Unique Paper Code	**:**	**62341101**
Name of the Course	**:**	**B. Voc.**
Name of the Paper	**:**	**(GEC 1.2) Computer Fundamentals**
Semester	**:**	**I**
Duration	**:**	**3 Hours**
Maximum Marks	**:**	**50**
Students admitted in the year	**:**	**2019 or before**

Instructions for Candidates:

Attempt any Four out of Six questions.
All questions carry equal marks.

1. A user was working on a document file when the computer suddenly turned off. The user was unable to Save the file. Do you think the user would be able to get the file in the same state as before the unexpected shut down? Give Reasons for your answer. Also suggest a solution to such an issue.

   A type of permanent memory of a computer is ***'manufacturer programmed'***. List the key features of the various types of this memory briefly.

2. Mr X works in the design industry, he needs to print the design/drawing that he created, but finds that the printer may not be the appropriate for this purpose. What alternative device would you like to suggest to him. Explain in detail

   Which is the most preferred ***secondary storage device*** of a Computer? Discuss.

3. There is a mismatch of speed between the processor and the Primary Memory. Explain in detail the measure adopted to overcome this? Also define the terms ***Cache Hit*** and ***Cache Miss.***

   Perform the given conversions:
   $(32.541)_{10} \rightarrow ?_2$, $(9CD)_{16} \rightarrow ?_8$, $(11000011.101)_2 \rightarrow ?_{10}$, $(2B.3C)_{16} \rightarrow ?_8$

4. A good security strategy mandates protecting your computer from malware and viruses. What measures(software) are taken in this regard? Explain.

   Perform ***binary arithmetic*** to calculate the result of the following:
   $(+43) - (-5)$, $(+34) + (-1)$, $(+10) - (-13)$, $(+50) + (-2)$

5. Discuss the role Computers have played in the ***Education sector***, especially during the present circumstances

   If you want to share data between two devices that are in close proximity to each other without using a cable/cord. Which technology would you suggest for this? Explain .

6. The '***working memory'*** of the CPU holds data, instructions, intermediate results and final results of processing. Discuss the significance and types of these high-speed storage areas within the CPU.

   Distinguish between ***UNICODE*** and ***ASCII*** coding schemes