

Reg. No. : .....

Code No. 7019

Name : HSSLVF

Second Year – JUNE 2017  
SAY/IMPROVEMENT

Time : 2 Hours  
Cool-off time : 15 Minutes

Part – III

COMPUTER SCIENCE

Maximum : 60 Scores

General Instructions to Candidates :

- There is a 'cool-off time' of 15 minutes in addition to the writing time of 2 hrs.
- You are not allowed to write your answers nor to discuss anything with others during the 'cool-off time'.
- Use the 'cool-off time' to get familiar with questions and to plan your answers.
- Read questions carefully before answering.
- All questions are compulsory and only internal choice is allowed.
- When you select a question, all the sub-questions must be answered from the same question itself.
- Calculations, figures and graphs should be shown in the answer sheet itself.
- Malayalam version of the questions is also provided.
- Give equations wherever necessary.
- Electronic devices except non-programmable calculators are not allowed in the Examination Hall.

നിർദ്ദേശങ്ങൾ :

- നിർദ്ദിഷ്ട സമയത്തിന് പുറമെ 15 മിനിറ്റ് 'കൂൾ ഓഫ് ടൈം' ഉണ്ടായിരിക്കും. ഈ സമയത്ത് ചോദ്യങ്ങൾക്ക് ഉത്തരം എഴുതാനോ, മറ്റുള്ളവരുമായി ആശയ വിനിമയം നടത്താനോ പാടില്ല.
- ഉത്തരങ്ങൾ എഴുതുന്നതിന് മുമ്പ് ചോദ്യങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കണം.
- എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരം എഴുതണം.
- ഒരു ചോദ്യനമ്പർ ഉത്തരമെഴുതാൻ തെരഞ്ഞെടുത്തു കഴിഞ്ഞാൽ ഉപചോദ്യങ്ങളും അതേ ചോദ്യ നമ്പറിൽ നിന്ന് തന്നെ തെരഞ്ഞെടുക്കേണ്ടതാണ്.
- കണക്ക് കൂട്ടലുകൾ, ചിത്രങ്ങൾ, ഗ്രാഫുകൾ, എന്നിവ ഉത്തരപേപ്പറിൽ തന്നെ ഉണ്ടായിരിക്കണം.
- ചോദ്യങ്ങൾ മലയാളത്തിലും നൽകിയിട്ടുണ്ട്.
- ആവശ്യമുള്ള സ്ഥലത്ത് സമവാക്യങ്ങൾ കൊടുക്കണം.
- പ്രോഗ്രാമുകൾ ചെയ്യാനാകാത്ത കാൽക്കുലേറ്ററുകൾ ഒഴികെയുള്ള ഒരു ഇലക്ട്രോണിക് ഉപകരണവും പരീക്ഷാഹാളിൽ ഉപയോഗിക്കുവാൻ പാടില്ല.



1. Name the data structure that follows LIFO principle.  
(a) stack (b) queue  
(c) array (d) linked list (Score : 1)
2. Which HTML tag is used to create ordered list ? (Score : 1)
3. If 'ptr' is a pointer to the variable 'num', which of the following statements is correct ?  
(i) 'ptr' & 'num' may be of different data types.  
(ii) If 'ptr' points to 'num', then 'num' also points to 'ptr'. *HSS LIVE*  
(iii) The statement num = & ptr is valid.  
(iv) \*ptr will give the value of the variable 'num'. (Score : 1)
4. State whether the following statements are true or false :  
(a) JavaScript is the only client side scripting language. (Score : 1)  
(b) JavaScript is a case sensitive scripting language. (Score : 1)  
(c) The keyword used to declare a variable in JavaScript is VAR. (Score : 1)
5. \_\_\_\_\_ in a table gives the complete data of a particular entity.  
(a) Tuple (b) Attribute  
(c) Domain (d) Schema (Score : 1)
6. What is the difference between structure and class ? (Scores : 2)
7. Which command is used to delete the table ?  
(a) delete from (b) drop table  
(c) delete table (d) drop view (Score : 1)
8. Default access specifier is  
(a) private (b) public  
(c) protected (d) none (Score : 1)

9. Predict the output of the following code :

```
<HTML>
<BODY>
<SCRIPT Language ="JavaScript">
var i, s=0;
for (i=1; i <=10; i +=2)
s +=i;
document.write("sum = "+s);
</SCRIPT>
</BODY>
</HTML>
```

(Scores : 2)

Answer any **one** question – **10 (a)** or **10 (b)**.

10. (a) Predict the output of the following program :

```
#include<iostream.h>
#include<conio.h>
void main( )
{
    int x=100,y=20;
    void swap (int *x, int *y);
    cout<<"values before swap"<<endl;
    cout <<"x = "<<x<<" , y=" <<y<<"\n";
    x = x + 15; y = y + 25;
    swap (&x, &y);
    cout <<"values after swap" <<endl;
    cout <<"x = "<<x<<" , y=" <<y<<"\n";
    getch( );
}
void swap (int *x, int *y)
{
    int temp;
    temp = *x;
    *x = *y;
    *y = temp;
}
```

ASSLIVE

(Scores : 3)

OR



(b) Predict the output :

```
#include<iostream.h>
#include<conio.h>
void main( )
{
    int x[ ]={15,25,28,67,40};
    int *p = x, k, kk;
    cout <<"values of p ="<<*p<<endl;
    k = *p + (*p + 5);
    cout <<"k="<<k<<"\n";
    kk =*x+5;
    cout <<"kk="<<kk<<"\n";
    getch( );
}
```

HSSLUVE

(Scores : 3)

11. Differentiate between CHAR and VARCHAR data types in SQL.

(Scores : 3)

12. Write a PHP program to find the biggest of three numbers.

(Scores : 3)

13. Write an algorithm to perform insertion operation in a Queue.

(Scores : 2)

14. (a) What are the differences between "echo" and "print" statements ?

(Scores : 2)

OR

(b) What is the difference between PHP and JavaScript.

(Scores : 2)

15. Name the most appropriate SQL data type required to store the following data :

(a) Name of a student (maximum 70 characters)

(b) Date of Birth of a student

(c) Percentage of marks obtained (correct to 2 decimal places)

(Scores : 3)

16. Write an HTML code for a web page to show the following details in blue background :

Components of a Computer

- \* Hardware
  1. RAM
  2. ROM
  3. Hard Disk
- \* Software
  1. System Program
  2. Application program

HSS LVB

(Scores : 3)

17. <FORM> tag contains some other tags to facilitate interaction between user and web page. Write any two control tags and explain their mode of interaction. (Scores : 2)

18. What is the advantage of using SFTP protocol in FTP software ? (Scores : 3)

19. Expand the name of the language which is used to develop webpage. (Score : 1)

20. State any two differences between static and dynamic memory allocation. (Scores : 2)

21. Match the following :

| A              | B             | C  |
|----------------|---------------|--|
| 1. Stack       | i. Front      | a. Inserting a new item.                             |
| 2. Queue       | ii. Push      | b. Elements are accessed by specifying its position. |
| 3. Array       | iii. Start    | c. Contains the address of the first node.           |
| 4. Linked List | iv. Subscript | d. Removing an item.                                 |

(Scores : 2)

22. NLP is \_\_\_\_\_.

- (a) National Level Programming
- (b) Natural Language Processing
- (c) Neural Level Programming
- (d) None of the above

(Score : 1)



23. As part of your school project you are asked to create a relation STUDENT contains the details of 10 students with the fields RollNo., Name, Date of Birth and Score in IT. The constraints required are – RollNo. is the primary key, name cannot be empty and score in IT should be less than 60. Based on this table STUDENT answer the following queries in relational algebra.

- (a) Display the details of students whose score is greater than 50.
- (b) Display the name of students whose score lies between 45 and or equal to 60.

(Scores : 5)

24. (a) Write an HTML code for a web page for your supermarket named “HELPLINE SUPERMARKET” with the following details and features.

- (1) A heading followed by a paragraph of 2 sentences about the district using text formatting tags and attributes.
- (2) Give postal address of the supermarket with phone number and email id.
- (3) Include a marquee that “Hurry up, 50% off for all purchase”.

(Scores : 5)

OR

(b) Explain and compare the features of any four scripting languages. (Scores : 5)

25. What is ANN ?

(Scores : 3)

26. (a) Textual information available in electronic format is called \_\_\_\_\_.

- (a) e-Text
- (b) e-Learning
- (c) e-mail
- (d) e-Content

(Score : 1)

(b) Explain Infringement.

(Scores : 3)

HELPLINE