

- N.B.: (1) Question 1 is compulsory
(2) Out of remaining attempt any three.
(3) Assume suitable data wherever required.
(4) Figures to right indicates full marks.

1. Solve any Four :
 - a) Define project management. 5
 - b) Explain the need of project management. 5
 - c) Explain Business Case. 5
 - d) Explain formal and informal organisation. 5
 - e) What is project? What are the attributes of a project? 5
2. a) Explain four P's with respect to Project Management. 10
 - i) Product ii) People iii) Process iv) Project
 - b) Explain various project scheduling techniques. Explain the difference between CPM and PERT. 10
3. a) Describe the five phases of IT project methodology. 10
 - b) Describe the five scope management processes. 10
4. a) Explain project leadership and ethics. 10
 - b) List and explain the steps involved in terminating a project. 10
5. a) What is project risk management? What are the RM processes? 10
 - b) Distinguish resource loading from resource levelling. Why is levelling of resources preferred to large fluctuations? 10
6. Explain with a brief answer : (any four) 20
 - a) What is a milestone? Why are they useful?
 - b) What is projectitis? How can an organization minimize its likelihood of its occurrence?
 - c) Explain the difference between-AON and PERT.
 - d) Why is effective and efficient communication vital to a project?
 - e) How can a system be a technical success but an organizational failure?

(3 Hours)

[Total Marks : 80

- N.B. (1) Question no. 1 is compulsory.
(2) Attempt any **three** from remaining **five** questions.
(3) Assume suitable data, if necessary.

1. (a) What is cloud? Explain its features, service and deployment models. 10
(b) What is virtualization? What are benefits and mechanisms used for virtualization? 10
2. (a) What are the features of Amazon SimpleDB? 10
(b) Explain Big Table as Google's NoSQL system in details 10
3. (a) Explain conceptual Architecture of Open Stack and its modes of operation. 10
(b) What is CSB? Explain its role with example. 10
4. (a) What are public cloud adoption phases for SMBs? What are cloud vendor roles and responsibilities towards SMBs? 10
(b) Explain AAA model in detail along with its industry implementation? 10
5. (a) What are the risks associated with cloud computing? 10
(b) What are the fundamental requirements for cloud application architecture? 10
6. Write a note on 10
 1. Factors for successful cloud deployment
 2. Cloud Service Gateway
 3. Google App Engine
 4. SaaS maturity model

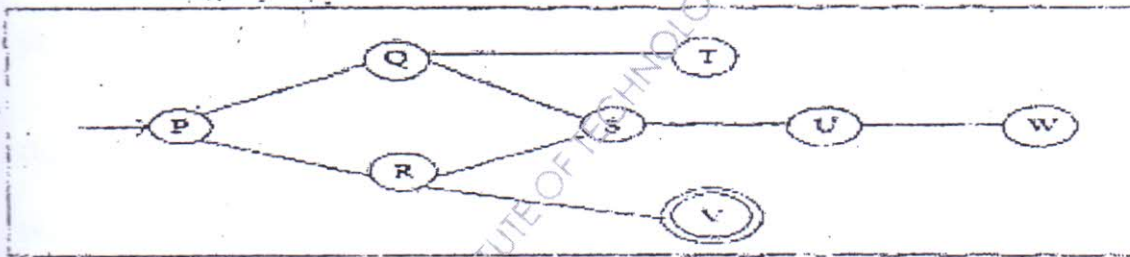
Q.P. Code : 5960

(Revised Course)
(3 Hours)

[Total Marks : 80

- N.B. : (1) Question No. 1 is compulsory.
(2) Attempt any Three of the remaining Five questions.

1. (a) What is AI? List down all components of AI. 3
- (b) List down all properties of Agent Task Environment explain in short any one. 3
- (d) What do you mean by heuristic function? Why it is use? 3
- (e) What is Expert system shell explain in short. 3
- (f) What is Reasoning? Write its role in AI in Short. 3
- (h) Give the Comparative analysis of Uninformed Search techniques. 5
2. (a) Consider the following graph starting from P execute DFS, the goal node is V. Show the order in which the nodes are expanded. Assume that the alphabetically smaller node is expanded first to break ties and also write the properties of DFS. 10



- (b) List down all the types of agent architecture. Explain utility based and learning agent. 10
3. (a) Suppose you are designing a machine to pass the Turing test. What are the capabilities such machine must have? Explain? 5
- (b) Represent following sentences in first order logic. 10
 - (i) Every gardener like the sun.
 - (ii) All purple mushrooms are poisonous.
 - (iii) Every student who takes French passes it.
 - (iv) No person buys an expensive policy.
- (c) Write the Planning algorithm for Spare Tyre Problem. 5

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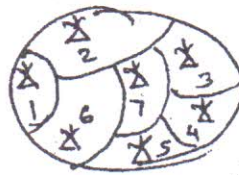
QP Code : 6030

(3 Hours)

[Total Marks : 80

- N.B. : (1) Questions No. 1 is compulsory
 (2) Solve any three from remaining questions.
 (3) Figures to the right indicate full marks.
 (4) Assume suitable data if necessary

1. (a) Consider a single high-power transmitter that can support 100 voice channels covering a given service area. Let the service area be divided into seven smaller area/cells. As shown in figure, each supported by lower power transmitters. The available spectrum of 100 voice channels is divided into 4 groups of 25 Channels each. The cells (1, 7) (2, 4) (3, 5) and 6 are assigned distinct channel groups. Show that the total number of channels that can be supported is enhanced to 175 to cover the same service area. 10



- (b) Explain in detail TDMA, CDMA and FDMA. 10
2. (a) Explain in detail the CDMA architecture. 10
 (b) Explain in detail the IEEE 802-11 MAC Layer. 10
3. (a) Explain in detail LRWPAN. 10
 (b) Compare CDMA 2000 & W-CDMA. 10
4. (a) Explain in detail Mobile IP. 10
 (b) Explain possible attacks on wireless LAN and explain WEP in detail. 10
5. (a) Explain in detail Bluetooth architecture. 10
 (b) Explain in detail GSM architecture
6. Write short note on any four. 20
 (a) FHSS and DSSS
 (b) OFDMA
 (c) MMDS
 (d) WLAN Architecture
 (e) WiMAX

QP Code.: 6217

(3 Hours)

[Total Marks : 80

- N.B. : (1) Question no 1 is compulsory
(2) Attempt any three questions from Q2 to Q6
(3) Assume data if required

1. (a) Give example of an interface you have come across which is 20
(i) Useful, usable and used
(ii) Which is useful but difficult to use?
(iii) Useful but not usable hence not used.
(b) Explain National, International and Vendor Standards
(c) Design a device with two buttons {B1, B2} to map 6 functionalities {F1, F2, F3, F4, F5, F6} Design can be theoretical or graphical.
(d) Comment on the statement "Usability aspect is equally important as technical aspect of the application".
2. (a) How usability approach can be adapted in system development. 10
(b) How you will know your user in the process of usability process 10
3. (a) On which dimensions user experience differs. 10
(b) What process you follow while shopping for your clothes use this process in 10
4. (a) list usability heuristics? Explain any two heuristics in detail. 10
(b) Explain Usability attributes. 10
5. (a) Explain focus group usability assessment method 10
(b) What is iterative design? Is it suitable for GUI design? 10
6. (a) What are the challenges In designing international graphical Interface? 10
(b) Design unique code for every citizen of India with minimum memory load to remember. 10
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- N.B. : (1) Question No. 1 compulsory.
(2) Solve any three questions out of remaining Five.
(3) Assume suitable data.

1. You want to be a part of Digital India move announced by Indian Government. You want to set up a business which will provide a required training to the government staff as well as to the citizens of India along with the responsibility of providing the required infrastructure to set up the training centers nationwide. Your company will have 49% share and the rest 51% will remain with the Indian Government. Develop a business plan based on the following guidelines. 20
- i) Identify the business model with respect to the following points: Value proposition, Revenue model, Market opportunity, Competitive environment, Competitive advantage, Market strategy, Organizational development, Management team
 - ii) Develop the strategic plan:
 - a. Strategic Analysis includes: External environment, Internal resources
 - b. Strategic Objectives - includes Vision, Mission, and objectives.
 - c. Strategic definition
 - d. Marketing plan
 - e. SCM and CRM plan
 - iii) Implementation should include few screens (hand drawn) of websites demonstrating
 - a. Business model, Revenue model(s) used
 - b. CRM, SCM activities
 - c. Marketing activities
 - d. Strategic objectives like mission, vision and objectives
 - e. Security concern, Payment mode (in case of B-C and C-C business model)
 - f. Monitoring and Control, maintenance
 - g. One example of use-case scenario.
 - h. Site structure diagram (blueprint) showing layout and relationship between pages
 - iv) Organizational structure and Hardware and Software requirement
2. a) Enlist and explain types of portals with an example of each types? 10
b) Write a short note E-CRM also explain its benefits. 10

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QP Code : 6211

- 2 -

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| 3. | a) | Explain the concept of Porter's value chain. | 10 |
| | b) | Explain buy side and sell side E-commerce with the help of example. | 10 |
| 4. | a) | Compare E-commerce and E-business? | 5 |
| | b) | Difference between client side programming and server side programming? | 5 |
| | c) | What are the characteristics of payment system? | 5 |
| | d) | Explain SOSTAC framework. | 5 |
| 5. | a) | Describe E-business revenue models and its types. | 10 |
| | b) | How does E-cash transfer take place in E-business. | 10 |
| 6. | a) | Explain SWOT analysis with example. | 10 |
| | b) | Describe different elements E-business procurement system. | 10 |
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