FORM 2 DESIGN & TECHNOLOGY TIME: 2 hours

Name: ___________________________ Class: _______________

--- Note to student: ---------------
You are required to answer all questions

---

<table>
<thead>
<tr>
<th>Areas corrected</th>
<th>Marks for Written Exam.</th>
<th>Marks for Design Folio</th>
<th>TOTAL</th>
<th>FINAL MARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>RM</td>
<td>E</td>
<td>F</td>
<td>T</td>
</tr>
<tr>
<td>Max. Marks</td>
<td>20</td>
<td>-</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Student’s mark</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enter student’s mark obtained in every area of study in the above table. D for Design, F for Food technology and T for Textiles technology
1. Complete the diagram in Figure A by placing the following stages in the proper sequence. One stage has been given.

- Chosen idea
- Initial ideas
- Development
- Design brief
- Research
- Planning
- Making
- Specifications
- Testing and Evaluation

![Diagram](image)

Figure A

½ mark x 9 = 4 ½ marks

2. Underline the keywords in the following design briefs.

   i) Design and make a healthy snack for 11 to 16 year old students to be sold in a secondary school tuck shop.

   ii) Design and make a mobile pocket to be distributed as a gift.

½ mark x 5 = 2 ½ marks
3. Choose ONE of the design briefs from question 2 and answer the following questions.

a. In order to complete your design brief you need to do research. Mention TWO sources from which you can get information.
   i. ________________________________
   ii. ________________________________

   \( \frac{1}{2} \text{ mark} \times 2 = 1 \text{ mark} \)

b. Mention FOUR specifications that should be considered.
   i. ____________________________________________
   ii. ____________________________________________
   iii. ____________________________________________
   iv. ____________________________________________

   \( \frac{1}{2} \text{ mark} \times 4 = 2 \text{ marks} \)

c. In the space provided below, draw sketches of one idea for your chosen design brief. Add colour, and notes to your sketch.

   5 marks

d. During the design process you are advised to prepare a minimum of three ideas. Explain how you would choose the best idea.

   ____________________________________________
   ____________________________________________
   ____________________________________________

   2 marks
4. A model is sometimes needed during the developmental stage.
   
   a. State TWO reasons why a model is sometimes needed.
      
      i. __________________________________________________________
      ii. __________________________________________________________
      
      \( \frac{1}{2} \text{ marks x 2 = 1 mark} \)

   b. Mention TWO materials that can be used to make a model.
      
      i. __________________________________________________________
      ii. __________________________________________________________
      
      1 mark x 2 = 2 marks

SECTION B: FOOD

5. Place the following foods in the correct place on the Healthy Food Pyramid.

   ▪   Apples   ▪   meat   ▪   ice-cream   ▪   bread   ▪   cabbage
   ▪   nuts   ▪   milk   ▪   pasta   ▪   butter   ▪   yoghurt

   1 mark x 10 = 10 marks
6. Certain food can cause problems such as obesity. Suggest TWO healthy packed lunches you could bring with you to school.

i. ____________________________________________________________________________

ii. ____________________________________________________________________________

1 mark x 2 = 2 marks

7. Name the following equipment.

1 mark x 6 = 6 marks

8. Match by using numbers the following statements with their appropriate endings.

<table>
<thead>
<tr>
<th></th>
<th>Raw and cooked food should not be stored together because</th>
<th>between 5°C to 63°C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The danger zone for food is</td>
<td>to maintain its temperature, there must be a circulation of air.</td>
</tr>
<tr>
<td>2</td>
<td>Food will be at its best quality until</td>
<td>its ‘Use By’ date.</td>
</tr>
<tr>
<td>3</td>
<td>The fridge should never be overstocked as</td>
<td>bacteria on raw food can be transferred on ready-to-eat food.</td>
</tr>
<tr>
<td>4</td>
<td>Never consume a product after</td>
<td>its ‘Best Before’ date.</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 mark x 5 = 5 marks
9. A meal consisted of: chicken breast, spinach, scrambled egg, boiled potatoes and a glass of orange juice.
Match the food products according to the type of the main nutrient that each one contains.

   i. Proteins: __________________________________________________________

   ii. Carbohydrates: ____________________________________________________

   1 mark x 5 = 5 marks

10. Students are encouraged to bring their school lunch in a food plastic container.
Give TWO advantages of using such a container.

   i. _________________________________________________________________

   ii. _________________________________________________________________

   2 marks x 2 = 4 marks

11. Complete the statements below to follow the dietary guidelines.

   a. I can improve my diet by eating more food containing______________.

   b. I can improve my diet by eating less food containing ____________,
      ____________, and ____________.

   1 mark x 4 = 4 marks

12. From the given foods below underline the products which are produced by a biotechnological process.

    Wine, baked beans, cheese, green peas, bread, yoghurt, juices.

    1 mark x 4 = 4 marks

SECTION C: TEXTILES

13. Give the specific names of TWO natural fibres used in textile products.

    a) ____________________________  b) ____________________________

    1 mark x 2 = 2 marks

14. Sheep are used to produce wool. Name THREE other animals which are used to produce wool as a textile fibre.

    a) ____________________________  b) ____________________________  c) ____________________________

    1 mark x 3 = 3 marks
15. Fasteners are often found in textile products. Fill in the table below by using the following terms.
   Hooks and eyes, Buttons, Zip, Press studs, Velcro.

<table>
<thead>
<tr>
<th>FASTENERS</th>
<th>PICTURE</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Picture]</td>
<td>[Picture]</td>
<td>[Picture]</td>
</tr>
</tbody>
</table>

1 mark x 5 = 5 marks

16. Give ONE reason why fabric made from cotton fibres is often used to make jeans.


2 marks

17. Give TWO safety rules that should be followed when using a sewing machine.
   a) 
   b) 

2 marks x 2 = 4 marks

18. Give ONE reason why it may be necessary to neaten the edge of a seam allowance.

2 marks
19. Name TWO non-woven fabrics commonly used in textile products.
   a) ___________________________  b) ___________________________
   2 marks x 2 = 4 marks

20. Give the name of the hand tool you would use to cut Denim (Jeans).
    __________________________________________
    2 marks

21. List THREE tasks which can be done with an electric iron.
   a) ___________________________
   b) ___________________________
   c) ___________________________
   2 marks x 3 = 6 marks

   a) ___________________________
   b) ___________________________
   c) ___________________________
   2 marks x 3 = 6 marks

23. Explain what is meant by the terms One-off production system and Mass production.
    One-off production: ____________________________________________
                       ____________________________________________
                       ____________________________________________
                       ____________________________________________
    Mass production: ____________________________________________
                       ____________________________________________
                       ____________________________________________
                       ____________________________________________
    2 marks x 2 = 4 marks