FIRST TERM MARKING SCHEME

SUBJECT: PRE-TECHNICAL SKILLS

CLASS: JHS 3

SECTION A [40 marks]

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| 1. B | 6. D | 11. A | 16. B | 21. C | 26. B |
| 2. B | 7. D | 12. C | 17. A | 22. C | 27. A |
| 3. D | 8. B | 13. B | 18. A | 23. C | 28. B |
| 4. A | 9. B | 14. B | 19. C | 24. A | 29. C |
| 5. B | 10. D | 15. D | 20. B | 25. B | 30. C |

SECTION B

1. (a) (i) Deep frying, Shallow frying, Drying frying. [2 marks]

 (ii) Rice, Wheat [1 mark]

 (iii) - Lack of fibre in deit, - Low intake of fruits or water. [3 marks]

 (b) (i) - Colours are attractive - Colours add beauty to artefacts

 - Colour communicate events [4 marks]

 (ii) - Colours bring out designers artpiece - Colour helps to make a design unique [3 marks]

 (c) (i) Transistor [1 mark]

 (ii) Aluminium is a good conductor of heat. [3 marks]

 (iii) It depicts the true nature of a landscape. - It shows the true nature of a scene

 [2 marks]

 (iv) A light emitting diode (L. E. D) [1 mark]

2. (a) (i) - Any substance that is used to make an artifact by forming part of the components of the artifact. - Any component of an artifact [2 marks]

 - Any substance that becomes part of an artifact or a product.

 (ii) Metal, Wood, Plastic, Aggregates, Abrasive, Adhesive, Finish etc [2 marks]

 (iii) Sand, stone, Gravels [2 marks]

 (b) (i) - Any metal that contains iron and carbon as basic elements.

 - Any metal that can rust [2 marks]

 (ii) Cast iron, Wrought iron, Pig iron, Low carbon steel [2 marks]

 (iii) - Cast iron is used to make car engine block

 - Cast iron is used to make the body of a hand sewing machine

 - Cast iron is used to make the sole of woodwork metal plane. [4 marks]

 (iv) 3.5% [1 mark]

 (c) (i) Crude oil, Coal, Animal, Plant. [2 marks]

 (ii) Thermoplastic - Nylon, PVC, Acrylic [3 marks]

 Thermosetting plastics – Urea fomaldehyte , polyester resin, epoxy resin [3 marks]

 (iii) It is used to make the front cover of clocks and wrist watch. [2 marks]

3. (a) (i) - Plastics fade with time - Plastic losses its elasticity and flexibility with time

 - Plastic product waste is a nuisance as it does not decompose.

 - Plastics cannot support weights beyond some level. [4 marks]

 (ii)

 [5 marks]

 (iii) It is used to flush or dress mortar joints during - walling plastering and rendering. [2 marks]

 (iv) Firmer chisel, Bevelled edge firmer chisel, mortise chisel. [3 marks]

 (v) - Sharpen the cutting edge when blunt

 - Grind cutting edge when damaged

 - check the state of the ferrule before use. [4 marks]

 (b) (i) - It prevents the handle from splitting during striking with the mallet.

 - It prevents the tang from splitting the handle during striking [2 marks]

 (ii) - Mallet will not impact heavily on the wooden handle to cause splitting but hammer can do.

 - It is because mallet is the appropriate striking tool for the chisel.

 - It is a principle of using the appropriate tool for the appropriate job. [3 marks]

 (iii) It prevents bending of the blade such as to ensure accurate cutting.

 It makes the blade stiff. [2 marks]

4. (a) (i) Try square is used to check for the squareness on wood work whilst builder’s square is used to check for the squareness of the corners of a wall. [2 marks]

 (ii) When the cutting edge is damaged [2 marks]

 (iii) To make the blade stiff during cutting.

 (b) (i)

 [5 marks]

 (ii) It is used to hold mortar temporarily during plastering rendering or walling. [2 marks]

 (iii) Fishing net, Tooth brush bristles, Rope, synthetic fibre [3 marks]

 (iv) Water hose, electric cable insulation, pipes, water tanks (reservoirs) [3 marks]

 (c) (i) They do not contain iron and carbon. [3 marks]

 (ii) - It is cheap

 - It is easy to produce in large volumes.

 - It can be produced in different colours

 - Plastics need no final finish or coating. [3 marks]