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BRAINWARE UNIVERSITY

Term End Examination 2025-2026
Programme – B.Sc.(ANCS)-Hons-2023/B.Sc.(ANCS)-Hons-2024
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 would you define ITIL?

a) Rules for achieving recognized IT standards
b) Good advice about how to manage IT services
c) Advice on managing projects
d) Advice on the technical requirements for infrastructure

(ii) How would you recognise an IT service provider?

a) An internal IT department
b) An external outsourced IT department
c) Either an internal IT department or an external IT department.
d) A business unit.

(iii) What is the name of the document that outlines the expected expenses and advantages of a proposed new service?

a) The project plan
b) The service strategy
c) The business case
d) The improvement register

(iv) When closing a problem record, which of the following actions should be identified as true? A) Close any related Incident records. B) Check that the Problem record contains a full historical record of all events which occurred

a) Only A is correct
b) Only B is correct
c) A and B are both correct
d) A and B are both incorrect

(v) What is the difference between a Known Error and a Problem?

a) The underlying cause of a KnownError is known. The underlyingcause of a Problem is notknown
b) A Known Error involves an error inthe IT infrastructure. A Problemdoes not involve such an error.
c) A Known Error always originatesfrom an Incident. This is notalways the case with a
d) With a Problem, the relevantConfiguration Items have beenidentified. This is not the

Problem

(vi) Define the purpose of event management.

a) Event management detects events that are significant for the management of the service and ensures the appropriate actions are taken.

b) Event management monitors the infrastructure of the IT services and guarantees that no outages occur in peak times of business usage.

c) Event management manages failures in the infrastructure and ensures that services are restored to normal working as quickly as possible.

d) An event is an incident that has become extremely serious and is causing significant business impact

(vii) Predict the correct list of functions described in ITIL.

a) Technical management function, facilities management function, service desk function.

b) Infrastructure management function, desktop support function, application management function, service desk function.

c) Technical management function, operations management function, application management function, service desk function.

d) Infrastructure management function, service desk function, application development function.

(viii) Recognize the best description of an incident.

a) An event that has significance and impacts the service

b) An unplanned interruption to an IT service or reduction in the quality of an IT service

c) A fault that causes failures in the IT infrastructure

d) A user error

(ix) Identify the unsatisfactory resolution to an incident.

a) A user complains of poor response; a reboot speeds up the response.

b) A user complains of poor response; second-line support runs diagnostics to be able to monitor it the next time it occurs.

c) The service desk uses the KEDB to provide a workaround to restore the service.

d) The service desk takes control of the user's machine remotely and shows the user how to run the report they were having difficulty with.

(x) Which can be produced by the problem management? 1. Known errors 2. Workarounds 3. Resolutions 4. RFCs

a) 1 and 4

b) 1 and 3

c) 1, 2, and 4

d) All of these

(xi) A serious incident has occurred. The assigned solution team is unable to resolve this incident within the agreed time. The Incident Manager is called in. Which form of escalation describes the above sequence of events?

a) Formal escalation

b) Functional escalation

c) Hierarchical escalation

d) Operational escalation

(xii) Identify the best description of an underpinning contract.

a) An agreement between an IT service provider and another part of the same organization assisting in the provision of services

b) An agreement between an IT service provider and customer relating to the delivery of services

c) An agreement between different customers about the requirements of the service

d) A contract between an IT service provider and an external third-party organization assisting in the delivery of services

(xiii) Determine which of the following you would NOT expect to see in an IT service continuity plan.

a) Contact lists

b) The version number

c) Reference to change control procedures

d) Service Level Agreements

(xiv) Availability is calculated using the formula AST-DT/AST × 100. Identify the terms AST and DT that refer to _____.

a) AST = assumed service target, DT = delivery time
b) AST = availability service target, DT = downtime
c) AST = agreed service time, DT = downtime
d) AST = agreed service time, DT = delivery time

(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. What is the difference between 'Responsible' and 'Accountable' in the RACI model? Give one example. (3)
3. Differentiate between Change Management and Release Management. (3)
4. Write two key processes involved in the Service Operation phase of ITIL. (3)
5. Define the role of a Service Desk within the ITIL framework. (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)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Differentiate between problem management and incident management. (5)
8. How would you demonstrate incident escalation? (5)
9. Explain about RACI model in ITIL. (5)
10. Explain the function of a multilevel SLA. (5)
11. How does IT Service Continuity Management determine that services are restored after a disaster? (5)
12. Summarize the subprocesses of Availability Management. (5)

OR

Summarize the incident management process organized in ITIL. (5)

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