

Answer the following questions:

Question 1 (15 marks):

- Mention only 8 of abstract words to be avoided in technical writing. (4 marks)
- What are the main sections of the engineering report? Show diagrammatically the elements of each section, and arrange them consecutively. (6 marks)
- Mention the different types of technical report, and what does evaluation report means? (5 marks)

Question 2 (15 marks):

- Mention the advantages and disadvantages of both Harvard and numerical referencing? (4 marks)
- Experiments were executed by a group of students to investigate how motor engine speed was changed by varying fuel consumption rate. In each run, both the engine speed and fuel were measured. It was observed from experiments that the rate of fuel consumption was increased with increasing engine speed.

Change Passive voice into active voice in the above paragraph. (4 marks)

- c. Complete the following:

- The abstract of an engineering report should include

- | | |
|---------|---------|
| 1. | 2. |
| 3. | 4. |

And its properties are:

- | | | |
|---------|-----------|-----------|
| 1....., | 2-, | 3-..... |
| 4-..... | | (7 marks) |

Question 3 (15 marks):

- a) Put the appropriate mark opposing the following sentences √ or X.

Correct the wrong ones and rewrite it in your answer sheet

- 1 - Major section of the report begins on a new page. ()
- 2- The abstract is written last and should not appear on a separate page. ()
- 3- The main text of the report is numbered using the roman numerals. ()
- 4- Headings cannot be differentiated using bold type, size and italics. ()
- 5-All figures and tables within the text should be labeled in bold with the appropriate consecutive number. ()
- 6-The contents of the conclusion are linked to the introduction. ()
- 7- The conclusion places results with introducing new materials. ()
- 8- Equations should be numbered consecutively as they appear, with roman numerals in parentheses. ()
- 9- Creates a non-alphabetical reference list at the end of the text is a disadvantage of Harvard referencing. ()

10- A recommendation report tells whether a project is practical and technologically possible. ()

(9 marks)

b. The good writing introduction includes

- 1- 2- 3-
4- 5- 6-

(6 marks)

Question 4 (15 marks):

a. Rewrite the followings references correctly:

1. Lee, D. Y., Park, S. J., and Ro., S. T., "Heat transfer in the thermally region of laminar pulsating pipe flow", Journal of Fluid Mechanics, 2003,
2. E. A. M. Elshafei, May, pp. 2233-2242 (2007), Elsevier, England, "Effect of Flow Bypass on the Performance of a Shrouded Longitudinal Fin Array", *J. Applied Thermal Engineering*, 27.

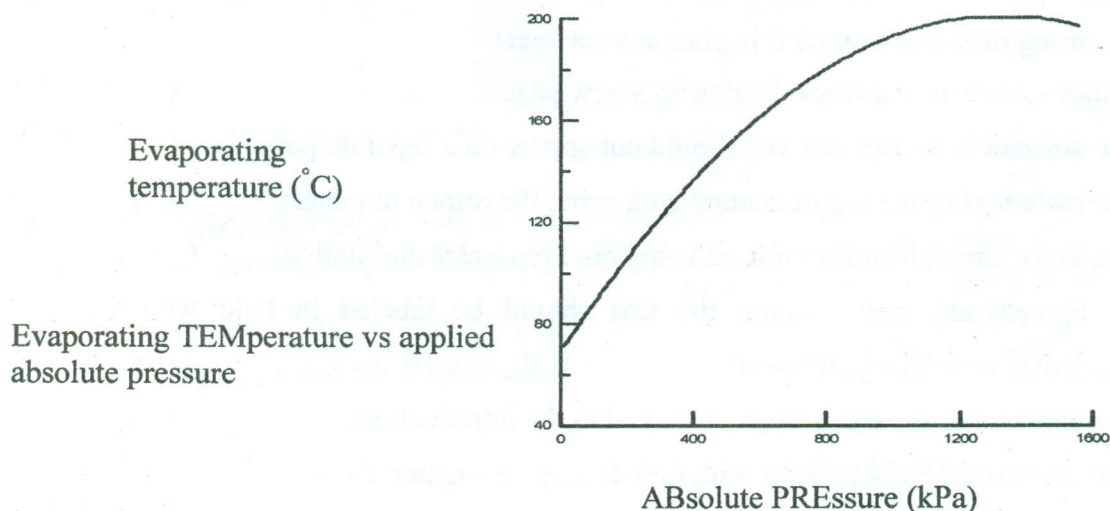
(4 marks)

b. In conclusions of a scientific report, what are the important materials which must be included? (5 marks)

c. How many errors can you spot on the following table and figure?

| X/D | Reynolds number =10853 | Re=13346 | REYNOLD=16795 |
|--------|---------------------------|----------|---------------|
| 0.50 | 0.960 | 0.94740 | 1.010 |
| 1.01 | 0.9703 | 0.952 | 1.02 |
| 2.0000 | 0.960 | 0.944 | 1.040 |
| 3.5000 | 0.9706 | 0.9240 | 1.0111 |
| 4.60 | 0.950 | 0.94045 | 0.990 |
| 6.3000 | 0.950 | 0.935 | 1.005 |

Table1: Values of Nusselt number versus dimensionless Distance at Different Values of REYNOLDS number



(6 marks)

Good Luck
Assoc. Prof. E. Elshafei