

Institute of Systems Science  
National University of Singapore

**MASTER OF TECHNOLOGY IN  
SOFTWARE ENGINEERING AND KNOWLEDGE ENGINEERING**

**Unit 4 & 8 (2<sup>nd</sup> Session) Sample Examination**

**Subject: IT Service Management**

**SOLUTIONS**

**SECTION A**

**Question 1**

[9 Marks]

- a. The ITIL Phases, relevant issues and how they are addressed are as follows:

S/no	ITIL Phase	Issue	How the Phase Addresses the Issue
1	Service Strategy	(xi)	Service Strategy provides guidance on how to design, develop and implement Service Management as a strategic asset. This will look into maximising value and minimising risk. Issue (xi) is a strategy issue and so ITIL Service Strategy will help to address it.
2	Service Design	Any one of below:  (i)  (iii)  (v)  (vi)  (vii)	Service design provides guidance for the design of appropriate and innovative IT services so as to meet current and future agreed business requirements. Its processes include Service Catalogue Management / Service Level Mgt / Capacity Mgt / Availability Mgt / IT Service Continuity Mgt / Information Security Mgt / Supplier Mgt which will cater to the issue.  The issues on the left belong to these processes (see question b below for details)

S/no	ITIL Phase	Issue	How the Phase Addresses the Issue
		(viii) (x)	which issue belong to which process) and so Service Design can help to address it.
3	Service Transition	(ii)	Service Transition provides guidance for transitioning new and changed services into operations. Issue (ii) is a transition issue and so ITIL Service Transition can help to address it.
4	Service Operation	(iv)	Service Operation includes guidance on achieving effectiveness and efficiency in the delivery and support of services so as to ensure value for the customer and the service provider. Issue (iv) is an Event Management issue which is under Service Operation. Hence, Service Operation can help to address it.
5	Continual Service Improvement	(ix)	Continual Service Improvement (CSI) provides instrumental guidance in creating and maintaining value for customers through better design, introduction and operation of services throughout their lifecycle. Issue (ix) is a CSI issue as ABC Company is taking effort to make their service better. Hence, CSI will help to address this issue.

- b. The Service Design processes, relevant issues and how they are addressed are as follows:

S/no	Service Design Process	Issue	How the Process Addresses the Issue
1	Service Catalogue Management	(vii)	Service Catalogue Management aims to ensure that a Service Catalogue is produced and maintained. Hence, this will cater to issue (vii) where there is no catalogue at all.
2	Service Level Mgt	(i)	Service Level Management aims to ensure that an agreed level of IT service is provided for all current IT services, and that future services are delivered to agreed achievable targets. Issue (i) arise because there is no agreed targets and so this process will help address it.
3	Capacity Mgt	(vi)	The Capacity Management process is to ensure that cost justifiable IT capacity in all areas of IT, always exists and is matched to the current and future agreed needs of business, in a timely manner. Issue (vi) is a capacity issue as not enough capacity is catered for the spikes in demand. Hence, Capacity Management can help address the issue.
4	Availability Mgt	(iii)	Availability Management aims to ensure that the level of service availability delivered in all services is matched or exceeds the current and future agreed needs of the business, in a cost effective manner. Issue (iii) is an availability issue as the availability does not meet the needs of the business and hence, Availability Mgt can help to address it.
5	IT Service Continuity Mgt	(x)	IT Service Continuity Mgt is to support the overall Business Continuity Mgt process by ensuring that the required IT technical and service facilities can be resumed within required, and agreed, business timescales. Issue (x) did not resume email service within required timescale and hence, IT Service Continuity Mgt can help

S/no	Service Design Process	Issue	How the Process Addresses the Issue
			to address it.
6	Information Security Mgt	(v)	Information Security Management (ISM) is to align IT security with business security and ensure that information security is effectively managed. Issue (v) is a security incident involving hackers and hence, ISM is the correct process to address it.
7	Supplier Management	(viii)	Supplier Management is to manage suppliers and the services they supply. Issue (viii) arise because of lack of supplier management and hence, Supplier Management can help to address it.

c. The priority and order should be as follows:

- i. One is a report on the e-Sales Application is not working. This is considered high urgency and medium impact. **[Priority 2 – deal with this first]**
- ii. The other is of the Payroll Application not working. This is considered medium urgency and low impact. **[Priority 4 – deal with this second]**

*[If the priority is not as above but the student produces a table (eg. as below) from which they give their priority correctly, then it is acceptable]*

