

**B.Sc. (A & G) Sem. – IV (Animation & Gaming) (CBCS - 2015  
COURSE) : WINTER - 2018  
SUBJECT : INFORMATION TECHNOLOGY FOR GAMES**

Day : Thursday  
Date : 29/11/2018

**W-2018-1125**

Time : 02.30 pm to 05.30 pm`  
Max. Marks : 60

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**N. B. :**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Draw neat diagram **WHEREVER** necessary.
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**SECTION – I**

**Q. 1** Solve **ANY FOUR** Questions: **(10)**

- a) What is Normalization?
- b) What are composite attribute? Give example.
- c) Define 'Tuple' and 'Field'.
- d) What is SQL?
- e) What is DBMS?

**Q. 2** Solve **ANY TWO** Questions: **(20)**

- a) Explain components of DBMS. Explain their functionality in details.
- b) Define entity, attributes and types of attributes with example.
- c) Suppose you are given the following requirements for a simple database for the **National Hockey League (NHL)**:
  - i) The NHL has many teams.
  - ii) Each team has a name, a city, a coach, a captain and a set of players.
  - iii) Each player belongs to only one team.
  - iv) Each player has a name, a position (such as *left wing* or *goalie*), a skill level, and a set of injury records.
  - v) A team captain is also a player.

Construct a clean and concise ER diagram for the NHL database using the Chen notation as in your textbook. List your assumptions and clearly indicate the cardinality mappings as well as any role indicators in your ER diagram.

**SECTION – II**

**Q. 3** Write short notes on **ANY TWO** of the following: **(10)**

- a) Linux Vs Windows
- b) 'Graphic Libraries' in OS
- c) Bluetooth Multiplayer Gaming

**Q. 4** Describe Layered Architecture of OS with neat diagram. **(10)**

**Q. 5** Explain following: **(10)**

- a) Graphics Adapters and Drivers
- b) Display Adapter and Drivers

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