

Higher Secondary Series Examination 2020
Computer Science
MODULE 1 - SET A

Max. Score: 25

HSE II

Time:1 hr

Answer all questions from 1 to 5. 1/2 mark each എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരമെഴുതുക

ഓരോന്നിനും അരമാർക്ക് വീതം

$5 \times 1/2 = 2 \frac{1}{2}$

1. An element of a structure may itself be another structure is known as _____
2. State True or False. "An array is a collection of same type of data"
3. Name the variable that points to the memory location
4. Name the operator which is used to create dynamic array during run time
5. Name the data structure that follows FIFO principle

6. Match the following

ചേരും പടി ചേർക്കുക

$5 \times 1/2 = 2 \frac{1}{2}$

- | | |
|------------------|-----------------|
| 1. Linked list | a) 25 |
| 2. <HR> tag | b) Green colour |
| 3. A link | c) No Shades |
| 4. push operator | d) Null pointer |
| 5. SMTP | e) stack |

Answer any 6 questions from 7 to 13 . 2 mark each

ഏതെങ്കിലും ആറെണ്ണത്തിന്

ഉത്തരമെഴുതുക. രണ്ട് മാർക്ക് വീതം

$6 \times 2 = 12$

7. Write the structure definition for the following details of a product.
ID, name, price
8. What are the reasons for memory leak situation? മെമ്മറി ലീഖ്
9. What are the advantages of character pointer? ക്യാരക്ടർ പോയിന്റിന്റെ സവിശേഷത
10. Give any two reason for the increasing complexity with procedural languages
11. Write an algorithm for insertion operation in Queue data structure
12. Explain the steps to represent H₂O in html document
13. Comments in HTML increases the code readability and help to understand the code. Justify

Answer any 1 questions from 13 to 14. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക

$1 \times 3 = 3$

14. Explain the scripting languages. JavaScript, PHP, ASP
15. Explain any three operations on data structure ഡാറ്റാ സ്ട്രക്ചർ ഓപ്പറേഷൻ

Answer any 1 questions from 16 to 17. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക

$1 \times 5 = 5$

16. Write an HTML code for a webpage about your village with the following details

1. A heading followed by a paragraph of 3 sentences
2. Provide a background colour to the webpage
3. Include an image of your village

17. Explain the following terms in OOP. Inheritance, Modularity, Polymorphism, Data Abstraction, Data Encapsulation

Higher Secondary Series Examination 2020

Computer Science

MODULE 1 - SET B

Max. Score: 25

Time:1 hr

HSE II

Answer all questions from 1 to 5. 1/2 mark each എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരമെഴുതുക

ഓരോന്നിനും അരമാർക്ക് വീതം

$$5 \times 1/2 = 2 \frac{1}{2}$$

- 1.Name the operator used to access the element of the structure
- 2.State True or False. “Structure is a user defined data type”
- 3.Name the variable that hold the address of a memory location
- 4.A base class is also called a) child class b) sub class c) Derived class d) parent class
- 5.Which element of the stack can be insert/ delete?

6.Match the following ചേരും പടി ചേർക്കുക

$$5 \times 1/2 = 2 \frac{1}{2}$$

- | | |
|-----------------------|--------------------|
| 1. Access Specifier | a) 53 |
| 2. Link | b) stack underflow |
| 3. Domain Name System | c) public |
| 4. tag | d) blue colour |
| 5. POP | e) SRC |

Answer any 6 questions from 7 to 13 . 2 mark each

ഏതെങ്കിലും ആറെണ്ണത്തിന്

ഉത്തരമെഴുതുക. രണ്ട് മാർക്ക് വീതം

$$6 \times 2 = 12$$

- 7.Write the structure definition for the following details of a person. ID, name, age
- 8.Consider the statement: `int p, a=10; p=&a; cout<<p+5;`
- 9.Write a declaration statement in C++ to refer the names of school soccer team using pointers
- 10.Explain the advantages of OOP.
- 11.Write an algorithm for deletion operation in Queue data structure
- 12.Write the HTML code to represent $x^3 - y^3$
- 13.Explain the difference between container tag and empty tags with examples

Answer any 1 questions from 13 to 14. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1x 3=3

14.Explain the static and dynamic webpages സ്റ്റാറ്റിക് വെബ്പേജും ഡൈനാമിക്സും

15.Explain the operations on linked list data structure

Answer any 1 questions from 16 to 17. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1x5=5

16.Write an HTML code for a webpage of a sports club in your village with the following details

1. A heading followed by a paragraph of 3 sentences
2. Provide an image of Sports Club
3. Include the postal address of the club

17.Explain the different scripting languages

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Computer Science

MODULE 2 -SET A

Max. Score: 25

Time:1 hr

HSE II

Answer all questions from 1 to 5. 1/2 mark each എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരമെഴുതുക

ഓരോന്നിനും അരമാർക്ക് വീതം

5×1/2=2 1/2

- 1.Which is the extension of JavaScript file
- 2.Which is the string addition operator in JavaScript
- 3.Which is the pattern matching operator used in SQL?
- 4.Expand DCL
- 5.Which is the function is used to print a text in the body section of an HTML page?

6.Match the following ചേരും പടി ചേർക്കുക

5×1/2=2 1/2

- | | |
|------------------------|-----------------------------------|
| 1. FTP Client Software | a) sites.google.com |
| 2. free hosting | b) domain names |
| 3. ICANN | c) information about registration |
| 4. WHOIS | d) Virtual Box |
| 5. VPS | e) FileZilla |

Answer any 6 questions from 7 to 13 . 2 mark each ഏതെങ്കിലും ആറെണ്ണത്തിന്

ഉത്തരമെഴുതുക. രണ്ട് മാർക്ക് വീതം

6×2=12

- 7.List any four built in functions of SQL and the value returned by each
- 8.Explain the significance of UNIQUE and Default column constraints in SQL
- 9.“Data integrity can be maintained in DBMS”. Comment
- 10.Consider the table student having 8 rows and 6 column. What would be the degree and cardinality of the table?
- 11.What is CMS? Give example
- 12.What does ‘A record’ contain? Explain its importance
- 13.What is the difference between cellspacing and cellpadding in HTML?

Answer any 1 questions from 13 to 14. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1x 3=3

- 14.What are the values of type attribute of <input> tag in HTML? Explain
- 15.Write the HTML code for the following table

Cities	Kerala Water Authority	
	Drinking	Domestic
Cochin	45289	23852
Kozhikode	47598	22150
Trichur	47523	20156

Answer any 1 questions from 16 to 17. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1×5=5

- 16.Write the SQL queries for the following details of a book. Bookid, bookname, price, author
 - 1. Insert data in all the fields
 - 2. Display the details of books published by author APJ Abdul Kalam
 - 3. Display the details of books whose price>100
 - 4. Delete the book whose bookid=101
 - 5. Update the price of the books by 20%
- 17.Explain the different types of built in functions in JavaScript with examples

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MODULE 2 -SET B

Max. Score: 25

HSE II

Time:1 hr

Answer all questions from 1 to 5. 1/2 mark each എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരമെഴുതുക

ഓരോന്നിനും അരമാർക്ക് വീതം

5×1/2=2 1/2

- 1.Which is the command in SQL to change the value of a table?
- 2.Which is the symbol used for the selection operation in Relational Algebra?
- 3.Write the command which is used to display the structure of a table
- 4.Name the tag is used to group data within the Form
- 5.Say True or False “Every JavaScript statements ends in a semicolon”

6.Match the following ചേരും പടി ചേർക്കുക

5×1/2=2 1/2

- | | |
|---------------|---------------------|
| 1. <A> tag | a) DDL Command |
| 2. CMS | b) Avoid Duplicates |
| 3. Drop Table | c) Drupal |
| 4. Delete | d) href |
| 5. Distinct | e) DML command |

Answer any 6 questions from 7 to 13 . 2 mark each ഏതെങ്കിലും ആറെണ്ണത്തിന്

ഉത്തരമെഴുതുക. രണ്ട് മാർക്ക് വീതം

6×2=12

- 7.Explain the difference between char and varchar data type in SQL
- 8.Write and explain the command used in SQL to modify the structure of a table
- 9.Explain the responsibilities of DBA
- 10.What is the difference between candidate key and Primary key
- 11.What is Responsive web design?
- 12.Explain any two data types in JavaScript
- 13.Write the HTML code to divide the browser window into 30:70 vertically

Answer any 1 questions from 13 to 14. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1×3=3

- 14.Explain the different levels of Abstraction in DBMS
- 15.Write the HTML code for the following table

Category	Pastime by Age in minutes		
	Reading	Computer/ Mobile	Sports/ Exercise
13-19 year	45289	23852	2564
20-65 year	47598	22150	1256
65 Above	47523	20156	2566

Answer any 1 questions from 16 to 17. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1×5=5

- 16.Write the SQL queries for the following details of a football player.
Playerid, Name, age, country
 1. Insert data in all the fields
 2. Display the details of youngest player in Indian Team
 3. Display the details of players whose name starts with “Ro”
 4. Display the details of players in ascending order of playerid
 5. Remove the player of id 7 from the team
- 17.Explain the different attributes of <table> tag in HTML

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MODULE 3 - SET A

Max. Score: 25

HSE II

Time: 1 hr

Answer all questions from 1 to 5. 1/2 mark each എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരമെഴുതുക

ഓരോന്നിനും അരമാർക്ക് വീതം

5×1/2=2 1/2

- 1.WAMP stands for _____
- 2.Write the symbol which is used in declaring a variable in PHP
- 3.Term used as the study of control and communication between man and machine
- 4.Textual information available in electronic format is called _____
- 5.Write the name for system of financial exchange between buyers and sellers in online

6.Match the following ചേരും പടി ചേർക്കുക

5×1/2=2 1/2

- | | |
|---------------------------|-------------------------|
| 1. Unregistered Trademark | a) Right to the creator |
| 2. Registered Trademark | b) HORLIKS |
| 3. IPR | c) ® |
| 4. Trademark infringement | d) ™ |
| 5. Copy right | e) WIPO |

Answer any 6 questions from 7 to 13 . 2 mark each ഏതെങ്കിലും ആറെണ്ണത്തിന്

ഉത്തരമെഴുതുക. രണ്ട് മാർക്ക് വീതം

6×2=12

- 7.How will you do comments in PHP?
- 8.What are the super global arrays in PHP?
- 9.Write a PHP program to print 3, 6, 9,..... 99
- 10.What is the difference between serial and parallel computing
- 11.Write any two suggestions as ethical practices over the internet
- 12.What is the difference between patents and trademark
- 13.Write any two advantages of cluster computing

Answer any 1 questions from 13 to 14. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1x 3=3

- 14.What are the cloud service models?
- 15.What is the difference between indexed arrays and associative arrays with examples

Answer any 1 questions from 16 to 17. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1×5=5

- 16.Explain the different types of cyber crimes against individual ഒരു വ്യക്തിക്ക് എതിരെയുള്ള സൈബർ ക്രൈം വിശദമാക്കുക

- 17.What is cloud computing? Explain its advantages and disadvantages

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MODULE 3 - SET B

Max. Score: 25

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Answer all questions from 1 to 5. 1/2 mark each എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരമെഴുതുക
ഓരോന്നിനും അരമാർക്ക് വീതം 5x1/2=2 1/2

- 1.LAMP stands for _____പൂർണ്ണരൂപം
2.What is the string concatenation operator in PHP
3.Give example for infrastructure as a service
4.Name the use of electronic media and ICT in education
5.Say True or False “ e Business is an extension of e-Commerce”
6.Match the following ചേരും പടി ചേർക്കുക 5x1/2=2 1/2

- 1. Common Service Centera) Cyber Crime against government
2. Education Channels b) Excessive use of technology
3. Intellectual Property theft c) Vyas
4. Website defacement d) Plagiarism
5. Infomania e) Akshaya Center

Answer any 6 questions from 7 to 13 . 2 mark each ഏതെങ്കിലും ആറെണ്ണത്തിന്
ഉത്തരമെഴുതുക. രണ്ട് മാർക്ക് വീതം 6x2=12

- 7.Explain core data types in PHP
8.List out the steps for connecting PHP with MYSQL
9.Write a PHP program to display 5, 10,100 using do..while loop
10.What is cyber terrorism? സൈബർ ടെററിസം
11.What is cyber forensics?സൈബർ ഫോറൻസിക്സ്
12.What is the difference between GET and POST method in PHP
13.What is swarm intelligence? Is it helpful for computing?

Answer any 1 questions from 13 to 14. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1x 3=3

- 14.Explain G2G, G2C, G2E
15.Write any three string functions in PHP

Answer any 1 questions from 16 to 17. ഏതെങ്കിലും ഒന്നിന് ഉത്തരമെഴുതുക 1x5=5

- 16.Explain any five applications of computational intelligence
17.What is distributed computing? Explain its advantages and disadvantages
ഡിസ്ട്രിബ്യൂട്ടഡ് കമ്പ്യൂട്ടിംഗ് എന്താണ്