

MODEL ANSWER

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE

SEMESTER END EXAMINATION

B. Sc. (Hons.) in Horticulture

Semester :	II (New)	Academic year :	2018-19
Course No. :	H/IT-121	Title :	Information and Communication Technology
Credits :	2 (1 + 1)	Time :	
Day & Date :		Total Marks :	40

SECTION 'A'

Q.1	Define software. Enlist the different types of software. Explain about system software.
Ans:	<p>The term software refers to a set of computer programs, procedures, and associated documents (flowcharts, manuals, etc) describing the programs, and how they are to be used. (1 Mark)</p> <p>1. System software (1 Mark)</p> <p>2. Application software</p> <p>System Software: System software is a set of one or more programs which controls the operations and/or extends the processing capability of a computer system.</p> <p>Functions of System software:</p> <ol style="list-style-type: none"> 1. Supports development of other application software. 2. Supports execution of other application software. 3. Monitors effective use of various hardware resources such as CPU, memory, peripherals, etc. 4. Communication with and controls operation of peripheral devices such as printer, disk, tape, etc. <p>Systems software includes the programs that are dedicated to managing the computer itself, such as the operating system, file management utilities, and disk operating system (or DOS). The operating system manages the computer hardware resources in addition to applications and data. Without systems software installed in our computers we would have to type the instructions for everything we wanted the computer to do. (2 Mark)</p>
Q.2	What is information communication technology? Explain its importance in detail.
Ans:	<p>ICT includes technologies that we are interested in recording, storing, processing, retrieving, transmitting and receiving information to help. Including the equipment that will be used for this purpose include computers, networks, communication equipment, electronic fax, software. (2 marks for explanation and 2 marks for importance)</p> <ul style="list-style-type: none"> • IT for Agricultural Teachers and Educational Planners • IT in Agricultural Learners in Class Rooms • IT for Agricultural Learners in Virtual Classes • New IT Dimensions of Agricultural Education • IT for Agricultural Empowerment Dimension • IT to link all agricultural Colleges
Q.3	Enlist computer input and output devices. Explain any two devices of both in brief.

Ans:	<ul style="list-style-type: none">• Input Devices: Mouse, digital camera, webcam, keyboard, microphone, Scanner.• Output devices: Monitor, printer, printer; projector, speaker. <p style="text-align: right;">(2 marks for enlist) (1 mark for each explanation)</p>													
Q. 4	Differentiate between machine language and assembly language.													
Ans:	<table><thead><tr><th>Machine Language</th><th>Assembly language</th></tr></thead><tbody><tr><td>Machine language is the lowest level programming language where the instructions execute directly by the CPU.</td><td>Assembly language is a low-level programming language which requires an assembler to convert to machine code/object cod.</td></tr><tr><td>Machine language is comprehensible only to the computers.</td><td>Assembly language is comprehensible to humans.</td></tr><tr><td>A machine language consists of binary digits.</td><td>Assembly language follows a syntax similar to the English language.</td></tr><tr><td>Machine language varies depending on the platform.</td><td>Assembly language consists of a standard set of instructions.</td></tr><tr><td>Machine language is machine code.</td><td>Assembly language is using for microprocessor-based, real-time systems.</td></tr></tbody></table> <p style="text-align: right;">(1 Mark for each difference)</p>	Machine Language	Assembly language	Machine language is the lowest level programming language where the instructions execute directly by the CPU.	Assembly language is a low-level programming language which requires an assembler to convert to machine code/object cod.	Machine language is comprehensible only to the computers.	Assembly language is comprehensible to humans.	A machine language consists of binary digits.	Assembly language follows a syntax similar to the English language.	Machine language varies depending on the platform.	Assembly language consists of a standard set of instructions.	Machine language is machine code.	Assembly language is using for microprocessor-based, real-time systems.	
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Q.5	What is programming? Explain algorithm and flowchart.													
Ans:	<p>The program or set of programs in a computer that helps in processing the information is called SOFTWARE. Software is a detailed writing of stepwise instructions for the computer to carry out the particular task efficiently and properly. The art of writing software is called programming. Software is an essential part of a computer. Without the software the computer will neither accept information nor give the desired result.</p> <p style="text-align: right;">(2 marks for description) (1 Mark)</p> <p>Algorithm:</p> <ul style="list-style-type: none">• A step-by-step procedure to solve the given problem is known as Algorithm.• The essential properties of Algorithm are:<ul style="list-style-type: none">• It should be simple• It should be clear with no ambiguity• It should lead to a unique solution of the problem.• It should involve a finite number of steps to arrive at a solution.• It should have the capability to handle some-unexpected situations.• For example if a student wants to purchase a pen, he has to follow the following steps.• These numbered steps are known as Algorithm. <p>Flowchart: (1 Mark)</p> <ul style="list-style-type: none">• The graphical or visual representation of algorithm is called as flow chart.• The flow charts are easier to understand the flow of the solution.• Flow charts are drawn with the standard symbols accepted worldwide.• Each standard flow chart symbol represents an action to be performed such as Start or Stop, input operations Read or Write, decision making etc.													
Q.6	What is operating system. Explain the functions of operating system.													
Ans:	<p>An operating system is a set of programs that helps in controlling and managing the hardware and the software resources of a computer system. As the name suggests, the</p>													

	<p>operating system is used for operating the system or the computer. It is a set of computer programs and also known as DOS (Disk Operating System). DOS was the first operating system introduced by Microsoft.</p> <p>Functions of an Operating System: (1/2 mark for each function)</p> <ul style="list-style-type: none"> • Memory Management • Processor Management • Device Management • File Management • Security • Control over system performance • Job accounting • Error detecting aids • Coordination between other software and users
Q.7	<p>What are the different important features of word processing software? (1/2 marks for each feature)</p>
Ans:	<ul style="list-style-type: none"> • Word wrap: automatic arrangement of text in lines of specified length without the necessity of touching the return key. • Justification: automatic alignment of text to both the left and right margins. • Adjustment: realignment of text to new margin and tab settings. • Alignment: positioning text or numbers to specified margin and tab settings. • Insertion: the entry of new text within previously typed material without erasing the existing material. • Deletion: erasure of text from the screen, or of whole documents from the disk. • Search and Replace: moving directly to specified words or parts of words within a document and replacing them with different words or word portions. • Copying or Cutting: the duplication or moving of blocks of text within a document. • Pagination: automatic division of a document into pages of specified numbers of lines. • Page Numbering: automatic sequential numbering of pages. • Headers and Footers: option of creating standard blocks of text that will automatically appear at the top or bottom of each page in a document. • Footnoting: automatic sequential numbering of footnotes and positioning of the footnotes at the bottom of their appropriate pages during pagination. • Table of Contents and Index Generators. Programs that create these based on the text of a document. • Automatic Spelling Checker and Corrector. Program that compares words in the text against an on-line dictionary, flagging items not found in the dictionary and offering alternative spellings and a means of correcting the errors.
Q.8.	<p>What is communication process? Enlist the importance of communication.</p>
Ans:	<p>Communication is the process by which two or more people exchange ideas, facts, feelings or impressions in ways that each gains a common understanding of the meaning, intent and use of messages. The term 'communication' stems from the Latin word 'communis'-meaning 'common'. Communication, then, is a conscious attempt to share information, ideas, attitudes and the like with others.</p> <p>Good communication does not consist merely of giving orders, but of creating understanding. It does not consist merely of imparting knowledge, but of helping people gain a clear view of the meaning of knowledge. Most of the progress in the future will</p>

stem from better technology and greater skill in communicating it to others. Too many people saying the wrong things at the wrong time, in the wrong way, to the wrong people; slows down progress. What is needed is more people saying the right things at the right time, in the right way, to the right people. This is the formula for good communication. (2 Marks)

Importance of Communication

(1/2 mark each)

1. Communication establishes a favourable climate in which development can take place.
2. Communication has multiplier effect
3. Communication varies the aspirations of the people
4. Communication is essential for all human activities
5. Communication is essential for good leadership

Q.9 What is Audio Visual aids? Enlist the advantages of Audio Visual aids.

Ans: Audio visual aid is a device that assists the instructor to transmit to a learner facts, skills, attitudes, knowledge, understanding and perception. Visual aid is any instructional device through which message can be seen but not heard. An audio aid is any instructional device through which a message can be heard but not seen. Audio visual aid is any instructional device through which a message can be heard as well as seen.

Advantages: (2 marks explanation; 1/2 marks for each advantage)

- Helps to convey meaning clearly.
- Helps to supplement the spoken word.
- Helps to present subject in condensed form.
- Helps to present subject in understandable form.

Q.10 Write down the common applications of Internet.

(1/2 mark for each application)

Ans:

- Communication
- Research
- Education
- Financial transaction
- Real time update
- Leisure
- Online booking
- Blogging
- Job search
- Shopping

SECTION 'B'

11 Match the pairs

	'A'	Answer
1	1024 MB	One Gigabyte
2	WAN	Wide area network
3	Recycle Bin	Used to store deleted files in windows
4	Undo	Ctrl + Z

Q.12	Spell out the abbreviations	
1.	WAN: Wide area network	
2.	HTML: Hypertext Markup Language	
3.	LAN: Local Area Network	
4.	RAM: Random Access Memory	

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