G.C.E. ORDINARY LEVEL

STUDENT SEMINAR SERIES - 2017

INFORMATION & COMMUNICATION TECHNOLOGY

QUESTION PAPER - I

Powered by

Ministry of Education
E-learning and Nenasa Educational Program Unit
G.C.E. Ordinary Level Examination – Support Seminars - 2017

80 - Information & Communication Technology - I

Grade 11	English Medium	Time - 2 hours

- *Answer **all** the questions.*
- *Each question carries **1 mark**.*

1. Select the machine which was invented by Charles Babbage.
   - (1). Mark I
   - (2). Abacus
   - (3). Analytical engine
   - (4). Pascaline

2. Select the most suitable expression regarding a computer.
   - (1). Computer is a machine that can process information.
   - (2). Computer is an electronic device that can store, retrieve and process both qualitative and quantitative data quickly and accurately.
   - (3). Computer is an electronic device that can store, retrieve and quickly process only quantitative data.
   - (4). Computer is a machine that can store, retrieve and process quickly and accurately only qualitative information

3. Communication between a computer and a keyboard involves ………… transmission.
   - (1). simplex
   - (2). half-duplex
   - (3). full-duplex
   - (4). automatic

4. Select the operating system which is used on mobile phones?
   - (1). Windows Vista
   - (2). Android
   - (3). Windows XP
   - (4). All of the above

5. If (y)x represents a number y in base x, then which of the following number is the smallest of all?
   - (1). $(1111)_2$
   - (2). $(1111)_8$
   - (3). $(1111)_{10}$
   - (4). $(1111)_{16}$

6. You are given two files with sizes of 1500 KB and 3×2^3 KB respectively. What is minimum free space that you need to have to store these two files.
   - (1). 2 MB
   - (2). 2000 KB
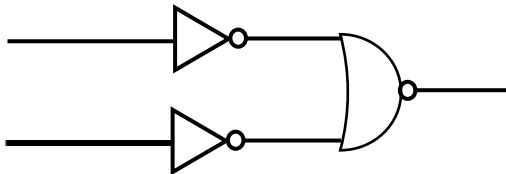   - (3). 1 GB
   - (4). 2.5 MB

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7. What is the lsd and msd of 0.00038920 respectively?
   (1). 0 and 2
   (3). 0 and 0
   (2). 3 and 0
   (4). 2 and 3

8. A student has to answer for 3 questions in a question paper. Student has to answer for X and Y compulsorily and as the third one he/she has to select at least one from S and T. Which of the following represents the selection of questions by a candidate?
   (1). X OR Y and S OR T
   (2). X AND Y AND (S OR T)
   (3). X OR Y AND S AND T
   (4). X AND Y AND (S AND T)

9.

   The output of the above logic circuit is 0. Which cannot be the input combination?
   (1). 0 , 1
   (3). 0 , 0
   (2). 1 , 0
   (4). 1 , 1

10. What is not a number representation technique in a computer?
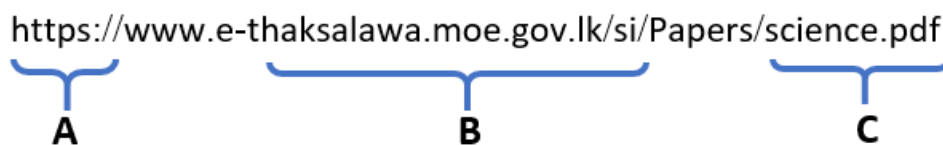   (1). EBCDIC
    (2). UNICODE
    (3). BCD
    (4). BSD

11. Select the correct statement/s regarding RGB and CMYK colour modes.

    A - RGB is widely used in television screen or computer screens.
    B – Colours used in CMYK are Cyan, Maroon, Yellow and Black
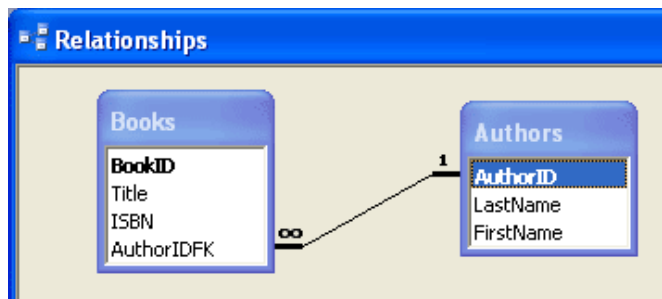   C – RGB colour scheme is used for printing purposes.

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

12. A, B and C represents 3 parts of the given URL. Select the correct answer which represents A, B and C respectively.

(1). A - Protocol	B – Domain name	C -	Current document
(2). A – Secured Protocol	B - Domain name	C -	folder of the document
(3). A - Protocol	B - Domain name	C -	Top level domain
(4). A - Secured Protocol	B – Internet service	C -	Current document

13. With a word processing software, a user can prepare a letter as it can be sent to different recipients. Above feature of a word processing software is called
    (1). Mail join
    (2). Mail copy
    (3). Mail insert
    (4). Mail merge

14. Matheesha wants to include some multimedia elements in his presentation file. He uses hyperlinks without copying the multimedia elements into the file. Which of the following is correct regarding his action?
    (1). He can include more multimedia elements.
    (2). It can be more interactive.
    (3). The presentation can play video files immediately.
    (4). This presentation file size is less.

15. Which one of the following is true regarding foreign key in a database?
    (1). It must be related with two databases.
    (2). It removes records from two tables
    (3). It can make a connection between two tables.
    (4). Foreign key is another name for the primary key.

Use the following diagram to answer questions 16 and 17.

16. Select the correct statement from the followings.
    (1). BookID is the Primary key of Books table & the Author ID is the foreign key of Author table.
    (2). Relationship between above two tables is One to Many.
    (3). ISBN is the Primary key of Books table.
    (4). AuthorIDFK is the foreign key of Author table.

17. What is the suitable fields for a composite attribute?
    (1). ISBN
    (2). LastName and FirstName
    (3). BookID and ISBN
    (4). AuthorIDFK

18. Followings are I/O devices and select device/s which can be used by a cashier in a Supermarket?

    A - Magnetic strip card reader
    B - QR reader
    C – MICR
    D – Dot matrix printer

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

19. A computer based information system is needed because
    A The size of organization has become large and data is massive
    B Timely decisions are to be taken based on available data
    C Computers are available
    D Difficult to get clerks to process data

    (1). B and C   (3). A and D
    (2). A and B   (4). C and D

20. Select the correct statement/s from followings regarding waterfall model.

    A – It is a sequential model for software development.
    B – User can provide their feedback at any stage of development.
    C - This can be used for projects with stable requirements.

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

21. .gif, .jpg, .bmp and .png are used as extensions for files which store
    (1). audio data   (3). video data
    (2). image data   (4). text data

22. Column A shows graphic types and column B shows their features. Match graphic type with correct feature/s.

Column A	Column B
A - Vector	1 - Adobe Photoshop is an example
B - Raster	2 - Adobe Illustrator is an example
	3 – contains array of pixels
	4 - contains curved and shaped lines

   (1). A – 1,3   B – 2,4
   (2). A – 1,4   B – 2,3
   (3). A – 2,3   B – 1,4
   (4). A – 2,4   B – 1,3

23. Which of the following is used for 2D animations and 3 D animations respectively?
   (1). Adobe Flash and 3Ds MAX
   (2). Dream viewer and 3Ds MAX
   (3). Adobe photoshop and Blend
   (4). Adobe photoshop and GIMP

24. What is the correct HTML code segment for making a hyperlink?
   (1). ministry of education
   (2). ministry of education
   (3). <http:// http://www.moe.gov.lk
   (4). url=" http://www.moe.gov.lk ">ministry of education

25. Select the correct html code segment to display the given output on the web browser.

Courses

Programming languages	
JAVA	Pascal

   (1). <table>
       <caption><h1>Courses</h1></caption>
       <tr><th colspan="2">Programming languages</th></tr>
       <tr><td>JAVA</td><td>Pascal</td></tr>
       </table>

(2). <table>
    <caption><h1>Courses</h1></caption>
    <tr><th>Programming languages</th></tr>
    <tr><td>JAVA</td><td>Pascal</td></tr>
    </table>

(3). <table>
    Courses
    <tr><th colspan="2">Programming languages</th></tr>
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(4). <table>
    <caption><h1>Courses</h1></caption>
    <tr><td colspan="2">Programming languages</td></tr>
    <tr><td>JAVA</td><th>Pascal</th></tr>
    </table>

26. Which of the following is used to create HTML document?
    (1). Notepad
    (2). MS FrontPage
    (3). Adobe Dreamviewer
    (4). All of the above

27. Select the statement which cannot be considered as a development of the country using information and communication technology.
    (1). Computerize all the activities in all government organizations.
    (2). Use educational software in schools
    (3). Use computer networks for data communication
    (4). Provide a computer for each house free of charge

28. Select the correct pseudocode to give the following output.

```
*
* * *
* * * * *
* * * * *
```

(1)
For y = 1 to 5 step 2 do
      for x=1 to y do
    Print " * "
  Next x
next y
print "* * * * *"

(2)
For y = 1 to 5 do
      for x=1 to y do
      Print " * "
  Next x
next y
print "* * * * *"

(3)
For y = 1 to 5 step 2 do
      for x=1 to 5 step 2 do
        Print " * "
    Next x
next y
print "*"

(4)
For y = 1 to 3 do
      for x=1 to 5 do
        Print " * "
    Next x
next y

Questions 29 and 30 are based on the given spreadsheet.

	A	B	C	D	E
1		**Number of Students**			
2	Yea▾	Subject Stream▾	Male	Female	Total
3	2016	Commerce	50	34	84
4		Science	30	45	75
5		Arts	45	62	107
6	2017	Commerce	40	42	82
7		Science	40	45	85
8		Arts	50	0	50
9					
10	Total number of Commerce Students				90
11	Total number of Art Students				70
12	Total number of Science Students				95
13	Total Number of Commerce and Science students				160

29. Select the correct function which should be included in cell E13?
  (1). =sum(C3:D4andC6:D7)   (3). =sum(C3:D4; C6:D7)
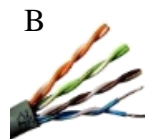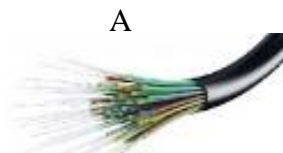 (2). =sum(C3: D7)   (4). =sum(C3:D4, C6:D7)

30. What is the suitable chart type to represent percentage of number of students for each subject stream in 2017?
    (1). Bar Chart
    (3). Scattered Chart
    (2). Column Chart
    (4). Pie Chart

31. While you are doing a presentation, F5 does all of the following operation except…………
    (1). View show
    (2). Slide show
    (3). Continue presentation
    (4). Run presentation

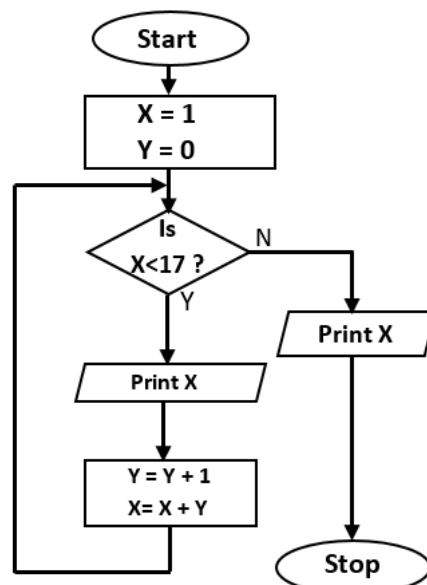32. Following images contains 3 types of network cables.

    Select the option which shows correct names with each cable.
    (1). A - Fiber optics   B - Coaxial cable C - Twisted Pair
    (2). A - Coaxial cable B - Fiber optics   C - Twisted Pair
    (3). A - Twisted Pair   B - Coaxial cable C - Fiber optics
    (4). A - Fiber optics   B - Twisted Pair   C - Coaxial cable

33. Which one of the following is a set of rules that governs data communication?
    (1). Protocols   (3). RFCs
    (2). Standards   (4). None of the mentioned

    Questions 34 and 35 are based on the flowchart given below.

34. Select the output of the above flow chart.
    (1). 1, 2, 4, 6, 11
    (2). 1, 2, 4, 7, 11, 16
    (3). 1, 2, 4, 7, 11, 16, 16
    (4). 1, 2, 4, 7, 11, 16, 22

35. It is required to get the output as 1, 2, 4, 7, 11, 16 Which one of the following/s can be used as the condition of the above flow chart?

    A - Is x <16 ?
    B - Is x <=15?
    C - Is x <=16?

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

36. Which of the following/s can be considered as an instant messaging application/s ?
    (a) WhatsApp
    (b) Google Talk
    (c) Viber
    Select the correct answer from following options.

    (1). (a) and (b) only
    (2). (b) and (c) only
    (3). (a) only
    (4). (a), (b) and (c)

37. A person who has an expert knowledge regarding programming uses his/her expertise knowledge to gain access to other people's computers to get information illegally or do damage is a
    (1). Spammer   (3). phisher
    (2). Analyst   (4). hacker

38. Followings are about learning management systems. Which one is not a challenge of using a learning management system for teaching learning process?
    (1). Need to keep backup copies of an information.
    (2). Requirement of maintenance of the system.
    (3). Negative thoughts of people.
    (4). No need to have ICT literacy for using the system.

39. Which of the following statements is correct about copyright?
    (1). It is effective only if the author has a statement about copyright on his/her work.
    (2). It applies to computer software only.
    (3). The author must register his/her work to obtain copyright.
    (4). It applies automatically to the owner of the original work.

40. Which one of the following/s can be identified as solution to fill the digital divide?

    A – Distribute computers and other resources to rural schools
    B - Increase computer literacy for relevant people
    C - Introduce new technologies for day to day activities.
    D – Arrange awareness programs for people with negative thoughts

    (1). A and B only
    (2). A, B and D only
    (3). B and D only
    (4). All of the above