

United States International University

MIS 6160 IT PROJECT MANAGEMENT

MID Semester Examination

Summer 2015

DATE : Wednesday 25th June 2015 TIME : 6.00 - 8.30 pm

STUDENT ID:

NAME:

Written examination (constitutes 20% the total course score))

Start: 6.00 pm

End: 8.30 pm

READING TIME:

: 5 minutes

WORKING TIME:

: 2 1/2 hours

TOTAL TIME :

: 2 1/2 hours 5 minutes

ATTEMPT

: ALL SECTIONS

GENERAL INSTRUCTIONS

- 2: This is a closed book examination. Text book/Reference books/notes are not Permitted.

SPECIAL INSTRUCTIONS:

This examination paper consists of FOUR (4) SECTIONS

- SECTION A: True False questions (Answer all 15 Questions-15 Marks)
- SECTION A: Multiple questions (Answer all 15 Questions-15 Marks)
- SECTION C: Short questions (Answer ANY TWO OUT OF THREE Questions-40 Marks)
- SECTION D: Applied questions (Answer COMPULSORY Question-30 Marks)

SECTION A	MAX. SCORE	YOUR SCORE
Q1-15	15	
SECTION B		
Q1-15	15	
SECTION C	(40)	
Q1		
Q2		
Q3		
SECTION D	(30)	
Q1		
TOTAL	100	

- b. False
- 13. Each phase of the project should provide at least one specific deliverable.
 - a. True
 - b. False
- 14. Basing an estimate of activity durations on experience gained from working on similar projects is called analogous estimation.
 - a. True
 - b. False
- 15. If the estimates from different estimating techniques are fairly close, then you can average them with a fairly high degree of confidence.
 - a. True
 - b. False

SECTION B: Answer ALL questions

1. The first stage of the IT project methodology focuses on:
 - a) choosing the project team members.
 - b) defining the overall goal of the project✓
 - c) conceptualizing alternative approaches to project development.
 - d) identifying the project's scope.
 - e) identifying project managers and sponsors.
2. The IT project management foundation includes all of the following except:
 - a) PM processes
 - b) PM objectives
 - c) PM methodologies
 - d) PM tools
 - e) PMBOK® knowledge areas
3. _____ focuses on carrying out the project plan to deliver the IT product and managing the project to achieve the goal.
 - a) Conceptualize and initialize the project (Phase 1)
 - b) Develop the project charter and plan (Phase 2)
 - c) Execute and control (Phase 3)
 - d) Close project (Phase 4)
 - e) Evaluate project success (Phase 5)
4. The _____ infrastructure supports the project in terms of the environment and team itself.
 - a) organizational
 - b) project
 - c) technical
 - d) process
 - e) control
5. Which of the following is the best MOV statement?

- a) Our project should make Dayton customers flock to the stores in droves to buy our products.
- b) Our project should be completed in no more than 180 days and should cost no more than \$150,000 and be completed 100% in-house.
- c) Our project should increase sales in the Dayton market by 15% next year to complete our company's Ohio expansion strategy.
- d) Our project should utilize the Spiral Development approach to eliminate 95% of the major risks to our Dayton sales program.
- e) Our project should produce an advertising campaign in Dayton that wins the Ohio Advertising Guild's Award for most creative campaign.

6. A project that improved operational effectiveness would impact the _____ area of an organization.

- a) strategic
- b) customer
- c) financial
- d) operational
- e) social

7. Determining whether employees will be able to adapt to the planned change is _____.

- a) organizational feasibility
- b) technical feasibility
- c) economic feasibility
- d) legal feasibility
- e) ethical feasibility

8. Calculate the ROI for a project with total expected costs of \$40,000 and total expected benefits of \$35,000.

$$\begin{array}{r} 40,000 \\ - 35,000 \\ \hline 15,000 \end{array} \quad \frac{15}{40}$$

- a) -12.5%
- b) 12.5%
- c) 1.875%
- d) 187.5%
- e) -18.75%

9. The text cites all of the following as reasons supporting the selection of an IT project except:

- a) The project is doable and worth doing.
- b) The project maps directly to the organization's strategies and goals
- c) The project provides measurable organizational value.
- d) The project represents a cutting edge technology that fits the team skill set.
- e) The project ranks favorably based on the company's adaptation of the Balanced Scorecard Approach.

10. Executing processes:

- a) Signal the beginning of the project or phase.
- b) Requires an organization to make a commitment of time and resources.
- c) focus on integrating people and resources to carry out the planned activities.
- d) supports planning of the entire project and each individual phase
- e) none of the above

11. The _____ model is where the user and developer work closely together to develop a partially or fully functional system as soon as possible.
- Rapid Application Development (RAD)
 - Waterfall
 - Prototyping
 - Spiral
 - eXtreme Programming
12. Within the Project Charter, _____ focuses on the knowledge areas, processes, and controls that will support the project and are separate subplans or strategies.
- Project description
 - Statement of Work
 - MOV
 - Project Scope
 - Project Administration
13. The business case, project plan, source code, or product are all examples of _____.
- deliverables
 - milestones
 - tasks
 - project phases
 - none of the above
14. _____ integrates areas and resources throughout the organization.
- The Functional Organization
 - The Matrix Organization
 - The Project-Based Organization
 - The Informal Organization
 - The Formal Organization
15. Which of the following attributes is least important for successful project managers:
- ability to communicate with people
 - ability to deal with people
 - ability to create and sustain relationships
 - ability to learn new technical skills
 - ability to organize

SECTION C: Answer ANY TWO questions

Question 1

- What are the advantages of having and following a project methodology?
- Describe the five phases of the IT project methodology. — Plan
- Describe project integration management and its relationship to the other eight Project Management Body of Knowledge areas.
- Describe overall change control and its importance to the project team.

Question 2

- Describe the matrix organizational structure. — Areas & resources integrated through the org.
- Describe the balanced matrix, functional matrix, and project matrix organizational structures. — functional

Track the plan (manage) deliverables

— seamless formal changeover — parallel

- (c) Describe the scope management plan.
 (d) Why is it important to define the project's scope accurately and completely?
- make sure nothing is left out

Question 3

- (a) What is time boxing? What are some advantages and disadvantages of time boxing project activities? *- creates pressure (does not account for unknown)*
 (b) Describe top-down estimating. What are some advantages and disadvantages of top-down estimating? *finished product - abstract*
 (c) Describe bottom-up estimating. What are some advantages and disadvantages of bottom-up estimating? *start -> finished product*
 (d) Why is counting lines of code (LOC) a popular method for estimating and tracking programmer productivity? What are some problems associated with this method?
more lines - more work. true correlation

SECTION D: Answer COMPULSORY questions

Question 1:

The CEO of Nairobi Hospital was to present to the Hospital Board of Directors the Capital budgeting models calculations for the HMIS. His first HMIS alternative was the **MEDITEC** system shown in exhibit 7 below of the Nairobi hospital case given in this class.

Exhibit 7: Meditech SA Solution Cost Benefit Analysis Data

ITEMS	UNITS	UNIT PRICE	2003	2004	2005	2006	2007	2008
Cost of Hardware								
Server			32,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
Client Station	38	1,300	49,400	1,000	1,000	1,000	1,000	1,000
View station	200	1,100	220,000	2,500	2,500	2,500	2,500	2,500
Laser Printer	6	400	2,400	240	240	240	240	240
Desk Jet Printer	15	100	1,500	150	150	150	150	150
Backup tape drive	1	4,500	4,500.00	-	-	-	-	-
Telecommunications								
Router	1		5,000.00	50	50	50	50	50
Firewall	1	3,800	3,800	800	800	800	800	800
Cabling			1,030,000	-	-	-	-	-
Software								
MEDITECH			1058400	-	-	-	-	-
Oracle database 9i			26000					
Services								
Professional service			349790	35,000	35,000	35,000	35,000	35,000
Annual Maintenance			190512	190512	190512	190512	190512	190512
System Personnel								
TOTAL COSTS			2,973,302	235,252	235,252	235,252	235,252	235,252
Benefits								
1. Billing enhancement			400,000	480,000	576,000	748,800	973,440	1,265,472
2. Reduced Paramedics			50,000	60,000	69,000	79,350	91,253	104,940
3. Reduced Clerical			50,000	60,000	69,000	79,350	91,253	104,940
4. Reduced Messenger			15,000	18,000	20,700	23,805	27,376	31,482
5. Reduced Communication			15,000	18,000	20,700	23,805	27,376	31,482
6 Reduced stock			240,000	288,000	331,200	380,880	438,012	503,714
TOTAL BENEFITS			770,000	924,000	1,086,600	1,335,990	1,648,709	2,042,031
Net Cashflows								
			(2,203,302)	688,748	851,348	1,100,738	1,413,457	1,806,779

Assumed Rate billing enhancement income (20% for years 2004 and 2005, 30% for years 2006 to 2008)

Assumed Growth Rate for other cost reductions revenue: 20% for year 2004, 15% increases for each additional year

Net Cashflows

924,000
235,252
688,748

-2,203,302-

Profit - deductions - costs
 Profit - deductions - costs

Initial cost
2,973,302
2.7

2,203,302

Workout the following for the CEO:

- (a) Payback Period —
- (b) Return on Investment(ROI) —
- (c) Cost-Benefit Ratio ·
- (d) Net Present Value (NPV) *do account for*
- (e) Profitability Index.
- (f) Internal Rate of Return (IRR) *BAI33*