



DII-003-015203

Seat No. _____

M.Sc. (Electronics) (Sem. II) (CBCS) Examination

May / June – 2015

Paper - VII : Fundamentals of Computer Hardware

Faculty Code : 003

Subject Code : 015203

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- 1 Answer the following in brief : (Any seven out of ten, each carry 2 marks) 14
- (1) What is lumen in context of projector display technology?
 - (2) Explain pitch and intensity regarding sound card.
 - (3) Describe the various layers of IBM PC system.
 - (4) Write the difference between Hardware Acceleration Versus Software Acceleration graphics.
 - (5) What is RAMDAC? Explain its function briefly.
 - (6) Write the various advantages of S/PDIF over other types of audio jacks.
 - (7) Explain POST and bootstrap jump loader briefly.
 - (8) What is EAX? Explain in brief.
 - (9) What is Primitives? Explain it in context of video card in brief.
 - (10) What is the difference between eSATA and USB port?
- 2 Answer the following : (Any 2 out of 3, each carry 7 marks) 14
- (1) Write a name of various PC components and explain any five in brief.
 - (2) Write a short note on "MIDI".
 - (3) Explain Microprocessor installation steps in brief. What precaution should we take against ESD?

- 3** Answer the following : (Each carry 7 marks) **14**
- (1) Write a note on "Pre-Boot Execution Environment".
 - (2) Explain various Cathode ray tube component with suitable diagram.

OR

- 3** Answer the following : (Each carry 7 marks) **14**
- (1) Write a note on "UEFI".
 - (2) Write a short note on "Speaker selection criterial".

- 4** Answer the following : (Each carry 7 marks) **14**
- (1) Write a short note on "Evaluating the Quality of Your Audio Hardware"
 - (2) Explain following terminologies regarding CRT Monitor :
 - (i) Display size
 - (ii) Resolution
 - (iii) Aspect ratio
 - (iv) Display Power Management Signaling
 - (v) HRR and VRR
 - (vi) Pixels
 - (vii) Image brightness and contrast.

- 5** Answer the following : (Any 2 out of 4, each carry 7 marks) **14**
- (1) Explain various audio card external jacks briefly.
 - (2) Explain various ROM chip types in brief.
 - (3) What is DirectX? Explain various components of DirectX in brief. Also give the comparison between OpenGL and Direct 3D. What advantages does Core Audio APIs have over DirectSound and DirectMusic?
 - (4) Explain various LCD monitor component in brief and write a short note on how LCD works?