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<th>KOD/NAMA KURSUS :TC 5012 – PENULISAN ILMIAH</th>
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<td>TARIKH : 5 Februari 2003</td>
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<td>MASA : 2 1/2 JAM SAHAJA</td>
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<tr>
<td>TEMPAT : SEKOLAH SISWAZAH</td>
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</tbody>
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ARAHAN

1. Kertas ini mengandungi ENAM BELAS (16) soalan BAHAGIAN A dan DUA (2) soalan BAHAGIAN B di dalam SEBELAS (11) halaman bercetak termasuk muka hadapan.
2. Anda dikehendaki menjawab SEMUA BAHAGIAN soalan
3. Semua jawapan hendaklah ditulis di atas KERTAS JAWAPAN yang disediakan di dalam kertas soalan.

NO MATRIK :

(PERKATAAN) 

NO KAD PENGENALAN :

KUMPULAN :

JANGAN BUKA SOALAN SEHINGGA DIBERITAHU
PART A
Answer all questions given below

1. What is the purpose of technical writing? [2 marks]

2. List down five (5) common mistakes in writing [5 marks]
   a) ..............................................................................
   b) ..............................................................................
   c) ..............................................................................
   d) ..............................................................................
   e) ..............................................................................

3. Fill in the blanks within the statement given below [3 marks]
The data in technical data can be measured, observed, ................., ................., and ..................

4. From questions number three (3), explains only three (3) attribute in technical data. [6 marks]
   a) ..............................................................................
   b) ..............................................................................
   c) ..............................................................................

5. What is the purpose of angle bracket in punctuations? Give an example to show the usage of angle bracket. [4 marks]
   ..............................................................................
   ..............................................................................
   ..............................................................................
6. Arrange the following four references in the correct APA form for a List of References.

a) A book called Java Programming Language written by Cay Horstmann, Stephen Ang, Dr. Kamarah Sulaiman and Karen Smith and published by O’Reilly Company in Mahattan, USA, with a copyright date of 2002. [2 marks]

b) An article by Hamidah Omar entitled Software Piracy, published in the January 2003 issue of the magazine Jaring, and appearing on page 143 of volume 4. [2 marks]


7. Rewrite the following short selection to make it clear and more readable. Correct any writing mistakes that you spot.

a. Each quotations of a new computer is specified with a processor name, the type of Random Access Memory (RAM) (SDRAM, RD RAM, DDR RAM) needed; the load of hardisk; and, if SDRAM, the price is more cheaper than DDR RAM. [4 marks]

b. Too many visuals, or visuals that are crowded with too much information, create “visual noise”. Tufte and Gorin (1990, p.34) said that “people have easy time processing visuals, but not if the chart, graph or other visual is so crowded or disorderly that it cannot be understood. Experts refer to this as chartjunk: too many bells and whistles at the expense of readable, credible visual information”. Thus keep your design simple and elegant. [4 marks]
8. List two (2) characteristics of a controlling sentence. [4 marks]
   a) ........................................................................................................
   b) ........................................................................................................

9. List only four (4) items, when we should use visuals [4 marks]
   a) ........................................................................................................
   b) ........................................................................................................
   c) ........................................................................................................
   d) ........................................................................................................

10. List three (3) types of visual in technical writing and explain two (2) of it. [6 marks]
    List
    a) ........................................................................................................
    b) ........................................................................................................
    c) ........................................................................................................

    Explanations
    a) ........................................................................................................
11. Indicate whether each of the following statements is a fact (F), an inference (I) or an opinion (O) by placing the appropriate letter in front of it. [5 marks]

a) The Pentium IV processor will replace Pentium III because they more faster.
b) Nowadays, Pentium IV processor has a mixture total speed of 2.0 Ghz and 2.2 Ghz.
c) Pentium IV processor has a real value!
d) It is easy to distinguish Celeron, Pentium III and Pentium IV processors.
e) A study by National University research team found that Pentium III last approximately 2 to 3 years and Pentium IV last up 5 years.

a) ........
b) ........
c) ........
d) ........
e) ........

12. What is a diagram (you may also sketch the chart)? Why would you use diagram chart in your writing? What can it shows? [5 marks]
13. The term planning in writing process encompasses **four tasks** that first part planning in drafting essay. The tasks are... [4 marks]

a)  

b)  

c)  

d)  

14. What is the outline. What outline can help you do? [4 marks]

15. Explain in detail what is the analytical report? [4 marks]
16. Read the vague and general phrases listed below. In the blanks provided, rewrite the phrase by using expanded, specific information so the reader can visualize a more precise and vivid image. As needed, invent weights, quantities, and so forth. [6 marks]

i) A high rate of data transmitting

ii) Speed of paper out for printers

iii) Highest storage of Random Access Memory (RAM)
PART B
Answer all questions given below

1. Write a summary of this passage that would help readers to read less. Try to limit the summary no more than 100 words. [12 marks]

The researchers have built working 64-bit memories using what they call nano-imprint lithography. First, an array of parallel platinum wires are formed in a master mold that is created using electron beam lithography. Then a single layer of electronically switchable molecules is deposited on the surface of the wires, and finally another grid of wires is molded at right angles to the first, creating a sandwich.

The junctions where the wires intersect are no bigger than a square micron, and no more than 1,000 molecules sit between them. (By contrast, a human hair is 75 microns in diameter.) Yet each can be addressed individually, using previously designed techniques, and it is possible to read and write digital ones and zeros at each wire junction by electronically changing the properties of the molecules.

Ultimately the goal is to scale the wires to ever finer dimensions and use fewer and fewer switching molecules. Dr. Williams said the researchers now believe that the fundamental limits of the technology could be wires that are two nanometers in width — a single atom wide — spaced 10 nanometers apart. Such a device would achieve storage densities of one trillion bits of information per square centimeter. Current semiconductor memories can store about half a billion bits per square centimeter.

The researchers said they were pushing to meet a challenge set out by the Defense Advanced Research Projects Agency, known as Darpa, the Pentagon arm that is financing a number of research teams with the goal of being able to build 16,000-bit memories by 2004.

The Hewlett-Packard researchers said today that they believed that they would be able to scale their manufacturing technique to meet the challenge.

"To achieve the Darpa challenge we need to improve the pitch of our wires by a factor of two and double the number of wires each year," said Dr. Williams. "We're definitely on track to do that."

He said his laboratory had been working with electron beam experts at Lawrence Berkeley Laboratories to refine the capabilities of the electron beams that are used in making the wire molds used to make the circuits.
2. Critique the visual below. Does it convey the information effectively? Would a different type of visual be more effective? If yes, draw a new visual. [8 marks]