| Candidate Name |  |  |
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|  |  |  | ल $\stackrel{0}{\bar{\omega}}$ $\vdots$ 0 0 0 |  |  | $\stackrel{\text { ¢ }}{\substack{6 \\ \vdots}}$ |

1 Details are given about a sleeve to hold a cassette tape.

(a) The sleeve is made by folding the card shape given below. Add to the card shape:
(i) the fold lines;
(ii) the 'window'.


Card shape for making the cassette sleeve
Scale 1:1
(b) A number of problems have been found with the sleeve shown in part (a). The design shown below helps to overcome these problems.

(i) Explain why the change shown at X has been made.
$\qquad$
(ii) Give two reasons why this design would be more expensive to manufacture than the card sleeve shown in part (a).

Reason 1 $\qquad$
Reason 2 $\qquad$ [1]
$\qquad$
$\qquad$
$\qquad$

2 Shown below is a design for a card case to hold a compact disc (CD) 120 millimetres in diameter. The case is to be made from a single piece of card. The CD fits tightly into the case.
(a) Draw full size, a development (net) of the CD case.

The position for corner A is shown.
Clearly show all fold lines and glue tabs.
Clearly show all fold lines and glue tabs.
Use your judgement for the sizes of the case.
(b) It has been found that when CD cases are displayed in shops, people often open them and damage the CDs.

State two methods which would stop people easily opening the cases.
$\qquad$ [1]

2

3 Shown below is a design for a mobile which is to be used as part of an advertising campaign for a CD called HITS 01 .
The mobile is to be made from foamboard.

(a) Use a sketch and notes to show how two pieces of foamboard would need to be cut and joined to make the cross part of the mobile.
(b) (i) The stars are based on a regular hexagon, length of side 30 mm . Draw a full size view of a star which could be used in the production of a template.
(ii) State two ways in which the use of a template would improve the manufacture of the stars.
$\qquad$ 2 $\qquad$ _[1]
(c) Complete the block diagram to explain the stages in making the template and manufacturing four stars. Details should be given about the materials and equipment to be used.
$\qquad$
$\qquad$

4 Four school friends are in a band called 'The lllusions'. The freehand sketch below shows the band's logo. The final logo is to be drawn using a computer.
(a) Complete the drawing of the logo which has been started on the computer screen grid Use your judgement for the sizes which have not been given.
 complete the part of the design that you have produced in part (a)

Instructions for completing the logo design
$\qquad$
(c) Explain how the tone would be added to the computer generated drawing.
$\qquad$
$\qquad$
(d) The logo is to be used on a range of products including the packaging for an audio cassette tape, a T-shirt and promotional flyers.

State two advantages in having the logo design stored on a computer system when designing these products.

Advantage 1 $\qquad$

Advantage 2 $\qquad$
$\qquad$

5 The evaluation table below shows three possible methods for packaging an audio cassette tape.
Complete the table by: (a) comparing the three designs and stating their advantages and disadvantages against the given criteria headings of product protection, durability and environmental aspects;
(b) giving a reasoned choice on which would be the most appropriate design when evaluated against the given criteria.


| Most Appropriate Design |
| :--- |
| Chosen design |

Reasons for choice
$\qquad$


[^0]:    TIME 1 hour 15 minutes
    INSTRUCTIONS TO CANDIDATES
    Write your name, Centre number and candidate number in the spaces provided above and on the
    other sheets.
    Answer all questions in the spaces provided.
    All diagrams should be drawn accurately unless otherwise stated. Drawing aids may be used. Colour
    or shading should only be used if asked for in the question. Use your discretion where dimensions are
    NFORMATION FOR CANDIDATES
    The number of marks is given in brackets [ ] at the end of each question or part question.
    Dimensions are in mm unless stated otherwise.
    Marks will be awarded for the use of correct conventions.
    Marks will be awarded for the use of correct conventions.
    Total marks for this paper is 50 .

