FORM 2 DESIGN AND TECHNOLOGY TIME: 2 hrs

Name: ___________________________ Class: ____________

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--------------------------- Note to student: -----------------------------

You are required to answer all questions

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FOR TEACHERS’ USE ONLY DISTRIBUTION OF MARKS

<table>
<thead>
<tr>
<th>Marks for Written Exam.</th>
<th>Marks for Design Folio</th>
<th>Marks for Making Skills</th>
<th>TOTAL</th>
<th>FINAL MARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Marks</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>Student’s mark</td>
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SECTION A: TEXTILES

It was noticed that most school children are bringing their P.E. kit in their school bag or in a plastic bag. You were asked by your P.E. teacher to design and make a textiles artefact to solve this problem.

1. In the space provided below, sketch TWO initial ideas for the given design brief. Enhance your sketches by adding colours. Your sketches must be clear, indicating material used, fastening methods, approximate sizes and aesthetic (decorations) features.

   IDEA 1

   IDEA 2

5 marks x 2 = 10 marks

2. Name TWO characteristics that a fabric must have for the production of your artefact. Give one reason for each characteristic.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Reason</th>
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3 marks x 2 = 6 marks
3. In the table below suggest and sketch TWO other ideal fasteners, apart the ones mentioned in question 1, which can be used for your artefact.

<table>
<thead>
<tr>
<th>Fastener name</th>
<th>Sketch</th>
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</table>

3 marks x 2 = 6 marks

4. Name the tool you would use for cutting fabrics and give one safety precaution that should be observed.

Tool: _____________________________________________

Safety precaution: __________________________________

2 marks

5. Name and describe TWO methods by which you can produce the school logo on your artefact.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
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<tbody>
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</tbody>
</table>

3 marks x 2 = 6 marks

6. Name the tools you will require to apply the Bond-a-web to join pieces of fabrics.

a. _____________________________

b. _____________________________

2 marks x 2 = 4 marks
7. a. In the space provided below explain by means of a sketch the Plain Weave. You may use colours to enhance your sketch.

   ![PLAIN WEAVE](image)

   6 marks

   b. On your diagram indicate the following:
      i. The selvedge
      ii. The warp threads
      iii. The weft threads

   2 marks x 3 = 6 marks

8. Name TWO non-woven fabrics commonly used in textiles products.

   a. ____________________________  b. ____________________________

   2 marks x 2 = 4 marks

SECTION A: FOOD

Students in your school do not always bring a packed lunch with them to school but buy food from the school canteen. Staff from the school is running the canteen but they want students to suggest original ideas of different healthy snacks.

9. Give ONE example of how you would gather information on the type of snacks students like to buy.

   ____________________________________________________________

   ____________________________________________________________

   2 marks
10. Name THREE factors that may affect the type of food students choose to buy.
   a. ____________________________
   b. ____________________________
   c. ____________________________  
      1 mark x 3 = 3 marks

11. List the FOUR dietary guidelines that should be taken into consideration when preparing the
    snacks.
   a. ____________________________
   b. ____________________________
   c. ____________________________
   d. ____________________________  
      1 mark x 4 = 4 marks

12. Suggest TWO hand held healthy snacks that could be sold at the school canteen.
   a. ____________________________
   b. ____________________________  
      2 marks x 2 = 4 marks

13. Complete the table below to describe the two snacks you suggested in question no. 12.
    An example is given.

    | Characteristics |
    |-----------------|
    | **Name of the suggested snacks** | **Appearance** | **Texture** |
    | eg. ricotta closed toast | golden | crisp |

   1 mark x 6 = 6 marks

14. State TWO nutrients found in your suggested snacks and give the main function of each.
15. Explain how you would develop your snacks to suit students coming from different cultures.
________________________________________________________________________
________________________________________________________________________
1 mark

16. Identify THREE points that you should consider to ensure food safety and hygiene during food preparation.
   a. ________________________________________________________________
   b. ________________________________________________________________
   c. ________________________________________________________________
1 mark x 3 = 3 marks

17. A manufacturer wants to develop a new product using the basic recipe of yoghurt. You are asked to help in the design of this new product.

Write down the tools and equipment needed for making yoghurt. One of the equipments is given.

<table>
<thead>
<tr>
<th>List of tools and equipment</th>
<th>eg. Food probe</th>
</tr>
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<tbody>
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</table>

1 mark x 6 = 6 marks

18. Continue the following exercise taking into consideration food safety in making yoghurt.

Check the _______________ on the milk and yoghurt.

Keep milk and yoghurt in the _______________ until needed.

_________________________ all tools and equipment to be used.

Put vacuum flask in the fridge after 3 hours to slow the growth of _______________.

1 mark x 4 = 4 marks

19. Name the TWO important factors in the process of making yoghurt.
20. Identify the FOUR conditions required for the growth of bacteria.
   a. ____________________________
   b. ____________________________
   c. ____________________________
   d. ____________________________ 1 mark x 4 = 4 marks

21. Why is yoghurt considered as a high risk food?
   ___________________________________________ 1 mark

22. Where should we store high risk food?
   ___________________________________________ 1 mark

23. Tick the type of date that yoghurts are given.
   □ Use by           □ Best before ½ mark

24. State the mineral found in yoghurt.
   ____________________________ ½ mark

25. What is the effect in the body of the mineral mentioned in question 24.
   ___________________________________________ ½ mark

26. What is the process of yoghurt making called?
   ___________________________________________ ½ mark

27. Name THREE other foods produced by the process mentioned in question 26.
   a. ____________________________
   b. ____________________________
   c. ____________________________ 1 mark x 3 = 3 marks