



Holiday Assignments

ADVANCE LEVEL

Subject: General Information Technology Grade 12

Medium: English

1. Which of the following components of a computer performs the arithmetic operations?
 - (1) Central Processing Unit
 - (2) Main memory unit
 - (3) Input unit
 - (4) Secondary storage unit

2. Which of the following acts as both an input device and an output device?
 - (1) magnetic ink character reader
 - (2) memory card
 - (3) touch pad
 - (4) touch screen

3. Which of the following can be used to identify the type of a file in a computer?
 - (1) file extension
 - (2) file name
 - (3) folder in which the file resides
 - (4) sub-folder in which the file resides

4. Which of the following sets consists of only *system software*?
 - (1) database management system, operating system, spreadsheet software
 - (2) operating system, utility software, device driver
 - (3) presentation software, device driver, graphic software
 - (4) word processor, web browser, spreadsheet software

5. Which of the following units are included in the *Central Processing Unit*?
 - (1) Control Unit, Arithmetic and Logic Unit
 - (2) Control Unit, Arithmetic and Logic Unit, Input Unit
 - (3) Control Unit, Memory Unit, Output Unit
 - (4) Output Unit, Arithmetic and Logic Unit, Memory Unit

6. Which of the following is the software used by an operating system to work with devices?
 - (1) application software
 - (2) antivirus software
 - (3) device drivers
 - (4) malware

7. Which of the following instances are activities of an operating system?
A – acting as an interface between user and hardware
B – creating graphs
C – managing memory
(1) A only
(2) A and B only
(3) A and C only
(4) B and C only
8. A student thinks that the software GIMP is not needed and he wants to completely remove it from the computer. Which of the following operating system features should he use for this purpose?
(1) Add/remove program
(2) Disk defragmenter
(3) Snipping tool
(4) Windows Explorer
9. Consider the following statements:
A – One of the methods to increase the efficiency of a computer is through *disk cleanup* which is a utility available in an operating system.
B – Rearranging files stored on a disk to occupy contiguous storage locations is known as *disk defragmentation*.
Which of the following is valid in relation to the above statements?
(1) Only A is correct.
(2) Only B is correct.
(3) Both A and B are correct.
(4) Both A and B are incorrect
10. Which of the following is **not** a basic component of a computer system?
(1) input device
(2) liveware
(3) output device
(4) CPU
11. Consider the following statements:
Statement A – A *Graphical User Interface* is more user friendly than a *Command Line Interface*.
Statement B – The need to memorize the commands in the *Command Line Interface* is overcome by using the icons in the *Graphical User Interface*.
Which of the following is valid in relation to the above statements?
(1) Both statements A and B are correct and statement B explains a reason for statement A.
(2) Both statements A and B are correct but statement A is not related to statement B.
(3) Statement A is correct and statement B is incorrect.
(4) Statement A is incorrect and statement B is correct.

12. Which of the following is **not** a characteristic of useful information?

- (1) accuracy
- (2) existing in large amounts
- (3) relevance
- (4) reliability

13. Which of the following factors is used to classify computer networks as either Local Area Networks

(LAN) or Wide Area Networks (WAN)?

- (1) closeness of computers
- (2) number of computers
- (3) operating speed
- (4) number of users

14. Consider the following:

A – exchange of information

B – sharing resources

C – protection for computers

Which of the above is a (are) benefit(s) of a computer network?

- (1) A only
- (2) A and B only
- (3) A and C only
- (4) B and C only

15. Consider the following communication media:

A – Infrared

B – Fiber optics

C – Coaxial cables

D – Micro wave

Which of the above are examples for unguided media?

- (1) A and B only
- (2) A and D only
- (3) B and C only
- (4) C and D only

16. Which of the following can be used to connect two computer networks located in the same building?

- (1) a modem
- (2) a network switch
- (3) a router
- (4) a scanner

17. Consider the following:

- A – a computing device
- B – Internet Service Provider
- C – Modem
- D – Telephone line

Which of the above are basic requirements to access the Internet?

- (1) A, B and C only
- (2) A, B and D only
- (3) B, C and D only
- (4) All A, B, C and D

18. Consider the following statements :

- A – higher speed
- B – easy exchange of files
- C – ease of sending to multiple recipients

Which of the above is a (are) benefit(s) of email when compared with regular postal mail?

- (1) A only
- (2) B only
- (3) A and C only
- (4) All A, B and C

19. Which of the following is an example for plagiarism?

- (1) reading a paragraph online and rewriting it in one's own words
- (2) presenting a document created by someone else as his/her own work
- (3) creating a presentation based on your own work
- (4) copying something from the internet and inserting it in your document with relevant reference

20. Consider the following:

- A – Infrastructure as a Service
- B – Platform as a Service
- C – Software as a Service

From the above the main services associated with *cloud computing* are

- (1) A and B only.
- (2) A and C only.
- (3) B and C only.
- (4) All A, B and C.

21. Which of the following shows the ascending order of the binary numbers 1011_2 , 1101_2 and 1110_2 ?

- (1) 1011_2 , 1101_2 , 1110_2
- (2) 1110_2 , 1101_2 , 1011_2
- (3) 1110_2 , 1011_2 , 1101_2
- (4) 1101_2 , 1011_2 , 1110_2

22. In order to open an email account, both user name and password must be entered correctly. Which of the following logic gates represent this requirement?

- (1) AND gate only
- (2) NOT gate only
- (3) OR gate only
- (4) both AND and NOT gates

23. In the ASCII coding system, the alphabetic character 'E' is represented by the binary equivalent of decimal number 69. Which of the following represents the binary value of character 'B' in the ASCII code?

- (1) 1100001₂
- (2) 1000010₂
- (3) 1001001₂
- (4) 1100100₂

24. Consider the following truth table:

Input A	Input B	Output
0	0	0
0	1	1
1	0	1
1	1	1

Which the following represents the above truth table?

- (1) AND gate
- (2) NOT gate
- (3) OR gate
- (4) NOT (OR) gate combination

25. Which of the following statements is correct regarding the number 971?

- (1) This is only a decimal number.
- (2) This can be a binary or a decimal number.
- (3) This is only a hexadecimal number.
- (4) This can be a decimal or a hexadecimal number.

26. Which of the following software is most suitable to be used to edit a digital photograph?

- (1) Libre Office Impress
- (2) Adobe InDesign
- (3) Adobe Illustrator
- (4) Libre Office Writer

27. Which of the following truth tables represents the Boolean expression $X + Y$?

(1)

X	Y	X + Y
0	0	0
0	1	0
1	0	0
1	1	1

(2)

X	Y	X + Y
0	0	0
0	1	0
1	0	1
1	1	1

(2)

X	Y	X + Y
0	0	1
0	1	0
1	0	1
1	1	1

(4)

X	Y	X + Y
0	0	1
0	1	1
1	0	0
1	1	0

28. On which of the following will the quality of a digital image depend on?

- (1) its resolution
- (2) the hard disk capacity of the computer
- (3) the memory capacity of the computer
- (4) the clock speed of the processor

29. Consider the following statements regarding raster graphics file types:

- A – They are composed of pixels.
 - B – They are composed of paths.
 - C – gif and jpeg are examples for raster graphics file types.
- Which of the above are true regarding raster graphics file types?

- (1) A only
- (2) A and B only
- (3) A and C only
- (4) B and C only

30. Which of the following types of files contain extensions .gif, .jpeg, .bmp and .png?

- (1) audio files
- (2) image files
- (3) text files
- (4) video files

31. Which of the following is correct relating to the Internet and World Wide Web (WWW)?

- (1) The Internet is a service of the WWW.
- (2) The Internet and WWW are the same.
- (3) The WWW is a service of the Internet.
- (4) There is no relationship between the Internet and the WWW.

- 32.** Consider the following statements related to Learning Management Systems (LMSs):
A – LMS can be used by both teachers and students.
B – LMSs help to improve the teaching and learning processes.
C – LMSs can be accessed anytime from anywhere.
Which of the above statements are correct?
(1) A and B only
(2) A and C only
(3) B and C only
(4) All A, B and C
- 33.** Consider the following statements related to *online shopping*:
A – It is convenient compared to regular shopping.
B – Orders can be placed anytime of the day.
C – The delivered item may not be the one that was ordered.
Which of the above are correct?
(1) A and B only
(2) A and C only
(3) B and C only
(4) All A, B and C
- 34.** Consider the following relating to the use of an Automatic Teller Machine (ATM) to withdraw cash:
A – inserting the ATM card and typing the PIN
B – cash, receipt
C – checking whether sufficient funds available
Which of the following correctly represents the *input*, *process* and the *output* respectively?
(1) A, B and C
(2) A, C and B
(3) B, A and C
(4) C, A and B
- 35.** Which of the following activities is an example for "e-governance"?
(1) obtaining loan facilities through banks
(2) obtaining birth certificates at divisional secretariat offices
(3) obtaining marriage certificates online
(4) online shopping
- 36.** Which of the following is correct with regards to "Internet of Things (IoT)"?
(1) It is another name for the Internet.
(2) It consists of things that are connected to the Internet such as vehicles, webcams, light bulbs, etc.
(3) It is selling and purchasing items through the Internet.
(4) IoT are the devices needed to operate the Internet.

37. Which of the following organizations was established by the Government to develop ICT in Sri Lanka?

- (1) Computer Resource Centers
- (2) Information and Communication Technology Agency (ICTA)
- (3) Ministry of Education
- (4) Sri Lanka Computer Emergency Readiness Team (SLCERT)

38. Consider the following:

- A – Firewall
- B – Password
- C – Uninterrupted Power Supply
- D – Backup

Which of the above are able to provide **logical** protection to a computer?

- (1) A, B and C only
- (2) A, B and D only
- (3) A, C and D only
- (4) B, C and D only

39. Consider the following:

- A – downloading from unknown websites
- B – sharing personal information with unknown people
- C – using secure websites

Which of the above is a (are) good practice (s) relating to the use of the Internet?

- (1) A only
- (2) B only
- (3) C only
- (4) A and C only

40. Which of the following health issues may you face when you fail to keep your wrist in a proper

position while using the keyboard and mouse?

- (1) back pain
- (2) carpal tunnel syndrome
- (3) computer vision syndrome
- (4) repetitive strain injury

PART II

1.

(i) Login to the computer using the given login instruction:

user name:

password:

(ii) Open the *File Explorer*.

(iii) Create a new sub-folder named “GIT2018” inside the existing the “Documents” folder.

(iv) Open Settings System Storage

and select the C drive.

Then the C drive storage usage will be displayed.

Then using the **snipping tool** (which is available under Accessories of your Windows interface), take an image of the above storage usage output, and save it inside the GIT 2018 folder you have created as a jpg file with the name *NIC_no.jpg* and upload it.

(v) Get the system information screen (e.g., processor type, memory capacity, etc.) on your computer and get a picture of it using the snipping tool and save it inside the GIT 2018 folder you have created as a png file with the name *NIC_no.png* and upload it.

[6 marks]

2. Download the invitation. doc file to your computer. It is an invitation letter for a sports meet of a school. Format the document by doing the tasks given below so that the output is as shown in

Figure 1.

Tasks that you should do in order to format the above document:

(i) Download the logo of the school, insert it to the document and center it at the top of the letter. You may have to scale the image as well.

(ii) Increase the font size of “Gunawadana Maha Vidyalaya” to 18 and the word “Ella” to 15.

(iii) Right justify the date.

(iv) Make the “th” in the dates superscripts.

(v) Make the subject of the letter bold.

(vi) Do a spell check on your document and correct any incorrect spelling.

(vii) Save your letter as *NIC_no.doc* and upload



Gunawadana Maha Vidyalaya
Ella

26th July 2018.

Mrs. Mehkala Thuraisingham,
Temple Road,
Bandarawela.

Dear Madam:

Annual Sports Meet

We are having our “Annual Sports Meet” at the Ella Esplanade on August 29th 2018 and we would be honored if you can grace it as our chief guest. Please let us know whether you would be willing. We look forward to a favorable reply.

Yours sincerely,

Nilanga Bandara
President - Sports meet organizing committee

Figure 1

[12 Marks]

3.

- i) Download **sales.xls** spreadsheet (Figure 1) to your computer. It shows some of the items sold in a day at a bookshop.
- ii) Open File Explorer; select **sales.xls**; double click to open it using *Microsoft Excel*.
- iii) Insert a new column after column B and enter the content given in Column C (cells C1 to C6) of Figure 2 to it.
- iv) Use a suitable formula to compute the **Amount** for the sale of Pencils in cell D2.
Note : The amounts are computed using the equation:
Amount = Unit Price · Quantity
- v) Copy the above formula to cell range D3 to D6 to compute the amounts for the other items.

- vi) If a 2% discount is given to all items, insert a formula in cell E2 to compute the discount given for Pencils. **Note: Your formula should use cell B7 as well.**
- vii) Copy the above formula to cell range E3 to E6 to compute the discounts for other items.
- viii) Enter **Total (Rs.)** as the text to the cell F1. (Note that it has to be displayed in **boldface** as shown in Figure 3).
- ix) Use a suitable formula to compute the total obtained through the sale of pencils in cell F2 and copy the above formula to cell range F3 to F6 to compute the totals obtained through the sales of other items.
 Note : The total obtained through the sales of each item is computed using the equation:

$$\text{Total} = \text{Amount} - \text{Discount}$$
- x) Use a suitable formula to compute the **grand total** obtained through the sales of all items in cell F7. (i.e., the addition of cells F2 to F6). **Display it in boldface**

	A	B	C	D	E
1	Item	Unit Price	Amount	Discount	
2	Pencils	10.00			
3	Pens	15.00			
4	Books (120 pages)	60.00			
5	Books (200 pages)	80.00			
6	Erasers	5.00			
7	Discount rate	2%			
8					

Figure 1

	A	B	C	D	E
1	Item	Unit Price	Quantity	Amount	Discount
2	Pencils	10.00	200		
3	Pens	15.00	200		
4	Books (120 pages)	60.00	50		
5	Books (200 pages)	80.00	50		
6	Erasers	5.00	100		
7	Discount rate	2%			
8					

Figure 2