

2411000607020002
EXAMINATION NOVEMBER 2024
BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)
(MASTER OF SCIENCE (INFORMATION TECHNOLOGY) 5
YEAR INTEGRATED COURSE) (SEVENTH SEMESTER)
ADVANCED .NET - LEVEL 2

[Time: As Per Schedule]

[Max. Marks: 70]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination : **BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY) (MASTER OF SCIENCE (INFORMATION TECHNOLOGY) 5 YEAR INTEGRATED COURSE) (SEVENTH SEMESTER)**
 - b. Name of the Subject : **ADVANCED .NET - LEVEL 2**
 - c. Subject Code No : **2411000607020002**
2. Sketch neat and labelled diagram wherever necessary.
 3. Figures to the right indicate full marks of the question.
 4. All questions are compulsory.

Seat No:

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Student's Signature

Q.1 Attempt any TWO.

14

- a) How can we manage various environments and development modes for a .NET Core web application? When they are required?
- b) Write a note on Expression Bodied Members in C#. Explain any one type in detail.
- c) Explain ASP.NET Core MVC architectural pattern of a web application in detail.

Q.2 Attempt any TWO.

14

- a) What is Data First approach in .NET Core entity framework? Explain steps to use it with example.
- b) Explain anonymous type usage with LINQ statements using examples.
- c) Write a note on implementation of generic interface to achieve dynamic polymorphism in C#.

Q.3 Do as directed. 14

- a) Explain MVC Core Blazor based project template and architecture in detail.
- b) When should we use TempData, ViewBag and ViewData in an ASP.NET MVC application? Also discuss limitations of each in brief.

Q.4 Write a note on any TWO from the following with required examples. 14

- a) Minimal API design in .NET Core
- b) Custom Web API
- c) Testing a web API

Q.5 Answer any TWO. 14

- a) Explain various ways to host a .NET Core web application in detail.
- b) What is Identity in .NET Core web application? How to configure a web application for it? Explain with example.
- c) Why do we need Dependency Injection in a .NET Core application? Explain with suitable example.
