UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2013/2014 – 3rd Year Examination – Semester 6

IT6304: e-Business Application
Structured Question Paper

2nd August, 2014
(TWO HOURS)

Important Instructions:

- The duration of the paper is **2 (two) hours**.
- The medium of instruction and questions is English.
- This paper has **4 questions** and **16 pages**.
- **Answer all questions.** All questions carry equal marks.
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the examination hall by a candidate.
- Note that questions appear on both sides of the paper.
  If a page is not printed, please inform the supervisor immediately.

Questions Answered
Indicate by a cross (×), (e.g. ☒) the numbers of the questions answered.

To be completed by the candidate by marking a cross (×).	Question numbers				
	1	**2**	**3**	**4**	
To be completed by the examiners:					

Case Study for Q1

Ayurveda soap, shampoo and cream products manufacturing company has been in business in Sri Lanka for the last 12 years. The company, which is named "Aayu" is owned by a traditional Weda Mahattaya (Ayurveda doctor) Dr. Wedanayake and his son who is a MBBS doctor. The products are scientifically produced and there are over 50 varieties of soap, cream, shampoo, syrup, Oil, arishta, kalka etc.
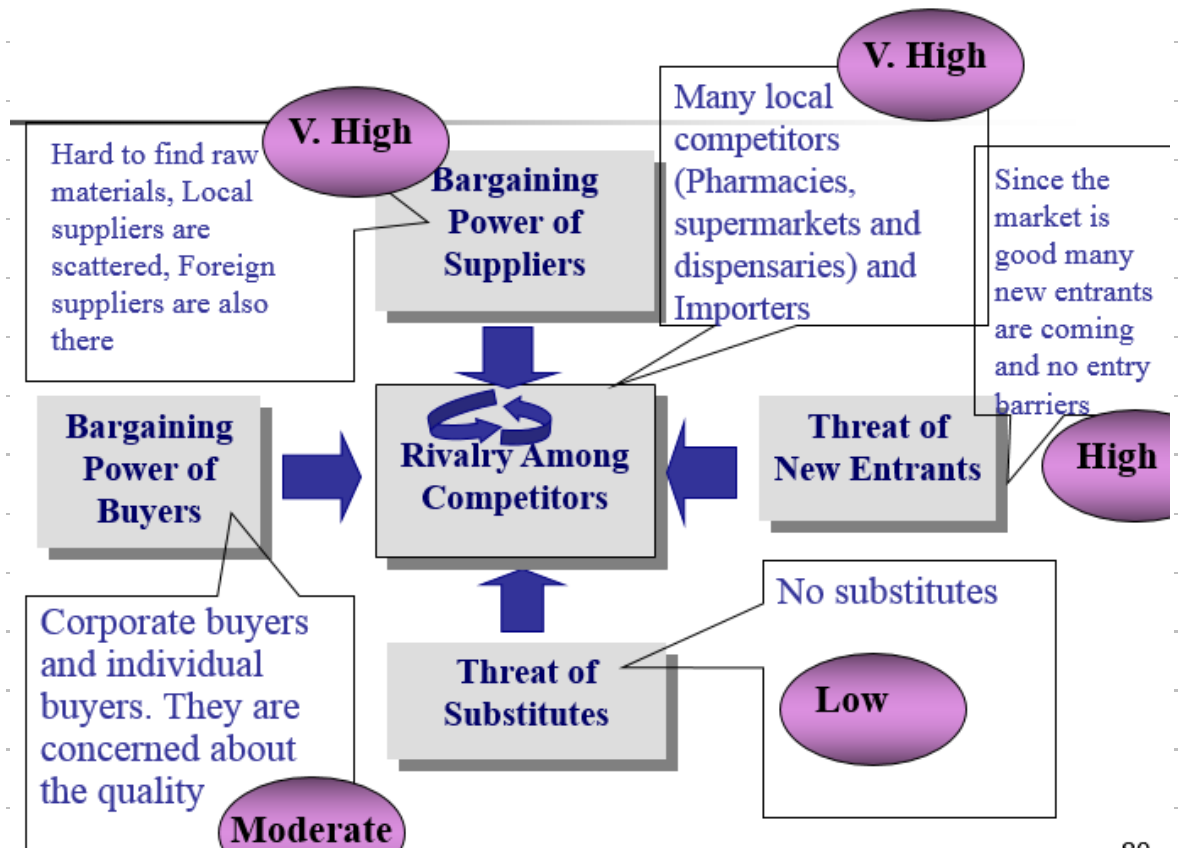
The market in Sri Lanka is very competitive with many western medicines and creams, soaps and other products. These products of "Aayu" are made 100% from local ingredients, raw materials and medicinal plants. Heavy research has been carried out with the Faculty of indigenous medicine before deciding on the medicinal value of the products. There are local producers as well as importers from India and China who are competing with "Aayu" for the same product range. One of the biggest problems in this industry is to find the various raw materials, leaves, plants and barks to manufacture the products. There are farmers who grow these medicinal plants who are scattered around the country.

Buyers in Sri Lanka are still a little sceptical about the quality of the products though they are approved by the Sri Lanka Ayurvedic Association. There are many pharmacies, supermarkets and dispensaries of Ayurvedic medicine who want these products to be sold as Sri Lankan buyers are beginning to realize the importance of herbal medicine. Requests are coming from many organisations to work as the intermediary to sell these collaboratively.

"Aayu" has its head office in Colombo and its two factories in Malambe and Kurunegala. Its customers are scattered around the country and the sales are done through supermarkets and pharmacies. "Aayu" has a networked head office and deals with other corporate customers through email. More and more requests are coming through email and internet based resources and they are finding it difficult to handle these due to lack of technical skills and other resources. In order to handle all these buyer, seller and competitor related requests, "Aayu" has decided to commence a web based solution to cater to these collaboration and communication needs.

Index No ………………………….

1. (a) Using the given case study, carry out Porter's forces analysis for "Aayu" in order to understand the environmental issues and concerns faced by them. Justify your answer as to why certain forces are high and certain forces are low.

(40 Marks)

ANSWER IN THIS BOX

V. High

Hard to find raw materials, Local suppliers are scattered, Foreign suppliers are also there

V. High

Bargaining Power of Suppliers

Many local competitors (Pharmacies, supermarkets and dispensaries) and Importers

V. High

Since the market is good many new entrants are coming and no entry barriers

Bargaining Power of Buyers

Rivalry Among Competitors

Threat of New Entrants

High

Corporate buyers and individual buyers. They are concerned about the quality

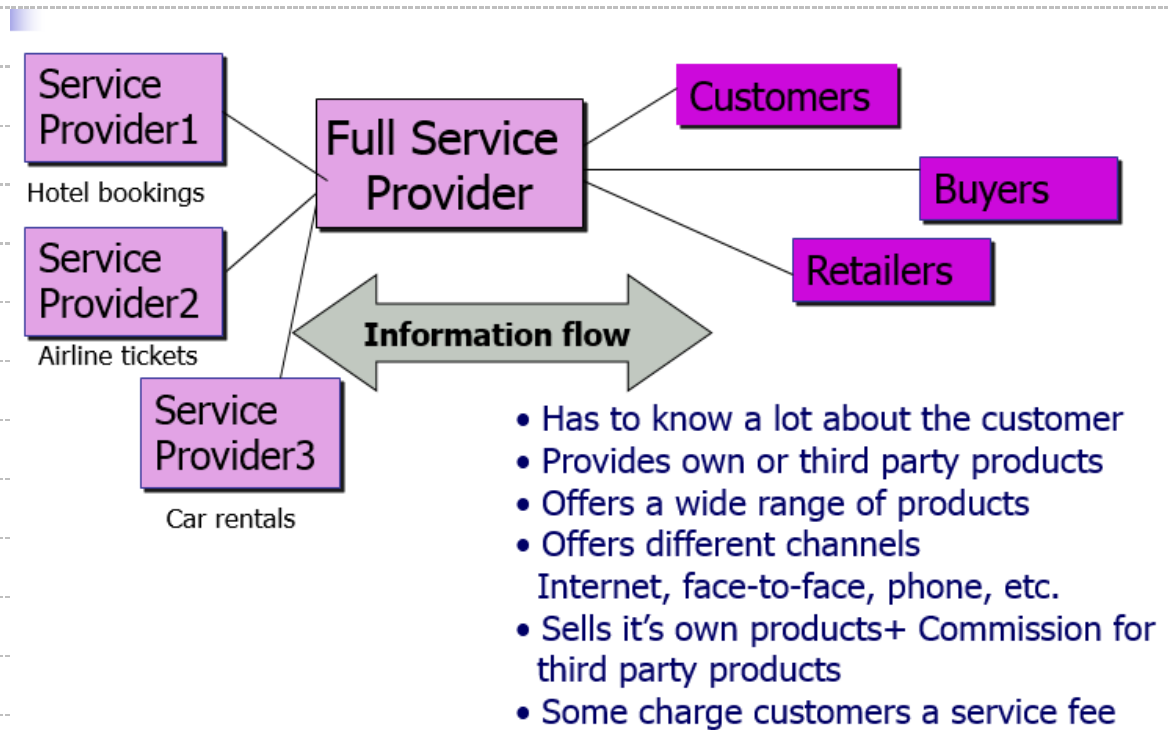Moderate

Threat of Substitutes

No substitutes

Low

1.

3

(b) Do you think the Full Service Provider eBusiness model is going to be beneficial for this company to deal with the forces? Justify your answer.

(30 Marks)

ANSWER IN THIS BOX

      Yes, Through collaborations with hotels, hospitals, schools and providing full service to customers the company can face well for the high force coming from the new entrants and competitors

Service Provider1
Hotel bookings

Service Provider2
Airline tickets

Service Provider3
Car rentals

Full Service Provider

Customers

Buyers

Retailers

Information flow

- Has to know a lot about the customer
- Provides own or third party products
- Offers a wide range of products
- Offers different channels
  Internet, face-to-face, phone, etc.
- Sells it's own products+ Commission for third party products
- Some charge customers a service fee

(c) Under the 6th phase of the Seven E model for eTransformation ," eSystems", what strategies would you recommend and why?

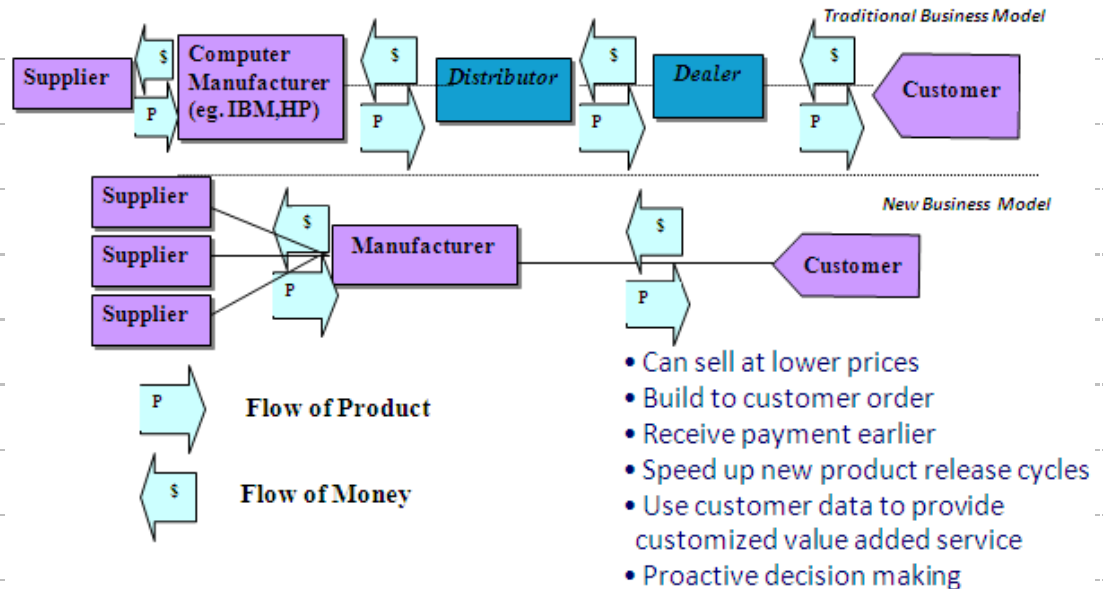*(30 Marks)*

ANSWER IN THIS BOX
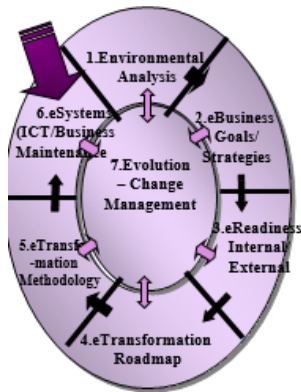
- **Management Controls :** Standards, guidelines to users, Procedures, Manuals
- **Security Measures :** To deal with common threats (sabotage, hacking, privacy, etc.) and contingency planning and disaster recovery
- **IT Maintenance and Support:** (Support for ICT infrastructure, upgrading, backing up, maintenance, troubleshooting, Support by the ISP and Vendors)

1.Environmental Analysis

6.eSystems (ICT/Business Maintenance

2.eBusiness Goals/ Strategies

7.Evolution – Change Management

3.eReadiness Internal External

5.eTransf -mation Methodology

4.eTransformation Roadmap

2. (a) Illustrate and describe the benefits of the following eBusiness models to the manufacturer/seller and the customer seperately.

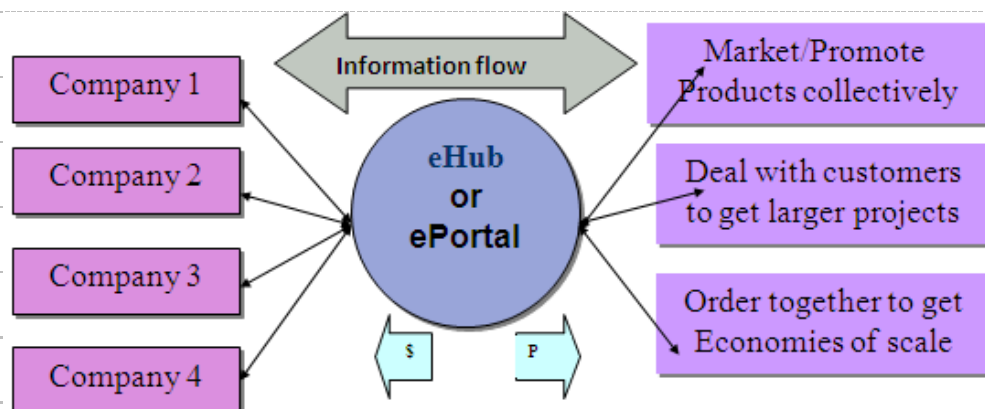   i. Direct-to-Customer Model   **(20 Marks)**
    ii. Resource Sharing eBusiness Model   **(20 Marks)**
    iii. Global Trade Platform for SMEs (Small and Medium Enterprises)   **(20 Marks)**
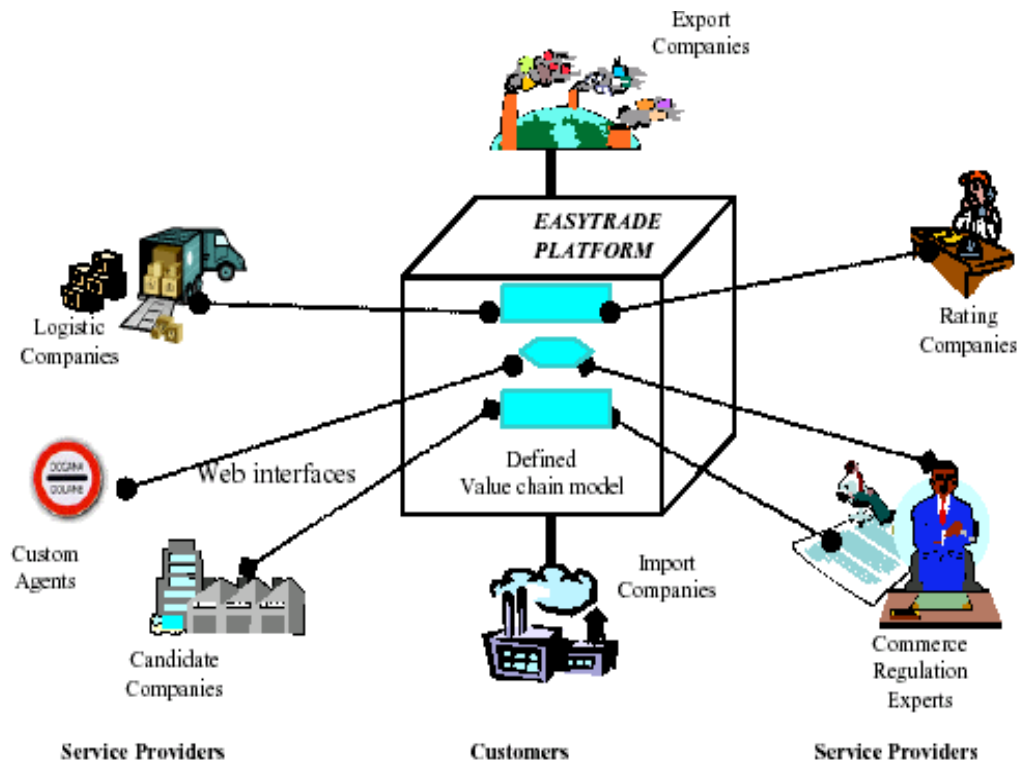
ANSWER IN THIS BOX

(i) Direct-to-Customer Model

Traditional Business Model: Supplier → Computer Manufacturer (eg. IBM,HP) → Distributor → Dealer → Customer

New Business Model: Supplier, Supplier, Supplier → Manufacturer → Customer

P → Flow of Product

$ → Flow of Money

- Can sell at lower prices
- Build to customer order
- Receive payment earlier
- Speed up new product release cycles
- Use customer data to provide customized value added service
- Proactive decision making

(ii)Resource Sharing eBusiness Model

Company 1, Company 2, Company 3, Company 4 → eHub or ePortal → Information flow

- Market/Promote Products collectively
- Deal with customers to get larger projects
- Order together to get Economies of scale

- The sellers get together through a Portal
- They Market/ Promote products collectively to a larger market segment
- Sellers can work on larger projects/orders as they work collectively
- Collective bulk orders give them bargaining power over suppliers
- Resources as well as profits are shared among companies

Continued

(iii)Global Trade Platform for SMEs (Small and Medium Enterprises)

(b) In a borderless, faceless and paperless virtual organization, what are the four (4) most important characteristics to consider and why are they important?
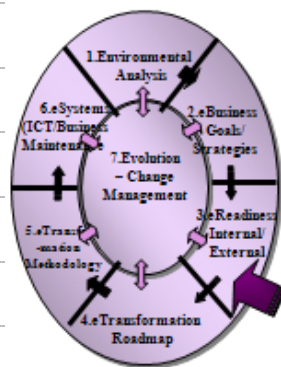
(20 Marks)

ANSWER IN THIS BOX

    (i)   Trust

    (ii)   Security

(c) Describe the importance of measuring the eReadiness of a company before eTransformation? What characteristics are measured in eReadiness Analysis?

(20 Marks)

ANSWER IN THIS BOX

Internal:
- Business processes – Well defined processes
- Applications & Infrastructure
- Web presence – Existence/ usage
- Skills – Level of IT skills of the employees
- Executive mgt – Commitment/Support
- External connectivity – Channels
- Future directions – Plans for expansions

External:
- Customers, Suppliers, Potential users

3. (a) Briefly describe the four (4) main driving forces for a company to change and eTransform.

(30 Marks)

ANSWER IN THIS BOX

IT Driven Forces

•Internet & WWW
•Communication Explosion
•Technological advancement
•Information Revolution
•Virtual Connectivity
•No Geographical boundaries
•etc.

Business Driven Forces

•Bargaining power of buyers
•Bargaining power of suppliers
•Market Changes
•Strong Competition
•Adopting New Strategies
•Diversifying in to new products
•etc.

Driving Forces for Change

•Government Regulations
•Pressure from business partners
•Pressure from Interest groups
•Market changes
•etc.

•Adopting New Strategies
•Changes in business processes
•Changes in management
•Changes in staff/structure
•Changes in value systems
•etc.

External Forces

Internal Forces

(b) Illustrate and briefly discuss the first Seven (7) stages of the eTransformation Roadmap emphasizing on the External and Internal processes of eTransformation.

(45 Marks)

ANSWER IN THIS BOX
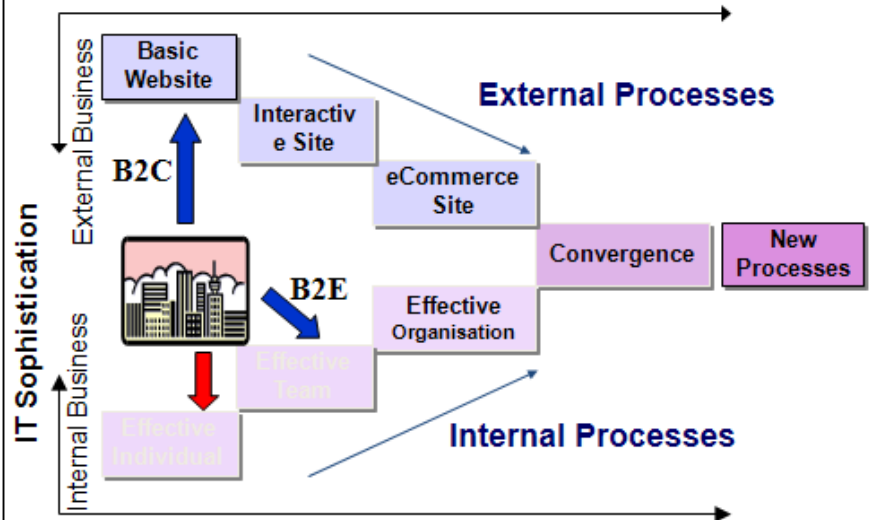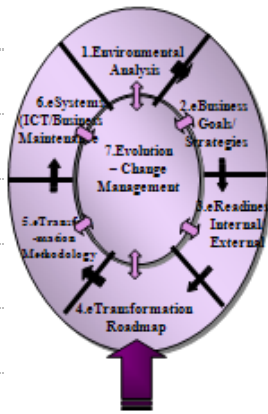
Continued

(c)

   i. How can a Bank use CRM (Customer Relationship Management) strategies effectively to gain competitive advantage ?

(15 Marks)

ANSWER IN THIS BOX

- Relationship management is a customer-oriented feature with service response based on customer input, one-to-one solutions to customers' requirements, direct online their communications with customer and customer service centers that help customers solve questions.

- Sales force automation. This function can implement sales promotion analysis, automate tracking of a client's account history for repeated sales or future sales, and also coordinate sales, marketing, call centers, and retail outlets in order to realize the salesforce automation.

- Use of technology. This feature is about following the technology trend and skills of value delivering using technology to make "up-to-the-second" customer data available. It applies data warehouse technology in order to aggregate transaction information, to merge the information with CRM solutions, and to provide KPI (key performance indicators).

- Opportunity management. This feature helps the company to manage unpredictable growth and demand and implement a good forecasting model to integrate sales history with sales projections.

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  ii. What could be the ethical implications associated with this CRM strategy for its customers?

(10 Marks)

ANSWER IN THIS BOX

   (i)   Discrimination

   (ii)   Privacy issues

Two main ethical implications, which pertain to both the customers and companies, involve customer discrimination behaviour and privacy issues.

Although CRM attempts to target the most profitable customers and maintain strong relationships with them, the process inherently discriminates against other current and potential customers when they are treated differently.

Since the CRM process requires a vast amount of customer information, privacy issues

remain an important and sensitive issue with firms and customers alike.

4. (a) Briefly explain the differences between the "make and sell" and "sense and respond" approaches in business.

(25 Marks)

ANSWER IN THIS BOX

Make and Sell – The company will produce the goods and sell it to the customers

Sense and Respond – identify the customers and their patterns and sense what they

want and produce it to them before hand

	Make and Sell	Sense and Respond
Production	Mass	Personalised
Distribution	Middleman	Direct
Communication	Chained / Closed	Networked / Open
Finance	Slow / Difficult	Faster / Easier (24/7)
Assets	Tangible / Physical	Intangible / Virtual

(b) Discuss whether the following statements are true or false. Justify your answer.

    i. When the bargaining power of suppliers are high, it is appropriate to adapt a "revenue sharing eBusiness model" to negate the force.

    ii. When the rivalry among competitors are very high, it is better to practice the "Digital Value Hub" eBusiness model to be competitive in the industry.

(40 Marks)

ANSWER IN THIS BOX

<u>i) Yes</u>

Using the revenue sharing model the companies can get together and order as a

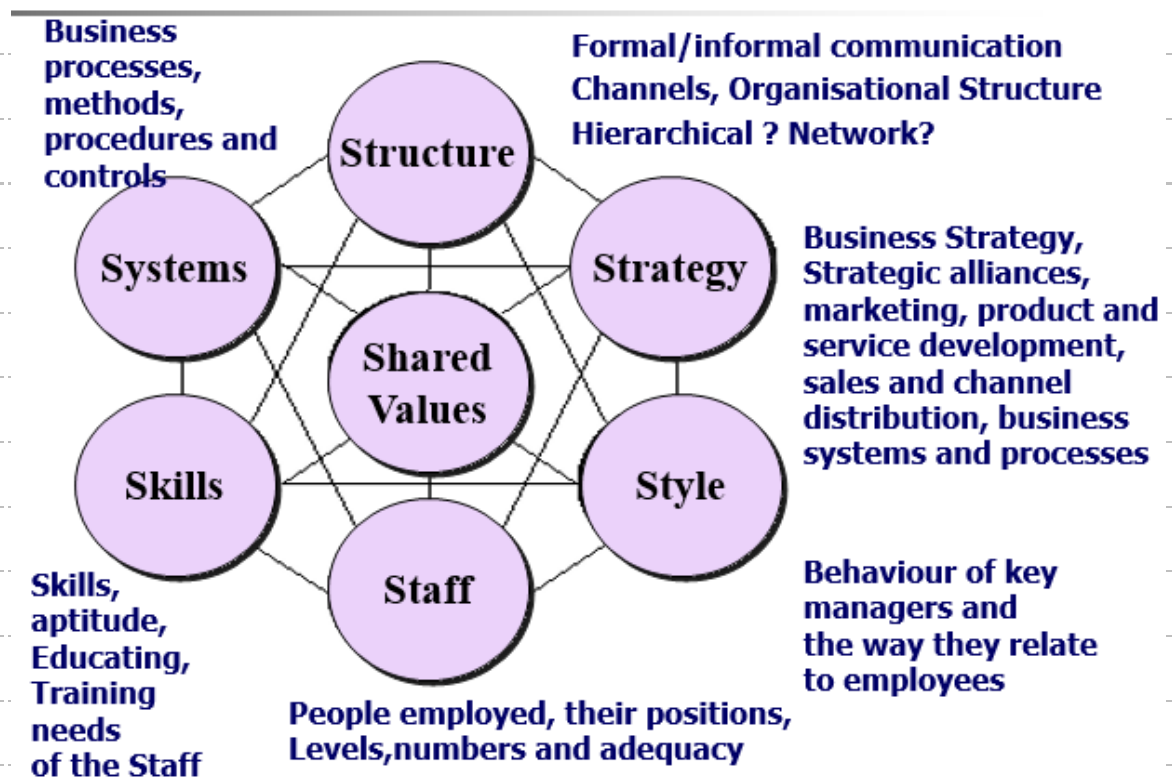team to negate the force.

<u>ii) No</u>

When rivalry is high you cannot use the Digital value hub as the competitors in such

situations cannot effectively work together

Continued

(c) Why is Change Management important in eBusiness Transformation? Briefly discuss the 7S model for change management in relation to eTransformation.

(35 Marks)

ANSWER IN THIS BOX

Business processes, methods, procedures and controls

Formal/informal communication Channels, Organisational Structure Hierarchical ? Network?

Systems

Structure

Strategy

Business Strategy, Strategic alliances, marketing, product and service development, sales and channel distribution, business systems and processes

Shared Values

Skills

Style

Skills, aptitude, Educating, Training needs of the Staff

Staff

Behaviour of key managers and the way they relate to employees

People employed, their positions, Levels, numbers and adequacy

Continued

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1. Strategy – This defines key actions and capabilities along the major dimensions of marketing, product and service development, sales and channel distribution, business systems and processes, and management of alliances and partnerships in order to achieve organisational goals.

2. Structure – The way the organisation's units relate to each other and the chain of command and formal/informal communication channels

3. Systems –The information flow which requires capabilities in both information technology and in organisational processes, methods, procedures and controls.

4. Style – The behaviour of the key managers and the way they relate to employees in order to achieve the organizational goals

5. Staff - The types of people employed in the organization, their positions, levels and numbers.

6. Skills - The skills and aptitude for developing customer relationships, service and sales For staff to develop appropriate new skills requires a learning environment.

7. Shared Values – The guiding concepts, values and aspirations, often unwritten, which directs all the personnel in the organization in the same direction

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