



RAN-2511001106020001

B.Sc. (IT) (NEP) (Sem. VI) Examination March - 2026

ASP.NET Core MVC using C# (Paper - 602)

Time: 2 Hours]

[Total Marks: 50

સૂચના : / Instructions (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the above details on your answer book.	Seat No.: <table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> Student's Signature						

Q. 1. Attempt any THREE. [15]

- (A) Describe the .NET Framework architecture and the specific role of the Common Language Runtime (CLR).
- (B) Demonstrate the design of a Class type versus a Structure type. When should each be used?
- (C) Compare the .NET Core architecture with the traditional .NET Framework. What are the primary advantages of .NET Core?
- (D) Demonstrate designing a custom event for a C# class.

Q. 2. Attempt any THREE. [15]

- (A) Explain the concept of Indexers and how they differ from standard Property types.
- (B) Describe the process of defining, creating, and invoking a Delegate in C#.
- (C) Explain the limitations of Multicast Delegates.
- (D) Define the Stack and Queue collection types in C# and provide a use case for each.

Q. 3. (A) Illustrate the MVC Architectural Pattern and how it separates concerns in a web application. [06]

- (B) Explain how to create a Controller and describe the specific role it plays in the request lifecycle. [05]

OR

- (B) How can Models be used to manage temporary data within an ASP.NET application?

Q. 4. (A) Explain State Management using Session State and Cookies in ASP.NET Core. [06]

- (B) Describe the role of Environment Variables in supporting Multiple Environments. [03]

OR

- (B) Compare the usage of ViewData, ViewBag, and TempData for passing data in brief.