dimensions (sizes) have been given at the bottom of the question.



NOT TO SCALE

L = 100 mm [1]

 $W = 25 \text{ mm} \qquad [1]$ 

T = 15 mm [1]

**12.** On the lines below, complete the following sentence.

| A Scale Drawing is |
|--------------------|
|                    |
|                    |
|                    |

[5]

13. Complete the sentences below about **materials**, using answers from the list below.

a type of glue; a type of man-made board; a type of finish;

a type of hinge; a type of plastic; a type of nail.

M.D.F. is \_\_\_\_\_\_[2]

A.B.S. is \_\_\_\_\_\_[3]

| 14. | This       | question is about types of finish you have used in your coursework.                 | rsework. |  |  |
|-----|------------|---|----------|--|--|
|     | (a)        | Name <b>one</b> (1) finish you have used.   | [1]      |  |  |
|     | (b)        | Complete the following sentence.  |          |  |  |
|     |            | I applied my chosen finish by   |          |  |  |
|     |            |   | [4]      |  |  |
| 15. |            | question is about planning your coursework.  plete the following sentence.          |          |  |  |
|     |            | itting list is  |          |  |  |
|     |            |   | [5]      |  |  |
| 16. |            | question is about personal safety when carrying out your coursework.                |          |  |  |
|     | On t       | he lines below, name <b>three</b> (3) pieces of Personal Protective Equipment (PPE) |          |  |  |
|     | <i>(a)</i> |   | [1]      |  |  |
|     | (b)        |   | [2]      |  |  |
|     | (c)        |   | [2]      |  |  |
|     |            |   |          |  |  |

| <b>17.</b> | This | question | is | about | using | the | Sanding | Disc | safely. |
|------------|------|----------|----|-------|-------|-----|---------|------|---------|
|------------|------|----------|----|-------|-------|-----|---------|------|---------|

On the lines below state **five** (5) safety rules which you **MUST** follow when using a Sanding Disc.

General safety rules will  ${\bf NOT}$  be accepted.

| (a) | [1]             |
|-----|-----------------|
| (b) | [1]             |
| (c) | [1]             |
| (d) | [1]             |
| (e) | Γ1 <sup>-</sup> |

**18.** In the space below **sketch** a Joint that you have used in your coursework. [5]

19. In the space below, sketch a Mallet or a Hammer you have used in your coursework. [5]

20. In the space below sketch a Chisel you have used in your coursework.