



## BRAINWARE UNIVERSITY

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Brainware University  
398, Ramkrishnapur Road, Barasat  
Kolkata, West Bengal-700125

Term End Examination 2024-2025

Programme – B.Sc.(ANCS)-Hons-2023

Course Name – IT Infrastructure Service Management and Entrepreneurship

Course Code - BNC30002

( Semester III )

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

(i) How do you explain the term "request fulfilment" in the ITIL framework?

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|--|---|
| a) Request fulfilment is a means of managing the changes that users request in the IT environment. | b) Request fulfilment is used to deliver non-IT-related business components to the users.                       |
| c) Request fulfilment is a process for managing the requests from users to the IT department.      | d) Request fulfilment is the report produced on the number of password resets carried out by the IT department. |

(ii) How do you explain the "continual service improvement" (CSI) stage of the service lifecycle?

- |  |  |
|--|--|
| a) The CSI stage is concerned with the management of improvement across the whole service lifecycle. | b) The CSI stage considers only the improvements needed for the business outputs.              |
| c) The CSI stage focuses on improving the operational processes in the service lifecycle.            | d) The CSI stage manages the improvements between project management and operational services. |

(iii) How do you define the value of problem management?

- |   |  |
|---|--|
| a) Coordinating Service Design                                  | b) Planning and supporting Service Transitions |
| c) Reduced expenditure on workarounds or fixes that do not work | d) Increased customer engagement               |

(iv) Identify the reason to raise a change proposal for authorization.

- |  |   |
|--|---|
| a) If the change has a major cost impact on the business | b) If the change has been assessed as being technical |
| c) If the change has been raised by a user               | d) If the change has been assessed by a supplier      |

(v) Choose the correct activity from the list below that is the responsibility of Change Management.

- a) Reviewing changes to ensure they have worked  
b) Creating a change to rectify a known error  
c) Determining the release strategy for a major change  
d) Implementing a software change at a remote site
- (vi) Select the right activity that is NOT part of the release process.  
a) Moving software from the DSL to the development environment  
b) Moving software from the DSL to the live environment  
c) Moving software from the development to the test environment  
d) Moving software from the live environment to the DSL
- (vii) Which of these statements provides the best description of the purpose of service level management?  
a) Ensure that all current and planned IT services are delivered to agreed achievable targets  
b) Ensure there is a high-level relationship with customers to capture business demands  
c) Ensure users have a single point of contact for all operational issues  
d) Ensure there is a smooth transition of services to and from service providers
- (viii) Identify the service level requirements that are related to which of the following:  
a) Utility  
b) Warranty  
c) Change records  
d) Configuration records
- (ix) Which of these is the best description of the purpose of transition planning and support process?  
a) To provide overall planning and coordination of resources for service transition  
b) To provide coordination for all change management activities  
c) To provide planning for all designs in the service lifecycle  
d) To provide planning for operational activities during release management
- (x) What is the purpose of the Service Desk Application?  
a) To manage customer requests  
b) To manage IT assets  
c) To manage IT projects  
d) None of these
- (xi) Define the Availability Management.  
a) The process of managing IT assets  
b) The process of ensuring that services are available when customers need them  
c) The process of managing IT projects  
d) None of these
- (xii) Define the IT Service Continuity Management.  
a) The process of managing IT assets  
b) The process of ensuring that IT services can be restored in the event of a disaster  
c) The process of managing IT projects  
d) None of these
- (xiii) Summarize the purpose of the Service Strategy component of the ITIL framework.  
a) To define the overall business strategy for IT services  
b) To design new IT services  
c) To transition IT services into production  
d) To operate and support IT services
- (xiv) Identify the purpose of the Continual Service Improvement component of the ITIL framework.  
a) To develop a strategy for managing IT services  
b) To implement IT services quickly and efficiently  
c) To design and build IT services that meet business needs  
d) None of these
- (xv) Identify the term which is not included in RACI model.  
a) Responsible  
b) Accountable  
c) Informed  
d) Incident

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Illustrate the activities involved in IT Service Continuity Management. (3)
3. Apply the concept of Capacity Management to manage resources in an IT organization. (3)
4. Define IT Service Management (ITSM) and explain its primary objective. (3)
5. Identify two key performance indicators (KPIs) used to measure the effectiveness of a Service Desk. (3)
6. Solve this problem: If the service is available but used only from 9 a.m. to 5 p.m., Monday to Friday (and these 40 hours are the service hours agreed in the SLA), then there will be the same one hour of downtime. Then, then what will be the availability? (3)

OR

Solve this problem: A service suffers four failures in a month. The duration of each was 1 hour, 2 hours, 1.2 hours, and 1.8 hours, resulting in a total downtime of 6 hours. What will the MTRS be? (3)

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**Group-C**

(Long Answer Type Questions)

5 x 6=30

7. What is the purpose of the Availability Management Process? (5)
8. Illustrate the role of the Service Level Agreement (SLA). (5)
9. How would you apply the 7 R's of Change Management to real-world changes? (5)
10. How would you demonstrate incident escalation? (5)
11. Explain the Service Failure Analysis (SFA). (5)
12. How would you assess risks by implementing IT service continuity management? (5)

OR

How would you explain Mean Time Between Failure (MTBF)? (5)

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