

Roll No. 

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

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) The regulations for avoidance of hazards that have been proven by research and experienced to be harmful to health and safety are called \_\_\_\_\_
- A. Rules  
B. Laws  
C. Standards  
D. None of these
- (ii) Anything that has potential to cause harm is called \_\_\_\_\_
- A. Hazard  
B. Risk  
C. Danger  
D. None of these
- (iii) What is called the subject matter of Patient safety?
- A. M.M.M. Safety  
B. Occupational safety  
C. Occupational health and safety  
D. All of these
- (iv) What are the types of hazards to be faced in hospital?
- A. 5  
B. 7  
C. 10  
D. 3
- (v) What is called the current which changes its magnitude and direction?
- A. Alternating Current  
B. Direct Current  
C. Risk Current  
D. Variable Current
- (vi) Which of the following is called the most power computer?
- A. Super-computer  
B. Mainframe  
C. Work station  
D. Minicomputer
- (vii) What is the unique use of Mainframe computers?
- A. For complex calculations  
B. For access to programs and to share data by many users  
C. Have multiple terminals  
D. Product design and animation
- (viii) Which of the following hardware should be ergonomically correct to avoid injuries?
- A. CPU  
B. Monitor  
C. Keyboard  
D. Printer
- (ix) Which of the following is **NOT** variant of the mouse?
- A. Trackballs  
B. Track Pads  
C. Joy stick  
D. None of these
- (x) Which of the following hardware keeps the memory units inside?
- A. Printer  
B. CPU  
C. ALU  
D. Keyboard

For Examiner's use only:

Total Marks:

10

Marks Obtained:



# APPLIED SCIENCES HSSC-II

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) Define **Safety** and **Accident**.
- (ii) List the categories of occupational health hazards.
- (iii) Differentiate between A.C. and D.C.
- (iv) List the conditions for physical effect of electric current to occur.
- (v) What is Ventricular Fibrillation?
- (vi) How is leakage current high risk for the patient?
- (vii) List and define the units of radiation.
- (viii) Write briefly about protective devices used in electrical safety.
- (ix) List the parts of the computer system.
- (x) Differentiate between Data and Information.
- (xi) What are the five mouse techniques?
- (xii) List three categories of Alternative input devices and briefly write about any one of them.
- (xiii) What is Resolution and Refresh rate?
- (xiv) Differentiate between Application and System Software.
- (xv) What is **RAM**, **ROM** and **Memory address**?
- (xvi) What is Earthing?

## SECTION – C (Marks 16)

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

( 2 x 8 = 16 )

- Q. 3** Explain the Cardinal Principle of Radiation Protection.
- Q. 4** Write a detailed note on Laser Printers.
- Q. 5** Name the three best known families of CPU and write their differences.