

**Qn. 1**

The Higher Secondary Department wishes to conduct an examination for +1 students with multiple choice questions and publish results as soon as possible. Suggest a method to evaluate the answer scripts and publish the results quickly & correctly with the help of computers.

ഹയർ സെക്കന്ററി ഡിപ്പാർട്ട്മെന്റ്, multiple choice ചോദ്യങ്ങൾ അടങ്ങിയ ഒരു പരീക്ഷ +1 students ന് നടത്താനും result വേഗം പ്രസിദ്ധീകരിക്കാനും തീരുമാനിച്ചു. കമ്പ്യൂട്ടറിന്റെ സഹായത്താൽ answer script നോക്കുന്നതിനും result വേഗം പ്രസിദ്ധീകരിക്കുന്നതിനുള്ള ഒരു method നിർദ്ദേശിക്കുക.

**Ans** OMR has to be used, it senses the presence or absence of a mark (bubbles) using a high density beam then converted into electric signals for computer. It needs good quality expensive paper and accurate alignment of printing on forms.

**Qn. 2**

Remesh is a graphic designer who prepares his drawing using a computer. He desires for an alternative device by which he can draw directly on the screen. Suggest a device for this and explain it working.

രമേഷ് ഒരു graphic designer ആണ്. അവൻ computer ന്റെ സഹായത്താൽ പടങ്ങൾ വരയ്ക്കുന്നു. അവൻ പടങ്ങൾ screen ൽ നേരിട്ട് വരയ്ക്കുന്നതിനുള്ള ഒരു ഉപകരണം വേണം. അതിനുള്ള ഉപകരണം ഏതെന്ന് വിശദീകരിക്കുകയും അതിന്റെ പ്രവർത്തനം വിവരിക്കുകയും ചെയ്യുക.

**Ans** Light pens are used for this. It consists of a photo-cell placed in a small tube, it is able to detect the light coming from the screen. Hence locate the

exact position on the screen. It is used by graphic designers, illustrators and drafting engineers, with the help of CAD to draw directly on the screen.

**Qn. 3**

You might have noticed that in some shops billing is done using computers without typing the item name, price, quantity, etc. Mention the device used for entering data and explain its working.

നിങ്ങൾ ചിലപ്പോൾ ശ്രദ്ധിച്ചിട്ടുണ്ടാവും ചിലകടകളിൽ item അതിന്റെ പേരും, വിലയും, എത്ര എണ്ണമെന്നും key boardൽ കൂടി type ചെയ്യാതെ computer ൽ feed ചെയ്യുന്നത്. അതിനുള്ള ഉപകരണത്തിന്റെ പേരെഴുതുക. അതിന്റെ പ്രവർത്തനം വിവരിക്കുക.

**Ans** A device called Bar Code Reader is used for this. It contains photoelectric scanner that read the bar code and input the information to the computer attached to it. It helps to reduce the errors and process the bills quickly.

**Qn. 4**

Your school has arranged an excursion. You are having an ordinary camera whereas your friend has a digital camera. List the benefits your friend enjoys by using digital camera.

നിങ്ങളുടെ school ൽ നിന്നും ഒരു വിനോദയാത്ര പോകുവാൻ തീരുമാനിച്ചു. നിങ്ങളുടെ കയ്യിൽ ഒരു സാധാരണ ക്യാമറയും നിങ്ങളുടെ കൂട്ടുകാരന്റെ കയ്യിൽ ഒരു digital camera യും ഉണ്ട്. ഡിജിറ്റൽ ക്യാമറയുടെ നേട്ടങ്ങൾ എന്തൊക്കെയാണ്?

**Ans** 1) Digital camera does not need film.  
2) More number of shots can take  
3) Operational cost is less  
4) Very easy to manipulate images in digital form using computers.

**Qn. 5**

A medical shop in your locality wishes to purchase a printer for their billing purpose. Which type of printer will you recommend if carbon copies are to be taken. Justify.

നിങ്ങളുടെ പ്രദേശത്തുള്ള ഒരു medical shop ൽ ബില്ലിടുകു തിനുവേണ്ടി ഒരു printer വാങ്ങിക്കുവാൻ ഉദ്ദേശിക്കുന്നു. കാർബ കോപ്പികൾ വേണമെന്നുണ്ടെങ്കിൽ നിങ്ങൾ എത് printer നിർദ്ദേശിക്കുന്നു. ന്യായീകരിക്കുക.

**Ans** Dot Matrix Printer. To take carbon copies impact printer is a must, operational cost is less and it can print bills in a moderate speed.

**Qn. 6**

Find the exact match.

ചേരുമ്പടി ചേർക്കുക.

1	Laser Printer	A	Heat Sensitive Paper
2	Dot Matrix Printer	B	Cartridge
3	Inkjet Printer	C	Ribbon
4	Thermal Printer	D	Toner

**Ans** 1-D, 2-C, 3-B, 4-A

**Qn. 7**

Your friend wishes to start a DTP centre with facilities to design posters and notices, to scan pictures and modify them and to print them. What would be your suggestions regarding the computer and peripherals?

Poster കളും notice കളും design ചെയ്യുന്നതിനും മാറ്റങ്ങൾ വരുത്തുന്നതിനും പ്രിന്റ് ചെയ്യുന്നതിനും സൗകര്യങ്ങളുള്ള ഒരു DTP Centre തുടങ്ങാൻ നിങ്ങളുടെ കൂട്ടുകാരൻ തീരുമാനിച്ചു. ഇതിന് ആവശ്യമുള്ള കമ്പ്യൂട്ടറുകളും അനുബന്ധ ഉപകരണങ്ങളും ഏതൊക്കെയാണ്.

**Ans** The requirements are computer, scanner, printer and software.

**Qn. 8**

Find the most appropriate match.

ചേരുംപടി ചേർക്കുക.

1	1 GB	A	$2^{30}$ bytes
2	$2^{20}$ bytes	B	$2^{30}$ KB
3	$2^{20}$ KB	C	1 MB
4	1 TeraByte	D	$2^{10}$ MB

**Ans** a) 1-D    b) 2-C    c) 3-A    d) 4 - B

**Qn. 9**

Suggest a suitable device for the following.

- a) High quality printing
- b) High quality drawing
- c) Printing with carbon copies
- c) Economical printing of small quantities of data

താഴെ കൊടുത്തിരിക്കുന്നതിന് ആവശ്യമുള്ള അനുയോജ്യമായ ഉപകരണങ്ങൾ നിർദ്ദേശിക്കുക.

- a) നല്ല ക്വാളിറ്റിയുള്ള പ്രിന്റിങ്ങിന്
- b) നല്ല ക്വാളിറ്റിയുള്ള പടങ്ങൾ വരയ്ക്കുന്നതിന്
- c) കാർബൺ കോപ്പികൾ കൂടി പ്രിന്റ് ചെയ്യുന്നതിന്
- d) കുറച്ച് data economically പ്രിന്റ് ചെയ്യുന്നതിന്

**Ans** a) Non impact - Laser printers, Inkjet  
b) Plotter  
c) Impact (DMP(Dot Matrix Printer))  
d) Dot Matrix Printers

**Qn. 10**

"Not all primary memory is volatile". Justify this statement.

'എല്ലാ primary memory യും volatile അല്ല'. ഇത് വിശദീകരിക്കുക.

**Ans** Primary Memory (Main memory) is classified into two RAM and ROM. Out of this RAM is volatile but ROM is non volatile.

**Qn. 11**

Categorise the softwares in the list according to the appropriate classifications given below.

താഴെ കൊടുത്തിരിക്കുന്ന software അനുയോജ്യമായ രീതിയിൽ തരം തിരിക്കുക.

Classification : OS, Compiler, DTP Software, Compression software, Word processor

List : Open Office Writer, Photoshop, 7 Zip, MS Word, Unix, C++, PageMaker, Winzip, C, Windows 98.

**Ans** OS - Unix, Windows 98  
Compiler - C, C++  
DTP Software - Photoshop, PageMaker  
Compression - 7 Zip, Winzip  
Word Processor - Open Office Writer, MS word

**Qn. 12**

Your friend has just assembled a computer. Now he is provided with installation CD's of MS Word and Microsoft Windows XP. In what order will he install them? Justify your answer.

നിങ്ങളുടെ friend ഒരു computer assemble ചെയ്തു അവന് MS Word യുടേയും MS Windows XP യുടേയും CDകൾ install ചെയ്യാൻ കൊടുത്തു. എന്ത് Order ൽ അവന് install ചെയ്യും. നിങ്ങളുടെ ഉത്തരത്തെ സ്വാധീകരിക്കുക.

**Ans** First he has to install the Microsoft Windows XP because it is the OS, it makes the computer to work other programmes. After that only he can install MS Word It is a package.

**Qn. 13**

A group of 20 students is given a test in 6 subjects. The examiner wishes to prepare a neatly formatted marklist with total and Rank. Suggest a suitable software to serve this purpose. Give reasons.

20 students ന് 6 subject കളുടെ ഒരു പരീക്ഷ നടത്തി. എക്സാമിനർ ടോട്ടലും റാങ്കും കണ്ടുപിടിച്ച് ഒരു rank list ഉണ്ടാക്കുവാൻ തീരുമാനിച്ചു. അതിനു ആവശ്യമുള്ള ഒരു software നിർദ്ദേശിക്കുക. കാരണമെഴുതുക.

**Ans** The spread sheet Excel is a suitable software to serve this purpose. It consists of inbuilt functions, that facilitates to find total and rank easily.

**Qn. 14**

A program is written in BASIC, C and assembly language. Mention the difference in converting these programs to machine language.

BASIC, C, assembly എന്നീ language കളിൽ ഒരു program എഴുതി. Machine language ലേക്ക് മാറ്റാനുള്ള വിവിധ programs സൂചിപ്പിക്കുക.

**Ans** a) C - Compiler                      b) BASIC - Interpreter  
c) Assembly Language - Assembler

**Qn. 15**

Your friend told you that he has a system. What is a system? Explain.

നിങ്ങളുടെ കൂട്ടുകാരൻ പറയുകയാണ് അയാളുടെ വീട്ടിൽ ഒരു system ഉണ്ടെന്ന്. എന്താണ് ഒരു system?

**Ans** A computer is also called a system. A computer is not a single unit. It consists of more than one unit such as input unit, output unit, memory unit, ALU and control unit. Therefore a computer is called a system.

**Qn. 16**  
What is cache memory?  
കാഷ് മെമ്മറി എന്താലെന്ന്?

**Ans** A cache (pronounced cash) memory is a high speed memory placed in between the processor and primary memory to reduce the speed mismatch between these two.

**Qn. 17**  
What is the use of program counter register?  
Programme counter രജിസ്റ്ററിന്റെ ഉപയോഗമെന്താണ്?

**Ans** This register stores the memory address of the next instruction to be executed by the CPU.

**Qn. 18**  
What is HDMI?  
HDMI എന്താലെന്താണ്?

**Ans** Its full form is High Definition Multimedia Interface. Through this port we can connect high definition quality video and multi channel audio over a single cable.

**Qn. 19**  
Give two examples for customized software.  
Customized software ന് രണ്ട് ഉദാഹരണമെഴുതുക.

- Ans** 1) Pay roll System : It keeps track of details of employee and their salary details in an organisation
- 2) Inventory Management System: It keeps track of all about inventory in a company

**Qn. 20**  
What do you mean by free and open source s/w?  
Free and open source s/w എന്താണെന്ന് വിശദീകരിക്കുക.

**Ans** Here "free" means there is no copy right or licensing. That is we can take copies of the s/w or modify the source code without legal permission of its vendor (creator) we can use and distribute its copy to our friends without permission. That is Freedom to use, to modify and redistribute

**Qn. 21** (MARCH - 2015)

- a) What do you mean by cache memory? (1)
- b) Write the names of the figures given below. (1)
- b) ക്യാഷി മെമ്മറി എന്നതുകൊണ്ട് നിങ്ങൾ എന്താണ് ഉദ്ദേശിക്കുന്നത്.
- b) താഴെ കൊടുത്തിരിക്കുന്ന ചിത്രങ്ങൾ ശ്രദ്ധിക്കുക. അവയുടെ പേരുകൾ എഴുതുക.



**Ans** a) It is a high speed memory placed in between the CPU and RAM. CPU is a high speed memory compared to RAM. There is a speed mismatch between the CPU and RAM to resolve this problem a high speed memory called cache memory is placed in between the CPU and RAM

b) QR code and Bar Code

**Qn. 22** (SCERT SAMPLE - I)  
What is the role of students in e-Waste disposal?  
ഇ- വേസ്റ്റ് നിർമ്മാർജ്ജനത്തിൽ ഒരു വിദ്യാർത്ഥിയുടെ പങ്കെന്ത്?(2)

**Ans** Students' role in e-Waste disposal

- \* Stop buying unnecessary electronic equipments
- \* Repair Faulty electronic equipments instead of buying a new one.
- \* Give electronic equipments to recycle
- \* Buy durable, efficient, quality, toxic free, good warranty products
- \* check the website or call the dealer if there is any exchange scheme
- \* Buy rechargeable battery products

**3 MARK QUESTIONS & ANSWERS**

**Qn. 1**  
Why is the paper coming from the laser printer hot?  
Explain.

Laser printer ൽ നിന്നും വരുന്ന paper ചൂടാകുന്നതിനുള്ള കാരണമെന്ത്. വിവരിക്കുക.

**Ans** Laser printer uses photocopying technology. It uses a positively charged drum and negatively charged toner (dry powder). A laser beam is used to scan the page to be printed on the drum with positive charge and then rolled through a reservoir of negatively charged toner. It uses a combination of heat and pressure to adhere the dry powder to the paper. That is why, the paper coming from the laser printer is hot.

**Qn. 2**  
Explain the process how data from the hard disk is taken to the processor for processing.

Hard disk ൽ നിന്നും processor ലേക്ക് data എടുക്കുന്നതിനുള്ള steps വിവരിക്കുക.

**Ans** A processor is a high speed device. It can access data only from the Primary Memory (RAM). So we have to transfer data from hard disk to RAM. We know that a hard disk is a slow device also. So data is first transferred to RAM. A RAM is comparatively slower than processor. To reduce the speed mismatch between the RAM and processor, the data has to transfer to CPU registers. Then the processor takes the data from the CPU register because CPU register has almost equal speed as processor.

**Qn. 3**  
Why computer is called as a system? (3)  
എന്തുകൊണ്ടാണ് computer കളെ ഒരു system എന്നു പറയുന്നത്?

**Ans** A computer is also called a system. A computer is not a single unit. It consists of more than one unit such as input unit, output unit, memory unit, ALU and control unit. Therefore a computer is called a system.

**Qn. 4**

Differentiate hardware and software. (3)

Hardware ഉം software ഉം തമ്മിലുള്ള വ്യത്യാസം എഴുതുക?

**Ans** The tangible parts of a computer is called hardware. We can see, touch and feel the hardware in a computer.

The set of instructions that tell the hardware how to perform a task is called software. Without software computer cannot do anything.

**Qn. 5**

We all have a brain. Just like this, is the computer has a brain? Explain it?

നമ്മുക്ക് എല്ലാവർക്കും brain ഉണ്ട്. അതുപോലെ computer ന്റെ brain ഉണ്ടോ? വിവരിക്കുക.

**Ans** Yes. CPU is the brain of a computer. The CPU comprises three parts ALU, Control Unit and Memory. The control unit control the overall functioning of a system. ALU performs all the arithmetic calculations and takes logical decisions. Memory is used for storage of data for future reference.

**Qn. 6**

Explain the various functions of a control unit.

Control unit ന്റെ വിവിധ function നുകൾ എഴുതുക.

**Ans** The control unit performs the following functions.

- 1) It controls data flow between input device, ALU, memory and output devices.
- 2) Normal execution of a program is line by line. The control unit controls this sequence with the help of ALU and memory.
- 3) It controls the decoding and interpretation of instructions.

**Qn. 7**

Match the following (3)

ചേർക്കുക.

- |                     |             |
|---------------------|-------------|
| 1) Input device     | a) Linux    |
| 2) Output device    | b) Java     |
| 3) Secondary Memory | c) Joystick |
| 4) System S/W       | d) Plotter  |
| 5) Application S/W  | e) PROM     |
| 6) Primary Memory   | f) HDD      |

**Ans** 1-c, 2-d, 3-f, 4-a, 5-b, 6-e

**Qn. 8**

Write down the full form of the following.

താഴെ കൊടുത്തിരിക്കുന്നവയുടെ മുഴുവൻ രൂപവും എഴുതുക.

- |        |        |     |
|--------|--------|-----|
| a) VDU | b) OMR | (2) |
|--------|--------|-----|

**Ans** a) VDU - Visual Display Unit  
b) OMR - Optical Mark Reader

**Qn. 9**

We know that a scanner is a hardware. What do you think of a virus scanner? Explain.

ഒരു scanner hardware ആണെന്ന് നമ്മുക്കറിയാം. അങ്ങനെ യെങ്കിൽ virus scanner എന്താണെന്ന്, വിവരിക്കുക.

**Ans** We know that a scanner is a hardware but a virus scanner is not a hardware. It is a program. That is a virus scanner is an antivirus software. That scans your disk (HDD, CD, DVD, Pen Drive ..... ) for viruses and removes them (if it can), if any virus is found.

**Qn. 10**

Your friend told you that a compiler is a hardware. Is it true ? Justify your answer.

നിങ്ങളുടെ friend നിങ്ങളോട് പറയുകയാണ് ഒരു compiler hardware ആണെന്ന്. അത് ശരിയാണോ? ന്യായീകരിക്കുക.

**Ans** It is not true. A compiler is not a hardware but it is a software. A compiler is a collection of programs that translates program written in HLL into machine language.

**Qn. 11**

Anil purchased a product from a super market and he found that its wrapper contains light and dark bars. What is the purpose of this ?

അനിൽ super market ൽ നിന്നും ഒരു product വാങ്ങി. അതിന്റെ കവറിന് പുറത്ത് കട്ടി കുറഞ്ഞതും കട്ടിയുള്ളതുമായ വരകളുണ്ട്. അതിന്റെ ഉദ്ദേശമെന്താണ്.

**Ans** This light and dark bars are called bar code. It is used to record some details about the product such as item code, name, price etc.... A device called Bar Code Reader contains photo electric scanner that read the bar code and input the information to the computer attached to it. It helps to reduce error and process the bills quickly.

**Qn. 12**

What are the disadvantages of OMR ? (2)

OMR ന്റെ ന്യൂനതകൾ എന്തെല്ലാമാണ്.

**Ans** The disadvantages are:

- 1) It needs accurate alignment of printing on forms.
- 2) It needs good quality expensive paper.

**Qn. 13**

Differentiate CRT and LCD (OR) Your friend going to purchase a computer. He asked you which is better, CRT or LCD ? What is your opinion ?

CRT ഉം LCD ഉം തമ്മിലുള്ള വ്യത്യാസമെഴുതുക.

OR

നിങ്ങളുടെ കൂട്ടുകാരൻ ഒരു computer വാങ്ങിക്കുവാൻ ഉദ്ദേശിക്കുന്നു. C.R.T യാണോ L.C.D യാണോ നല്ലതെന്ന് അവൻ നിങ്ങളോട് ചോദിക്കുന്നു. എന്താണ് നിങ്ങളുടെ അഭിപ്രായം.

**Ans** The difference between CRT and LCD is given below :

CRT	LCD
It is heavy and bulky	It is neither heavy nor bulky
It consumes more power and emits heat	It consumes less power and does not emit heat
It is used in desk top computer	It is used with laptop and desktop
It is cheaper	It is expensive.

So LCD is more better than CRT

**Qn. 14**

While you pressing "A" on the keyboard what is actually stored in the memory ?

നിങ്ങൾ computer ന്റെ key board-ൽ A press ചെയ്യുമ്പോൾ വാസ്തവത്തിൽ എന്താണ് memory യിൽ store ചെയ്യുന്നത്?

**Ans** The keyboard is an electro mechanical device that is designed to create electronic codes when a key is pressed and this code is transmitted to the memory through the cable. Here while you pressing "A" on the keyboard, the electronic codes corresponding to the ASCII value 01000001 is transmitting to the memory.

**Qn. 15**

Your family friend started a super market. He asked you, which printer is suitable to print bills. Give your suggestion.

നിങ്ങളുടെ family friend ഒരു supermarket ആരംഭിച്ചു. Bill print ചെയ്യുന്നതിന് എന്ത് printer ആണ് നല്ലതെന്ന് അയാൾ ചോദിച്ചു. നിങ്ങളുടെ നിർദ്ദേശം എന്താണ്.

**Ans** According to my opinion, dot matrix printer is most suitable. Because they are capable of faster printing as well as it is cheap also. It's printing quality is not good but cost per copy is very cheap. Dot matrix printer consists of a ribbon cartridge that is cheap and can be changed easily. Here we have to print more copies at a time. So dot matrix is suitable.

**Qn. 16**

Suppose your brother is an engineer. He wants to draw some drawings. Which output device is suitable? Explain.

നിങ്ങളുടെ സഹോദരൻ ഒരു engineer ആണെന്ന് വിചാരിക്കുക. അയാൾക്ക് കുറച്ച് drawings വരക്കണം. അതിന് അനുയോജ്യമായ output device ഏതാണ്. വിവരിക്കുക.

**Ans** Plotter is suitable for him. A plotter is a device that draws pictures or diagrams on paper based on commands from a computer. Plotters draw lines using a pen. Pen plotters generally use drum or flat bed paper holders. In a drum plotter the paper is mounted on the surface of a drum. Here the paper is rotated. But in a flat bed plotter the paper does not move and the pen holding mechanism provides the motion that draws pictures. Plotters are used in engineering applications where precision is needed.

**Qn. 17**

Match the following.

ചേരുംപടി ചേർക്കുക.

- |                              |                      |
|------------------------------|----------------------|
| 1. Operating System          | a. Compiler          |
| 2. Language Processor        | b. Windows Vista     |
| 3. Package Administratin S/W | c. Santhi Hospital   |
| 4. Utility                   | d. Spread sheet      |
| 5. Customised S/W            | e. Disk defragmenter |

**Ans** 1-b, 2-a, 3-d, 4-e, 5-c

**Qn. 18**

There are special purpose storage locations within the CPU. What are they explain ?

CPUവിന് അകത്ത് പ്രത്യേക ആവശ്യങ്ങൾക്കുള്ള storage location ഉണ്ട്. അവ ഏതെന്ന് വിവരിക്കുക.

**Ans** Registers are special purpose storage locations within the CPU. They are temporary storage locations. The processing power of a CPU depends on register. Registers appears with storage capacity of 8 bits, 16 bits, 32 bits an 64 bits. They accept, store and transfer data from the CPU at a very high speed.

**Program Counter :** This register stores the memory address of the next instruction to be executed by the CPU.

**Instruction Register :** The instruction to be executed is stored in this register.

**Memory Address Register. :** The address on the memory location from which data has to be read is stored here.

**Memory Buffer Register :** The data read from the location specified by the MAR.is stored in this register.'

**General Purpose Registers :** These are used to store the result and intermediate results during a processing.

**Qn. 19**

What is an operating system?

ഒരു operating system എന്നാലെന്ത്?

**Ans** An operating system acts as an interface between user and computer without an operating system computer is a bare machine. That is without an OS computer cannot do anything. The OS not only makes the system convenient to use but also use hardware in an efficient manner. eg:- Windows XP, Vista, Linux, MS Dos, Windows 7.

**Qn. 20**

We know that a computer only knows low level language and human beings use high level language. So how is it possible to communicate? Explain.

നമ്മുക്കറിയാം computer ന് low level language മാത്രമേ അറിയുകയുള്ളൂവെന്നും എന്നാൽ മനുഷ്യർക്ക് high level language മാത്രമേ അറിയുകയുള്ളൂ. അങ്ങനെയെങ്കിൽ അവർ തമ്മിൽ എങ്ങനെ communication സാധ്യമാവും. വിവരിക്കുക.

**Ans** The language processors translate the programs written in HLL into machine language which is understood by the computer. The different language processors are given below:

- i) **Assembler :** This language processor translates programs written in assembly language into machine language.
- ii) **Interpreter :** This language processor translates programs written in HLL into machine language by converting and executing it line by line. If there is any error, the execution is stopped we can continue after the correction of the program.



iii) Compiler : This language processor is same as interpreter. But it translates HLL into machine language by converting whole lines at a time. If there is any error, correcting all the errors then only it will execute.

**Qn. 21**

Normally a CD contains 700 MB. Is it possible to store a file with size 1 GB? Explain.

സാധാരണയായി ഒരു CD യിൽ 700 MB data മാത്രമേ കൊള്ളുകയുള്ളൂ. 1 GB file size ഉള്ള ഒരു file ഒരു CD യിൽ store ചെയ്യാൻ സാധിക്കുമോ? വിവരിക്കുക.

**OR**

Normally a Car has a seating capacity of 5 persons including the driver. But some adjustments more persons can be accommodated in Car. This is connected with a utility. Which is the utility? Explain.

**Ans** Compression utility is used for this. By using compression utility programs we can reduce the file size upto the one third of the file size. So by using this we can reduce 1GB file and store in a CD. It is provided by the OS. The other compression utility programs are Winzip, WinRar etc. It is possible to compress the files and when needed, these compressed files can be uncompressed and it is restored to their original form.

**Qn. 22**

What is a Virus?

ഒരു virus എന്നാലെന്താണ്?

**Ans** A virus is a bad program or harmful program to damage routine working of a computer system. It reduces the speed of a computer. It may be delete the useful system files and make the computer useless.

**Qn. 23**

What do you mean by Utilities?

Utilities എന്നാലെന്താണ്?

**Ans** Utilities are useful programs which are designed to help computer for its smooth functioning. Some utilities are back up utility, Disk defragmentation, Virus scanner, etc. It is provided by the O.S.

**Qn. 24**

Differentiate RAM and ROM.

RAMഉം ROMഉം താരതമ്യം ചെയ്യുക.

**Ans** The difference between RAM and ROM is given below.

RAM	ROM
1. It is Random Access Memory	1. It is Read only Memory
2. It is Read/Write memory	2. We can't write but we can only read memory.
3. It is temporary	3. It is permanently stored.
4. It is volatile	4. It is non volatile
5. RAM is faster	5. It is slower
6. It is used to store data and instructions needed by CPU for processing	6. It contains instructions to check the hardware components, BIOS operations etc.
	7. It is also called firmware.

Qn. 25

Mention any two functions of OS.

OS ന്റെ ഏതെങ്കിലും രണ്ട് function എഴുതുക

**Ans** Major functions of an operating System

- i) Process management : It includes allocation and de allocation of processes(program in execution) as well as scheduling system resources in efficient manner
- ii) Memory management : It takes care of allocation and de allocation of memory in efficient manner
- iii) File management : This includes organizing, naming , storing, retrieving, sharing , protecting and recovery of files.
- iv) Device management : Many devices are connected to a computer so it must be handled efficiently.

Qn. 26

Give two examples of human ware.

Human ware ന്റെ ഏതെങ്കിലും രണ്ട് ഉദാഹരണമെഴുതുക.

**Ans**(Write any two from the following)

The term refers the persons who use computer System Administrator : It is a person who has central control over the computer systems.

System Managers: He is responsible for all business transactions with all vendors and contractors.

System Analysts : He is responsible to improve the productivity and efficiency

Database Administrator - It is a person who has a central control over the DBMS.

Computer Engineer : The person design either h/w or s/w of a computer system.

Application Programmer - These are computer professionals who interact with the DBMS through programs.

Computer operators : He is an end user and does not know computer in detail.

Qn. 27

(MARCH - 2015)

Explain how e-waste creates environmental and health problems. What are the different methods for e-waste disposal? Which one is the most effective in your point of view? Why? (5)

ഇ-വേസ്റ്റ് പാരിസ്ഥിതിക പ്രശ്നങ്ങളും ആരോഗ്യപ്രശ്നങ്ങളും സൃഷ്ടിക്കുന്നത് എങ്ങനെയാണ് വിശദീകരിക്കുക. ഇ-വേസ്റ്റ് നിർമ്മാർജ്ജനം ചെയ്യുന്നതിനുള്ള നാല് മാർഗ്ഗങ്ങൾ ഏതൊക്കെയാണ്? അതിൽ ഏറ്റവും ഫലപ്രദമായതേത്? എന്തുകൊണ്ട്

**Ans** e-Waste(electronic waste) : It refers to the malfunctioning electronic products such as faulty computers, mobile phones, tv sets, toys, CFL, batteries etc.

It contains poisonous substances such as lead, mercury, cadmium etc and may cause diseases if not properly managed.

A small amount is recycled. Due to this our natural resources are contaminated(poisoned). Some of them can recycle properly. But it is a very big problem in front of the Government to collect segregate, recycle and disposal of e-Waste.

## e-Waste disposal methods

- a) Reuse : Reusability has an important role of e - Waste management and can reduce the volume of e-Waste
- b) Incineration : It is the process of burning e Waste at high temperature in a chimney
- c) Recycling of e-Waste : It is the process of making new products from this e-Waste.
- d) Land filling : It is used to level pits and cover by thick layer of soil.

Qn. 28

(SAY - 2016)

What do you mean by e-waste? Explain the role of students in e-waste disposal.

ഇ - വേസ്റ്റ് എന്നാൽ അർത്ഥമാക്കുന്നതെന്ത്? ഇ - വേസ്റ്റ് നിർമ്മാർജ്ജനത്തിൽ കുട്ടികളുടെ പങ്ക് വിവരിക്കുക. (3)

**ANS** **e-Waste(electronic waste)** : It refers to the mal functioning electronic products such as faulty computers, mobile phones, tv sets, toys, CFL etc. It contains poisonous substances such as lead, mercury, cadmium etc and may cause diseases if not properly managed.

### Students' role in e-Waste disposal

- Stop buying unnecessary electronic equipments
- Repair Faulty electronic equipments instead of buying a new one.
- Give electronic equipments to recycle
- Buy durable, efficient, quality, toxic free, good warranty products
- check the website or call the dealer if there is any exchange scheme
- Buy rechargeable battery products