

West Zone Power Distribution Company Limited (WZPDCL)

Assistant Engineer (CSE/CS/ECE/ETE)

Date: 27/05/2023

Exam Taker: KUET

Time: 60 minutes

Marks: 100 (30 Non + 70 Departmental)

Non-departmental Questions:

1) 5 x 2 = 10

- i) What is the actual length of the Padma Bridge?
- ii) When was WZPDCL constituted?
- iii) Which vitamin helps the blood clot?
- iv) Why March month is so valuable for our nation?

2) 5 x 2 = 10

- i) Correct the sentence:
⇒ **We had gone to the movies yesterday.**
- ii) Make a sentence using 'Keep on'.
- iii) Change the narration.
⇒ **He said, "I shall play football".**
- iv) বাক্যটি শুদ্ধ করুনঃ
⇒ সব ছাত্ররা আজ উপস্থিত।
- v) Translate the following sentence:
⇒ পথিকের পথচলা আর শেষ হল না।

3) 5 x 2 = 10

- i) শব্দ দুইটির সমার্থক শব্দ লিখুনঃ অপবাদ, ইতি
- ii) শব্দ দুইটির বিপরীত শব্দ লিখুনঃ অর্থী, আশু

iii) সন্ধি বিচ্ছেদ করুনঃ

উত্তম, মনীষা

iv) বানান শুদ্ধ করুনঃ

ঐকতা, নিরস

v)

Departmental Questions:

14 x 5 = 70

4) Write a C code segment of swapping two numbers without using a third variable.

5) Write the output of the following C code segment:

```
unsigned int a = 3, b = 9;
printf("a << 1 = %d\n", a << 1);
printf("b << 1 = %d\n", b << 1);
```

6) What is semaphore? Write a real-life example of it.

7) What is database normalization? Write down the types of database normalization.

8) What is MVC? Draw MVC pattern.

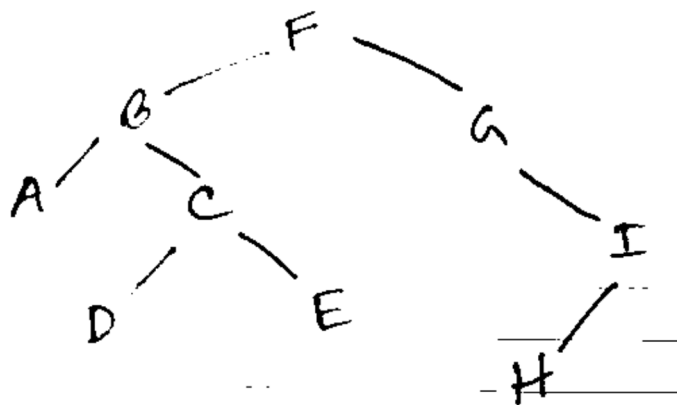
9) Write names of a few architectures design pattern of software development.

10) Differentiate between primary key and foreign key. What is trigger and how it works?

11) Differentiate between IPv4 and IPv6.

12) What is binary search tree. Write an example of it.

13) Write preorder and postorder representations of the following graph:



14) Write down about Blockchain.

15) What is asymmetric cryptosystems? Write an example of it.

16) What is constructor function? Write the properties of it.

17)

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