



RAN - 2311000702020002

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**M. Sc. (ICT) (Sem. - II ) Examination April - 2025**

**Application Development using .Net Core**

**Time: 3 Hours ]**

**[ Total Marks: 70**

**सूचना : / Instructions**

(१)

नीचे दशविले निशानीवाणी विगतो उत्तरवली पर अवश्य लभवी.  
**Fill up strictly the details of signs on your answer book**

Name of the Examination:

**M. Sc. (ICT) (Sem. - II )**

Name of the Subject :

**Application Development using .Net Core**

Subject Code No.: **2311000702020002**

Seat No.:

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Student's Signature

- (2) All questions are compulsory.  
(3) Give examples wherever applicable.

- Q.1 Answer any TWO from the following 14**
- a) Evaluate C# structure type with reference to object oriented programming  
b) What is Internal access modifier? How is it different from public and private modifiers? Explain by giving small examples.  
c) How to create and implement a generic collection in C# application?
- Q.2 Write a detail note on any TWO from the following. 14**
- a) Dependency Injection and Inversion of Control  
b) Difference between Indexer and Array  
c) Action Filter
- Q.3 Do as directed. 14**
- a) Why property type is known as smart field? Explain with example. 5  
b) Explain MVC application configuration for URL routing. 5  
c) What is appsettings.json? How is it useful in MVC application? 4

**Q.4 Answer any TWO from the following. 14**

- a) What is entity framework? How is it useful for application development?
- b) How to create a list of tuples and manage it in an application?
- c) What is Event? Explain its relationship with delegate type using a C# example.

**Q.5 Answer any TWO from the following. 14**

- a) Design a sample code solution to pass data from controller to view and display all values to the user.
- b) Compare TempData and ViewData usage in MVC application with example.
- c) Design and testing of a web API in .Net Core is same as web application.  
Comment on the statement and provide supporting arguments.

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