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Answer Sheet No. 87 87

Sig. of Candidate. \_\_\_\_\_

Sig. of Invigilator. \_\_\_\_\_

**APPLIED SCIENCES HSSC-II**  
**SECTION – A (Marks 10)**

**Time allowed: 10 Minutes**

**NOTE:** Section–A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 10 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

**Q. 1** Circle the correct option i.e. A / B / C / D. Each part carries one mark.

- (i) Which one of the following memory are needed to recharge frequently with electricity?
- |                 |                          |
|-----------------|--------------------------|
| A. SRAM         | B. DRAM                  |
| C. Flash memory | D. SRAM and Flash memory |
- (ii) The dpi used to measure the image quality of printer, refers to:
- |                        |                     |
|------------------------|---------------------|
| A. Decimeter per inch  | B. Decibel per inch |
| C. Decibel per instant | D. Dot per inch     |
- (iii) Laser are responsible to bond particles of toner to paper by:
- |            |  |
|------------|--|
| A. Heat    | B. Pressure  |
| C. A and B | D. Mutual cohesive force of particles with the paper |
- (iv) The actual manipulation of data takes place in:
- |              |                          |
|--------------|--------------------------|
| A. Hard disc | B. Arithmetic Logic Unit |
| C. Key board | D. Mouse                 |
- (v) Which one is true?
- |   |                        |
|---|------------------------|
| A. The CPU cannot find any piece of data in RAM   | B. RAM is non-volatile |
| C. When power is off, RAM's content does not lost | D. RAM is volatile     |
- (vi) The approximate value of Gigabyte:
- |              |              |
|--------------|--------------|
| A. $10^6$    | B. $10^9$    |
| C. $10^{12}$ | D. $10^{-6}$ |
- (vii) Which one is true?
- |                           |  |
|---------------------------|--|
| A. Mold is unicellular    | B. Mold and yeast are two forms of fungi |
| C. Yeast is multicellular | D. Spores can be easily destroyed        |
- (viii) The device which changes energy from one form to another form is:
- |               |               |
|---------------|---------------|
| A. CRT        | B. Resistance |
| C. Transducer | D. Electrodes |
- (ix) Which one is true?
- |   |   |
|---|---|
| A. Laser radiation is non-monochromatic       | B. Laser radiation is non-coherent              |
| C. Laser beam cannot be absorbed and coherent | D. Laser radiation can be absorbed and coherent |
- (x) The correct formula for Maximum Permissible Dose (MPD) is:
- |                    |                  |
|--------------------|------------------|
| A. $5(N-18)$ Rads  | B. $5(N-3)$ Rads |
| C. $10(N-18)$ Rads | D. $2(N-6)$ Rads |

**For Examiner's use only:**

**Total Marks:**

**10**

**Marks Obtained:**



# APPLIED SCIENCES HSSC-II

88

Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

**NOTE:** Answer any twelve parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

## SECTION – B (Marks 24)

**Q. 2** Answer any TWELVE parts. The answer to each part should not exceed 2 to 4 lines. (12 x 2 = 24)

- (i) Write few lines about CPU.
- (ii) Write five essential techniques for using a mouse.
- (iii) Write three common variants of the mouse.
- (iv) Write uses of optical input devices.
- (v) Write four features during comparison of monitors.
- (vi) List five types of high quality printing devices used in business.
- (vii) What is flash memory and where it is used?
- (viii) What is main difference between DRAM and SRAM?
- (ix) Write the difference between "RAM and ROM".
- (x) Write types of "RAM".
- (xi) Define potential and potential difference.
- (xii) Define centripetal and centrifugal force with example.
- (xiii) Define capacitor and inductor with their respective unit.
- (xiv) What is "Electro Dynamic Principle".
- (xv) Define Macro and Micro shock.
- (xvi) Write the names of five different units used to measure radiation.

## SECTION – C (Marks 16)

**Note:-** Attempt any TWO questions. All questions carry equal marks.

(2 x 8 = 16)

- Q. 3**
- (a) Write the types of ionizing radiation.
  - (b) Write late effects of radiation.
- Q. 4**
- (a) Write a short note on computer and CPU.
  - (b) Write note on software and hardware of computer.
- Q. 5**
- (a) Write a short note on "Ultrasound".
  - (b) Write clinical applications of "Ultrasound".