R.N.G.PATEL INSTITUTE OF TECHNOLOGY-RNGPIT
(An Autonomous Institute U/s UGC Act 1956)

B.Voc. SEMESTER-I, SEMESTER END EXAMINATION – WINTER 2025

SUBJECT CODE: 1AVFX101　　　　　　　　　　**DATE: 15-12-2025**

SUBJECT NAME: **FUNDAMENTALS OF INFORMATION TECHNOLOGY**

TIME: 11:00 AM to 01:00 PM　　　　　　　　**TOTAL MARKS: 50**

Instructions
1. It is **compulsory** for students to write **Enrolment No. /Seat No.** on the question paper.
2. Attempt all questions in the question paper.
3. The figures to the right of each question indicate full marks. Make suitable assumptions with proper justification wherever required.
4. Simple, non-programmable scientific calculators are permitted.
5. BL - Cognitive Level (As per Revised Bloom's Taxonomy) (R-Remember, U-Understanding, A –Application, N –Analyze, E – Evaluate, C -Create), CO - Course Outcomes.

			Marks	BL	CO
Q.1	**(a)**	List and explain the basic components of a computer system with the help of suitable examples.	**05**	**R**	**1**
	(b)	Differentiate between data and information with appropriate examples.	**05**	**U**	**1**
Q.2	**(a)**	Explain the differences between the Binary, Decimal, and Hexadecimal number systems with suitable examples to show how the same value is represented in each system.	**05**	**U**	**2**
	(b)	Apply your knowledge to explain how open-source software helps in creating new ideas in the animation and VFX industry.	**05**	**A**	**2**

<div align="center">OR</div>

			Marks	BL	CO
Q.2	**(a)**	Explain the difference between low-level and high-level programming languages with suitable examples, highlighting how they differ in terms of syntax, usability, and execution.	**05**	**U**	**2**
	(b)	Apply your understanding to compare Blender and Maya based on features, cost, and use in real projects.	**05**	**A**	**2**
Q.3	**(a)**	Explain any two advantages and two limitations of a Local Area Network (LAN).	**05**	**U**	**3**

(b)	Illustrate the basic structure of a MAN (Metropolitan Area Network) with a simple diagram showing how it works.	**05**	**A**	**3**	

OR

Q.3	**(a)**	Explain the difference between guided and unguided transmission media with examples.	**05**	**U**	**3**
	(b)	Apply your knowledge of networking to explain how file sharing helps teamwork in a studio.	**05**	**A**	**3**

Q.4	**(a)**	Explain the difference between a Blog and a Vlog with examples.	**05**	**U**	**4**
	(b)	Apply your understanding to identify suitable types of Internet Service Providers (ISPs) for a small business and a home user. Explain your choice.	**05**	**A**	**4**

OR

Q.4	**(a)**	Describe the key differences between IPv4 and IPv6 in simple terms	**05**	**U**	**4**
	(b)	Using your knowledge of Internet addressing, demonstrate how an IP address is used to send data between two computers on a network.	**05**	**A**	**4**

Q.5	**(a)**	Explain the key features of Cloud Computing in your own words.	**05**	**U**	**5**
	(b)	Apply the steps to update or reinstall a device driver when a hardware problem occurs.	**05**	**A**	**5**

OR

Q.5	**(a)**	Differentiate AI, IoT, and Cloud Computing based on their uses and impact on business.	**05**	**U**	**5**
	(b)	Demonstrate how Spoken Tutorials and Virtual Labs can be used to enhance digital learning.	**05**	**A**	**5**

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