

Bangladesh Computer Council

Batch-7

1. A computer program that converts an entire program into machine language at one time is
- A. an interpreter
 - B. a simulator
 - C. a debugger
 - D. a compiler
- Answer: D

2. Which of the following memories need refreshing
- A. Static RAM
 - B. Dynamic RAM
 - C. ROM
 - D. EPROM
- Answer: A

3. Data encryption techniques are particularly useful for
- A. reducing storage requirements
 - B. improving data integrity
 - C. protecting data in communication systems
 - D. All of the above
- Answer: C

4. Which of the following memory have the shortest access time ?
- A. Hard Disk
 - B. Magnetic memory
 - C. Magnetic bubble
 - D. Cache memory
- Answer: D

5. The term associated with the comparison of processing speed of different computer systems is
- A. CPS
 - B. EFTS
 - C. MIPS
 - D. MPG
- Answer: C

6. The primary job of the operating of a computer is to;
- A. command resources
 - B. manage resources
 - C. provide utilities
 - D. be user friendly
- Answer: B

7. What the parity bit is used for

- A. it is used in self-complementing code
- B. Internal code used for storing alphanumeric information
- C. The me Answer used by the computer to check errors during internal manipulation of data
- D. All of the above

Answer: C

8. The ALU of a computer responds to the commands coming from

- A. Primary memory
- B. Control section
- C. External memory
- D. Cache memory

Answer: A

9. 20% of 2=?

- A. 4
- B. 20
- C. 0.04
- D. 0.4

Answer: D

10. A wall 6m long, 5m high and 50cm thick has to be built using bricks measuring 25cm by 7.5cm by 7.5cm. If the mortar occupies 5% of the volume of the wall, then find the number of bricks to build the wall?

- A. 4565
- B. 6080
- C. 5424
- D. 8741

Answer:

11. Taka 432 is divided amongst three workers A, B, C such that 8 times A's share is equal to 12 times B's share which is equal to 6 times C's share. How much did A get?

- A. 192
- B. 162
- C. 144
- D. 128

Answer: C

12. If $12a+3b=1$ and $7b-2a=9$, what is the average (arithmetic mean) of a and b?

- A. 0.10
- B. 0.50
- C. 2.50
- D. 5.00

Answer: B

13. Mahbub visit three stores. At the first store he spends half of her money plus tk.20.00,at the second store he spends half the money he has left plus tk.10.00 and at the third store he spends half of what has left plus Tk.20.00 He is now out of money. How much money did Mahbub start out with?

- A. 100
- B. 140
- C. 240
- D. 260

Answer: C

14. Ms. Josna purchased x grams of Food A, y grams Food B and z grams of Food C.
Write the expression for the amount she spent?

Answer: $1.8x/100 + 3y/100 + 2.75/z$

15. A customer is considering to buy either of the following :

A. 500 grams of A, b.250 grams of B, C.350 grams of C, and d.200 grams of B and 200 grams of C. Which diet contains the most grams of protein and how much?

Answer: D-80gm

16. Two numbers are such that twice the smaller number exceeds twice the greater one by 18 and $\frac{1}{3}$ of the smaller and $\frac{1}{5}$ of the greater number are together 21.the numbers are:

- A. 36 and 45
- B. 45 and 36
- C. 50 and 41
- D. None

Answer: A

17. What value of O will make CDFE a parallelogram, if $AB \parallel CD$?

Answer: 145

18. $5*2$ is a three digit number with * as a missing digit.If the number is divisible by 6,then the missing digit is,

- A. 2
- B. 3
- C. 4
- D. 9

Answer: A

19. In four years time the combined age of my three cousins and me will be 208.what will be the combined age in seven years time?

- A. 220
- B. 224
- C. 229
- D. 234

Answer: A

20. WXYZ is a square, where $WX=14$,the are XOZ is drawn taking Y as center Find the area enclosed by are XOZ WX and WZ.

Answer: 42.0616

SECTION-II

1. A movie consists of overlapping_____of images.

- A. Layers
- B. Scenes
- C Frames
- D. Flash

Answer: B

2. Which of the following describes a bitmap graphic ?

- A. Any grid with a lot of
- B. A vector graphic
- C. Shape or path of line
- D. Any shape filled with solid or gradient color

Answer: B

3. Internet requires

- A. an international agreement to connect computers
- B. a local area network
- C. commonly agreed set of rules to communicate between computers
- D. World Wide Web

Answer: D

4. By an intranet we mean

- A. A Wide Area Network connecting all branches of an organization
- B. A network connecting all computers of an organization and using the internet protocol
- C. A LAN of an organization
- D. A corporate computer network

Answer: C

5. The tag used in HTML to link it with other URL's is:

- A. <A>
- B. <H>
- C. <U>
- D. <L>

Answer: A

6. Sessions are special techniques in web application development where :

- A. Stores javaScripts
- B. Store only IP address.
- C. Store only 'user id' and 'password'
- D. User's interactions with the site are stored dynamically

Answer: D

7. Which of the following standards does not support video ?

- A. mpeg
- B. wmv
- C. mp3
- D. avi

Answer: C

8. A search engine is a program to search

- A. for information
- B. Web pages
- C. web pages for specified index terms
- D. web pages for information using specified search terms

Answer: D

9. XML uses

- A. User defined tags
- B. Pre-defined tags
- C. both Pre-defined and User defined tags
- D. Extended tags used in HTML and makes them powerful

Answer: A

10. It is possible to display pictures in images in HTML specification by using the tag____

- A. <PIC src=Picture file>
- B.
- C. <GIF src=Picture file>
- D. <GR src=Picture file>

Answer: b

Section-IV

1. Which command properly allocates memory?

- A. `char *a=new char [20];`
- B. `char a=new char [20];`
- C. `char a=new char (20.0);`
- D. `char a[]=new char [20];`

Answer: D

2. Which one is the feature of object oriented programming?

- A. Encapsulation
- B. Polymorphism
- C. Inheritance
- D. All of the above

Answer: D

3. What's the error of the statement: `(x=4&& y=5)?(a=5);(b=6);`

- A. The question mark should be an equal sign
- B. There are too many variables in the statement
- C. The first Semicolon should be a colon
- D. The conditional operator is only used with strings

Answer: C

4. With every use of a memory allocation function, what function should be used to release allocated.

- A. `Unalloc ()`
- B. `Dealloc ()`
- C. `Release ()`
- D. `Free ()`

Answer: D

5. Class `Employee {int rate,comm;};` the access specifier for its data member `rate` and `comm` is not defined. What will be the access specifier then?

- A. Private
- B. Public
- C. Protected
- D. None

Answer: A

6. "Your bonus is 22%!"

Select the statement which will EXACTLY reproduce the line of text above.

- A. `Printf ("\"Your bonus is 22%!\"\\n");`
- B. `Printf ("Your bonus is 22%!\\n");`
- C. `Printf ("Your bonus is 22%!\\n");`
- D. `Printf ("\"Your bonus is 22%%!\"\\n");`

Answer: D

7. What is the Output of these codes?

B. 4,3,2,1,0,0.

8. What does `strcat (an_array, "this");` do?

- A. Copies "This" into `an_array`
- B. Adds "This" to the end of `an_array`
- C. Compares `an_array` and "This"
- D. Nothing

Answer: B

9. Which of the following is evaluated first in C?

- A. `<<`
- B. `||`
- C. `!`
- D. `&&`

Answer: C

10. Which function initializes variables in a class?

- A. method
- B. constructor
- C. destructor
- D. identifier

Answer: B

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Batch-8

SECTION -1

1. The sum of two numbers is 83957 and their difference is 74821; what should be subtracted from the greater number to get the smaller?

- A. 4568
- B. 9136
- C. 74821
- D. 75311

Answer: C

2. If $x/y = 3/z$, then what is the value of $9/2$?

- A. $3x^2$
- B. x^3z
- C. $(1/9)x^3z^3$
- D. x^2z^2

Answer: D

3. Which of the following is the closest to 2 (Zero)?

- A. $(1-0.9)^2$
- B. $1-(0.9)^2$
- C. 0.09
- D. $(0-0.9)^2$

Answer: D

4. Two numbers are in the ratio 5:4 and the difference is 10, what is the larger number?

- A. 10
- B. 40
- C. 50
- D. 100

Answer: C

5. If the radius of a circle increased by 6%, then the area is increased by

- A. 0.36%
- B. 3.6%
- C. 12.36%
- D. 36%

Answer: C

6. A wheel makes 600 revolutions is passing over 2 Km 736 m; what is its circumference?

- A. 4.56 m
- B. 27.36 m
- C. 45.6 m
- D. 273.6 m

Answer: A

7. What value of x holds for the inequality $2x+18>7x-5$?

- A. $x<23/5$
- B. $x>23/5$
- C. $x>23/9$
- D. $x<23/9$

Answer: A

8. Distribution of Exam Scores in a class : Number of Student, Number of correction Answerwer 10.36-40, 16.32-35, 112.28-31, 14.26-27, 8.0-25--- What percent of the class Answerwered 32 or more quesitons correctly?

- A. 16
- B. 30
- C. 43.33
- D. 11.5

Answer: C

9. The number of students who Answerwered 28 to 31 questions correctly is x times the number who Answerwered 25 or fewer correctly, wehre x is?

- A. 1.5
- B. 0.5
- C. 0.09
- D. 1.0

Answer: A

10. PQ and RS are stright lines which are parrellel to each other. What is the value of angle x in degrees?

- A. 30
- B. 40
- C. 50
- D. 75

Answer: C

11. Keramat's salary is currently Tk. 35,000. Five years back his salary was Tk. 10,000. What is the percentage increase in his salary in five years?

- A. 25
- B. 50
- C. 250
- D. 350

Answer: C

12. If a circle has a radius 4, and if P and Q are points of the circumference, then the maximum length of an arc which could seperate P and Q is.

- A. $4r$
- B. 5
- C. $2r$
- D. 2

Answer: A

13. What is the area of the rectangle ABCD?

- A. 6
- B. 10
- C. 12
- D. 20

Answer: D

14. X and Y agreed to do a job, X alone complete one third of the job and then asked Y to complete the rest, Y hired Z and the two of them shared the job equally. Which statement of the following is correct?

- A. Y did more than X
- B. Y did more than Z
- C. Y did as much as X & Z did individually
- D. Y did as much as X & Z did together

Answer: C

15. The sum of an odd and an even number is

- A. Sometimes an odd number
- B. Always an odd number
- C. Always a prime number
- D. Always divisible by 3 or 5 or 7

Answer: B

16. The ALU of a computer responds to the commands coming from?

- A. Primary memory
- B. Control section
- C. External memory
- D. Cache memory

Answer: B

17. Rahim and Karim are twin brothers. Their combined age now is equal to their mother's age. After 10 years,

- A. Combined age of Rahim and Karim will be equal to their mother's age;
- B. Mother's age will be three times Karim's age;
- C. Combined age of Rahim and Karim will be greater than their mother's age;
- D. Combined age of Rahim and Karim will be less than their mother's age;

Answer: C

18. To share data with other windows application use

- A. Object embedding
- B. Copying and pasting of text and images
- C. Object Linking
- D. All of the above

Answer: C

19. What represents graphic document on the World Web Web?

- A. .html
- B. .gif
- C. .wav
- D. .avi

Answer: B

20. Which of the following is not a function of the CPU?

- A. Decode instructions
- B. Write back the results
- C. Stores the program
- D. Fetch data

Answer: A

SECTION-II

21. If Y has the value 5 what will be value of variable Y after the following piece of C++ is executed?
if (y>0) y+=2 else y = 3;

- A. 5
- B. 7
- C. 3
- D. 2

Answer: B

22. Which one is the feature of object oriented programming?

- A. Encapsulation
- B. Polymorphism
- C. Inheritance
- D. All of the above

Answer: D

23. What's the error of the state, while ((i<10) && (i>24))

- A. Test condition cannot contain a logical operator
- B. The while loop is an exit-condition loop
- C. The test condition is always true
- D. The test condition is always false

Answer: D

24. With every use of a memory allocation function, what function should be used to release allocation memory which is no longer needed?

- A. Unalloc();
- B. Dealloc();
- C. Release();
- D. Free();

Answer: D

25. What values of i will be printed first and last in the loop?

```
n = 10; i = 0; do {printf("%d",i); while (++i<n)}
```

- A. 1 and 9
- B. 0 and 9
- C. 0 and 10
- D. 1 and 10

Answer: B

26. Which of the following is a complete function?

- A. int funct();
- B. int funct (int x) {return x=x+1;}
- C. void funct (int) {printf("Hello")}
- D. void funct (x) {printf("Hello")}

Answer: B

27. Which of the following is valid for declaration of main function with arguments?

- A. int main();
- B. void main ();
- C. int main (int argc, char*argv[])
- D. None of above

Answer: C

28. What is the result of the program segment?

```
counter=0; switch (counter) {case 1: printf("One"), case 1: printf("Zero"), case 1: printf("Hello")}
```

- A. One
- B. Zero
- C. Hello
- D. ZeroHello

Answer: B

29. What is the output of the following program segment?

```
int a = 5, b = 5; y = (++a < b--)? a--: ++b; printf("%d, %d/n", --y, y);
```

- A. 4, 5
- B. 5, 6
- C. 3, 4
- D. 5, 5

Answer: A

SECTION-III

30. Which of the following languages is used to define the schema of the database?

- A. DCL
- B. DDL
- C. DML
- D. SQL

Answer: B

31. Which among the given choices are the roles of Database Administrator: (a) managing security issues, (b) Define Storage structure definition, (c) Develop application programs and (d) take backup of the database?

- A. a
- B. a, b, c
- C. a, b, d...
- D. All of these

Answer: D

32. With SQL, how can you return the number of records in the "Persons" table?

- A. SELECT COUNT () FROM persons;
- B. SELECT COLUMNS (*) FROM persons;
- C. SELECT COLUMNS () FROM persons;
- D. SELECT COUNT (*) FROM persons;

Answer: D

33. Suppose you are making your own database to organize information about your favorite movies. Information include are: Title, Actor(s), Director, Year, Genre, etc. Each record in your database will represent:

- A. An actor
- B. A Director
- C. A year
- D. A movie

Answer: D

34. What do integrity constraints do?

- A. Preserve data consistency in a database
- B. Ensure authorized changes to the database
- C. Prevent database from accidental damage
- D. All of the above

Answer: B

35. Which of the following is true for statement-level triggers?

- A. Executes only once for all rows affected in a transaction
- B. Executes for each row affected in a transaction
- C. Executes only when insert or delete is done;
- D. Executes for each row for an appropriate statement to check the integrity constraint

Answer: A

36. How can you resolve many-to-many relationship in RDBMS?

- A. Putting Foreign Key to either of the 'many' side
- B. Combining the two tables into one
- C. Create a new table using the Primary Key of both table
- D. None of above

Answer: C

37. If every non-primary key attribute is functionally dependent on the whole primary key, then the relation is, at least, in

- A. 1st normal form
- B. 2nd normal form
- C. 3rd normal form
- D. 4th normal form

Answer: B

38. Which of the following constraint prevents the entry of duplicate value into the table column(s)

- A. Primary Key
- B. Foreign Key
- C. UNIQUE
- D. NULL

Answer: C

39. There are two relations r1 and r2 having 2 and 3 columns respectively. How many columns would be produced by $r1 \times r2$ (Cartesian product)?

- A. 5
- B. 6
- C. 7
- D. 8

Answer: A

SECTION-IV

40. Which of the following web server in both Linux and Windows?

- A. Apache
- B. IIS
- C. Apached and IIS
- D. Apache and Tamcat

Answer: D

41. Which is the correct HTML for creating a hyberlink?

- A. Dhaka
- B. <a> name="http://www.bcc.net"
- C. Dhaka
- D. Dhaka

Answer: C

42. How can you open a link in a new browser window?

- A.
- B.
- C.
- D.

Answer: B

43. Which of these tags all <table> tags?

- A. <table><tf><tr>
- B. <table><tf><tt>
- C. <table><tr><td>
- D. <table><td><tfoot>

Answer: C

44. What is a web spider?

- A. Internet security
- B. Items you can click on to go related pages
- C. Program that reports how many hits a search engine found
- D. A deadly virus spread through internet

Answer: C

45. When a visitor clicks the submit button on a form, the_____ of each form element is sent to the server.

- A. Label
- B. Label
- C. Value
- D. Name-value pair

Answer: D

46. Which of the following memory have the shortest access time?

- A. Magnetic memory
- B. Hard Disk
- C. Cache memory
- D. CD ROM

Answer: C

47. The technique of hiding internal implementation details of an object from its external view best describes;

- A. Inforporation
- B. Polymorphism
- C. Encapsulation
- D. Generalization

Answer: C

48. Identify the JavaScript statement that displays the message "Welcome" on one line in the HTML document.

- A. `alert("Welcome");`
- B. `document.writeIn("Welcome");`
- C. `window.prompt("Welcome",0);`
- D. None of the above

Answer: A

49. Which of the following is true for applets?

- A. A Java program that is explicitly executed on a computer system by Java Interpreter
- B. A Java program that typically runs on server
- C. A Java program that typically runs on client-side in a web browser
- D. A graphic application that is executed when a page is loaded on the client-side

Answer: D

50. If Y has the value 5 what will be value of variable Y after the following piece of C++ is executed?

- A. 5
- B. 7
- C. 3
- D. 2

Answer: