Seat No:_____

Enrollment No:_____

PARUL UNIVERSITY FACULTY OF MANAGEMENT MBA Winter 2018-19 Examination

| Semester: 3 Subject Code: 06205203 Subject Name: System Analysis & Design | Date: 2/11/2018 Time: 2:00pm t Total Marks: 60 | Date: 2/11/2018 Time: 2:00pm to 4:30 pm Total Marks: 60 | |
|---|--|---|--|
| Instructions | | , | |
| . All questions are compulsory. | | | |
| 2. Figures to the right indicate full marks. | | | |
| 3. Make suitable assumptions wherever necessary. | | | |
| 4. Start new question on new page. | | | |
| Q.1 Do as Directed. | | | |
| A).Multiple choice type questions/Fill in the blank | ks. (Each of 1 mark) | (05) | |
| 1. In a DFD external entities a represented by a | | | |
| a) Rectangle | c) Ellipse | | |
| b) Diamond shaped box | d) Circle | | |
| 2 The first step in systems Development Life C | ycle is | | |
| a) database design | c) system design | | |
| b) preliminary investigation and analysis | d) graphical user interface | | |
| 3 Data store in a DFD represents | | | |
| a) a sequential file | c) a disk store | | |
| b) a repository of data | d) a random access memory | | |
| 4 The main objective of feasibility study is | | | |
| a) to assess whether it is possible to meet | c) to assess if it is possible to meet the | | |
| the requirements specifications | of budget, human resource and hardware | | |
| b) to assist the management in implementing the desired system | d) to remove bottlenecks in implementing the desired system | | |
| 5 The major goal of requirement determination pa) determine whether information isneeded by an organization | hase of information system development isc) determine what information is needed by an organization | | |
| b) determine how information needed by an organization can be provided | d) determine when information is to be given | | |
| B).Define the following. (Each of 1 mark) | | (05) | |
| 1. Unit Testing | | | |
| 2. Context Diagram | | | |
| 3. Functional Dependency | | | |
| 4. Primary Key | | | |
| 5. Single-Location installation | | | |
| C).Direct questions. (Each of 1 mark) | | (05) | |
| 1. Difference between Alpha & Beta testing | | | |
| 2. List the steps in the project initiation and plan | nning process. | | |
| 3. What is Binary relation? Give one example. | | | |
| 4. What is difference between user documentation | on and system documentation | | |
| 5. Name any four traditional techniques for colle | ecting requirement during analysis. | | |
| Q.2 Answer the following questions. | | | |
| A).Explain the role of system analyst. The system an | alyst is known as "An agent of change". Why? | (07) | |

| A project has bee | n defined to | contain th | e following | list of | f activities | along with | their | required |
|---------------------|--------------|------------|-------------|---------|--------------|------------|-------|----------|
| times for completio | on | | | | | | | |

| | Activity | Immediate Activity | Weeks | Predecessors |
|-------------|----------|-------------------------|--------------|--------------|
| | 1 | Collect Requirements | 2 | - |
| | 2 | Analyse Processes | 3 | 1 |
| | 3 | Analyse data | 3 | 2 |
| | 4 | Design Processes | 7 | 2 |
| B). | 5 | Design Data | 6 | 2 |
| | 6 | Design screens | 1 | 3,4 |
| | 7 | Design Reports | 5 | 4,5 |
| | 8 | Program | 4 | 6,7 |
| | 9 | Test and document | 8 | 7 |
| | 10 | Install | 2 | 8,9 |
| | a. Dr | aw a network diagram fo | or the activ | ities |

- b. Calculate the earliest expected completion time
- c. Show the critical path
- d. What would happen if activity 6 were revised to take 6 weeks instead of one week?

Q.3 Answer the following questions.

A). Compare & explain various types of file organizations.

Calculate the expected time for the following activities:

| | | Optimistic | Most Likely Pessimistic | | Expected |
|-------------|----------|------------|-------------------------|------|----------|
| | Activity | Time | Time | Time | Time |
| | А | 3 | 7 | 11 | |
| | В | 5 | 9 | 13 | |
| | С | 1 | 2 | 9 | |
| B). | D | 2 | 3 | 16 | |
| _). | Е | 2 | 4 | 18 | |
| | F | 3 | 4 | 11 | |
| | G | 1 | 4 | 7 | |
| | Н | 3 | 4 | 5 | |
| | Ι | 2 | 4 | 12 | |
| | J | 4 | 7 | 9 | |

Q.4 Attempt any two questions. (Each of 7.5 mark)

- 1. What do you mean by SDLC? Describe the different phases of SDLC
- 2 Draw Context diagram and Level 0 DFD for a distance education university. The enrollment process works as follows: Students send in an application form containing their personal details and their desired course. University checks that the course is available and the student has necessary academic qualification.

If the course is available, the student is enrolled in the course and the university confirms the enrollment by sending a confirmation letter to the student.. If the course is unavailable the student is sent a rejection letter.

- 3. What are the four approaches to installation? Which is the most expensive? Which is most risky?
- 4. Distinguish between technical, operational and economic feasibility with suitable examples.

(07)

(15)