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Ecole Supérieure d'Ingénieurs Privée de Gafsa

Etablissement d'Enseignement Supérieur
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الجمهورية التونسية

المدرسة العليا الخاصة للمهندسين بقفصة *****

وسسة جامعية خاصة مرخص لها من طرف الدولة تحت عدد: 05- 2013

EXAMEN SESSION M.30H

A.U:	2021/2022	Cycle:	Engineering
Module:	Urbanisation of information systems	Level:	3rd Level
Time:	09H.00 - 11H.00	Field	ILSI
Date	30/11/2021	Duration:	2h
Documents:	Not Authorized	N° pages:	3

Exercise	1(5pts)	2(6pts	3(9pts)
C.L.Os Assessement	K1, S1, S3	V1 ,S2,S3,S4	V1,V4 ,V2, S2,S3,S4

Exercise1 (5pts):

- 1- What is an information system?
- 2- List the architectures of an information system. Give the role of each vision.
- 3- List the architecture in which a convergence plan is needed. State its usefulness.

Exercise2(6pts):

HORIZON is a training center that organizes seminars for trainees belonging to various companies.

Training Catalog

At the beginning of September each year, the General Management of the center prepares the catalog of seminars. To this end, it must first define the characteristics of each seminar: title, program, duration, technical manager and registration fees. Then, the animation department plans the sessions of the different seminars, knowing that the same seminar can be organized in several sessions, on different dates. Finally, and after agreement from the general management, he places an order with a printing company for the printing of the catalog in a determined number of copies. After receipt, these copies are sent to the various companies for information. The dispatch is carried out by the order office after preparation of the appropriate mailing by the registration department.

Registration

Interested companies register their employees for the various sessions of the various seminars through order forms that they send to the training center. An order form can group several registrations at the same time, whether for the same session or not and for the same seminar or not. The registration service of the center tries, as far as possible, to satisfy each order. He

enters, through transactional processing, the registrations that can be satisfied, then he informs, by mail, the company concerned of the registered registrations, of the unsatisfied registrations and of the possibilities of satisfying the latter in other sessions.

This letter also includes an invoice prepared according to the registered registrations and the scale adopted (price for each seminar and discount condition for group registrations).

Animation

Two months before the date of animation of each session, a computerized application, exploited by the registration service, allows the edition of the invitations to be sent to the participants. Each invitation is sent, by the centre's registry, individually to the participant concerned, to the address of his company. This summons refers to the order from which it originated. Similarly, on this date, an invitation is prepared by the events department and sent to the facilitator concerned to confirm the seminar.

The facilitator can be internal (training center official) or external. The day before the seminar, the registration department publishes the list of participants. This status is communicated to the facilitator at the opening time of the seminar, to record absences. The seminar is then run for the planned duration. Then, after the closing of the seminar, the registration department retrieves the list of signed participants to enter absences. Finally, he edits a state of absence per company. The absence statements will be sent, through the registry, to the companies concerned.

Questions:

- 1- Identify the organization treated.
- 2- Determine which elements are part of the organization of:
 - steering system
 - information system
 - operating system
- 3- Identify the list of actors (internal and external).
- 4- Locate the flows and Draw the flow diagram?

Exercise3(9pts):

Information systems (IS) are a major lever for the performance of health and medicosocial establishments.

The National Agency for Support to the Performance of Health and Medico-Social Establishments (ANAP) has observed a need for better readability and a common language in information systems. The latter aims to contribute to facilitating dialogue and changing practices among professionals by moving from a vision centered on software or an application to an expression of needs and objectives focused on the functions and usefulness of the tool. Its objective is to improve knowledge and common understanding of the hospital information system through a segmentation of the IS "by function" or functional. This division of the IS is called "functional segmentation" and is a prerequisite for any urbanization process.

The system is responsible for:

- Management and supervision
- Clinical and medical technical production
- Resource Management
- Organization of directories
- 1- In order to urbanize the hospital IS, it is necessary to:
- a- Identify the list of processes.
- b- Establish the business mapping.

- 2- In order to refine the business layer, the hospital IS is divided into areas: Steering and supervision, Management of patient arrival, Shared management of patient information, Management and sharing of vigilance information, Resource management, Organization of directories, Clinical and medical-technical production. a- Assign the corresponding neighborhoods to each zone:
 - Business analysis
 - Patient identification management
 - Invoicing and consideration
 - Patient location/movement management
 - Vigilance monitoring
 - Patient file management
 - Transport management
 - Hotel management
 - Human resources management
 - Equipment management
 - Organization management
 - Facility Management
 - Management of radiotherapy
 - Management of operating rooms
 - Pharmacy management
 - Production of imaging results
 - Production of biological analysis results
- b- Establish the functional map.
- 3- At what level do we need communication tools?
- 4- List communication tools.

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