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Answer Sheet No. \_\_\_\_\_

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

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

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# 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) The type of memory which can store content after the power is off and used in digital cameras is:  
A. DRAM      B. SRAM      C. Flash Memory      D. Both A and B
- (ii) Which one of the following relates to the two parts of CPU?  
A. Control unit and soft ware      B. Control unit and hard disk  
C. Control unit and USB      D. Control unit and ALU
- (iii) Which one is true?  
A. Ink jet printers have high resolution than laser printer.  
B. Ink jet printers are available only for black and white printing.  
C. Laser printers are available for only colour printing.  
D. Ink jet and laser printers both are non impact printer having black & white and colour printing.
- (iv) Which one of the following printer is impact printer?  
A. Dot matrix printer      B. Ink jet printer  
C. Laser printer      D. Snap shot printer
- (v) CRT monitor stand for:  
A. Central ray tube monitor      B. Cathode ray tube monitor  
C. Calibrated ram tube monitor      D. Cathode ray terminology monitor
- (vi) Which one of the following statement is true?  
A. RAM does not store data and programme.  
B. ROM is volatile.  
C. SRAM does not need to be recharged and hold its content longer.  
D. DRAM chips also does not need to be recharged.
- (vii) Which one of the following expression is CORRECT relating to Einstein's equation?  
A.  $m = \frac{E}{C}$       B.  $E = \frac{C^2}{m}$       C.  $E = \frac{m}{C^2}$       D.  $\frac{1}{m} = \frac{C^2}{E}$
- (viii) Which one of the following unit is used to measure the capacitance of a capacitor?  
A. Rem      B. Farad      C. Roentgen      D. Joule
- (ix) Radiation measuring instruments are calibrated in:  
A. Rem      B. Rad      C. Curie      D. Roentgen
- (x) What does the triple "MMM" safety stand for?  
A. Material man and maintenance      B. Man material and medicine  
C. Man Machine and maintenance      D. Man machine and material

**For Examiner's use only:**

Total Marks:

10

Marks Obtained:





# APPLIED SCIENCES HSSC-II

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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 a few lines on central processing unit of computer.
- (ii) Define the term "CISC and RISC".
- (iii) Write few factors which affect processing speed.
- (iv) Write the types of "RAM".
- (v) Write the main parts of central processing unit of computer.
- (vi) What is the difference between "RAM and ROM"?
- (vii) What is the function of ALU in computer?
- (viii) What is the text code system in computer?
- (ix) How printers of computer are evaluated?
- (x) How does laser printer work?
- (xi) What do you mean by chronic disease?
- (xii) Write effects of ultrasound.
- (xiii) Write five units used to measure radiations.
- (xiv) Write three parts of earthling system.
- (xv) If a consumer has a total load of 2200 watts at 220 volts. What will be its leakage current limit?
- (xvi) Write two mathematical formula of power, using ohm's law?

## SECTION – C (Marks 16)

**Note: Attempt any TWO questions. All questions carry equal marks. ( 2 x 8 = 16 )**

- Q. 3**
- a. Explain "Mutual Induction"
  - b. Write a note on "Electric Shock hazard".
- Q. 4**
- a. Write types of storage devices of computer and how does magnetic storage device work?
  - b. How do dot matrix printers work?
- Q. 5**
- a. Write a short note on modern atomic structure of an atom.
  - b. Write a short note on (GFCI) i.e "Ground Fault circuit interrupter".

