

Roll No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

Program: B.Tech TI (Telecom Informatics)

Semester – III

Subject (Course): Advanced Concepts of Telecommunication Business Max. Marks : 100

Course Code : CSIB292

Duration : 3 Hrs

No. of page/s:

SECTION-A

(5x4=20)

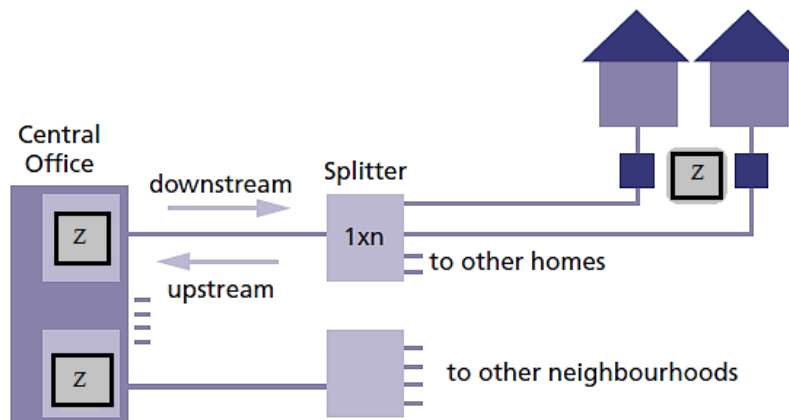
1. Define the following in terms of 'finance':

- (a) RoI
- (b) Asset
- (c) Liability
- (d) Dividend

2. Why do providers need inventory management tools?

3. How can service providers utilize eTOM?

4. Below is the Basic representation of point-to-multipoint Passive Optical Networks(PON) Architecture. Figure out the missing components marked as 'Z' and **explain** the working of the same.



5. **Select the correct answer:**

(i) Which of the following determines the working capital mix?

- a. Investment decisions
- b. Liquidity decisions
- c. Dividend decisions
- d. Financial decisions

- (ii) SLA Monitoring is a function of:
 - a. Service Assurance
 - b. Service Fulfilment
 - c. Service Assurance and CRM
 - d. Both b and c
- (iii) Level 1 of eTOM defines the:
 - a. Core processes that combine to deliver service streams and other end-to-end processes
 - b. Business activities that distinguish operational customer-oriented processes from management and strategic processes
 - c. Process groupings including business functions and standard end-to-end processes
 - d. None of these.
- (iv) 802.96e uses scalable OFDMA (SOFDMA).
 - a. True
 - b. False

SECTION-B

(4x10=40)

6. Contrast all the elements of SIP Vertical Process Groupings and SIP Horizontal Process Groupings of *SIP Process Area of eTOM Level1 Framework*.
7. (a) What are the various assumptions used in financial accounting? [2]
 (b) Explain in brief all the Principles of Financial Accounting. [8]
8. Illustrate the "staged representation of CMMI Maturity Levels".
9. **Answer any one:** either [A] or [B]
- [A](i) Illustrate various techniques of Promotion through which marketing departments spread awareness about the company's products and services among its customer base. [6]
 (ii) What are the components of a budget? [3]
 (iii) What do you understand by SWOT? [1]

OR

- [B](i) Why is it beneficial for mobile operators to have more post-paid customers? [4]
 (ii) Explain the various pricing strategies used by telecommunication industries. [6]

SECTION-C

(2x20=40)

10.(a) "The IP Multimedia Subsystem architecture is unified and layered". Explain. Give an illustration of a Simplified IMS architecture. [10]

(b) The GSM network is divided into how many main segments/ subsystems. Give a complete breakdown of the whole architecture. Support it with diagrams. [10]

11. Answer any one: either [A] or [B]

[A](i) Outline a pictorial representation of the interactions between OSSs and BSSs. [6]

(ii) Write down and explain in brief all the *OSS Components*. [14]

OR

[B](i) Outline the four elements comprised by NGOSS framework. [4]

(ii) Write down and explain in brief all the *BSS Components* [16]

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Course Code	:	CSIB292					
Name of Question Paper Setter	:	MONIKA RABHA					
Employee Code	:	40001480					
Mobile & Extension	:	9999706279					
Note: Please mention additional Stationery to be provided, during examination such as Table/Graph Sheet etc. else mention "NOT APPLICABLE": NOT APPLICABLE							
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SECTION-A

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1. Define the following in terms of 'finance':

- (a) Liquidity
- (b) Dividend
- (c) Liability
- (d) RoI

2. How do mediation systems help in decision making?

3. Contrast the significance of Machine-to-Machine (M2M) communications, an initiative of the DoT.

4. Outline the organizational difference between DoT and TRAI?

5. **Select the correct answer:**

(i) Which of the following promotional strategies is not used in the telecommunications sector?

- a. Below the line
- b. Between the line
- c. Through the line
- d. None of the above

(ii) Call Data Records are collected by:

- a. Mediation Systems
- b. Business Support Systems
- c. Billing Systems
- d. All of the above

(iii) In telecommunications management, FCAPS stands for:

- a. Fault, configuration, accounting, performance, and safety
- b. Fault, configuration, action, performance, and security
- c. Fault, configuration, accounting, performance, and security
- d. None of the above

(iv) Regulations ensure

- a. The appropriate and safe service delivery to consumers
- b. A level playing field among service providers
- c. Neither of the above
- d. Both a and b

SECTION-B

(4x10=40)

6. Illustrate the "staged representation of CMMI Maturity Levels".
7. (a) According to the conservatism principle in accounting, why should an accountant make the less optimistic estimate when faced with a choice?
(b) Apart from lower ARPUs, fierce competition, and rapid customer churn, why is it difficult for telecommunications operators to remain competitive?
8. (i) What do you understand by MVNOs? Who turns out to be main beneficiary here? Give reason.
(ii) What limitations does the TRAI place on MVNOs?
9. (i) What are the components of a budget? [3]
(ii) Explain the various pricing strategies used by telecommunication industries. [6]
(iii) What do you understand by EBIDTA? [1]

SECTION-C

(2x20=40)

10. (i) Outline the elements comprised by NGOSS framework. [8]
(ii) Outline a pictorial representation of the interactions between OSSs and BSSs. [6]
(iii) Write down and explain in brief all the OSS Components. [6]

11. **Answer any one** : Either [A] or [B]

- [A] (i) State the major advantages for telecommunications operator in providing cloud services. Explain in brief about SPI models. [6+6=12]
(ii) Give an illustration of "TM Forum SDF Reference Model: Scope of SDF". [8]

OR

- [B] (i) Illustrate how telecommunications fraud are further divided into categories. [6]
(ii) How a "Bypass fraud" is committed. [6]
(iii) Below is the Basic representation of EPC Architecture. Figure out the missing components marked as 'Z' and list down the main functions of each of those component. [8]

