

QUIZ-I on UNIT-I

Instructions:

Please mention registration Number, Name and date

Timing and marks details are written on each slide

Total no of questions = 50

Each question has a time limit which is displayed
along with the question

29/11/2018

Computer Architecture & Organization

ALL THE BEST

1. RTL stands for ? (20 Sec)

- A. Random transfer language
- B. Register transfer language
- C. Arithmetic transfer language
- D. All of these

2. What are the main components of computer system
?
(1min)

3.What is a register ? : __(**40sec**)

4. What is BUS ? (20 Sec)

A. It's a collection of wires used for communication

B. It's a microoperation

C. Its used for computation

D. It is a storage device

5.A bus divided into (20 sec)

A Communication bus

B Address Bus

C Control Bus

D Data Bus

6. Operations executed on data stored in one or more registers. (20sec)

A. Computation

B. Microoperation

C. Transfer operation

D. Logical operations

E. All of the above

7. Registers + Microoperations Hardware +
Control Functions = ?
(20sec)

- A. Control unit
- B. ALU
- C. Digital Computer
- D. Microoperation

8. Write any 3 symbols used for various microoperations? (30sec)

9. Which operations are used for addition, subtraction, increment, decrement and complement function:?
(30sec).

- A. Bus
- B. Memory transfer
- C. Arithmetic operation
- D. All of these

10. Which language is termed as the symbolic depiction used for indicating the series: (30 sec)

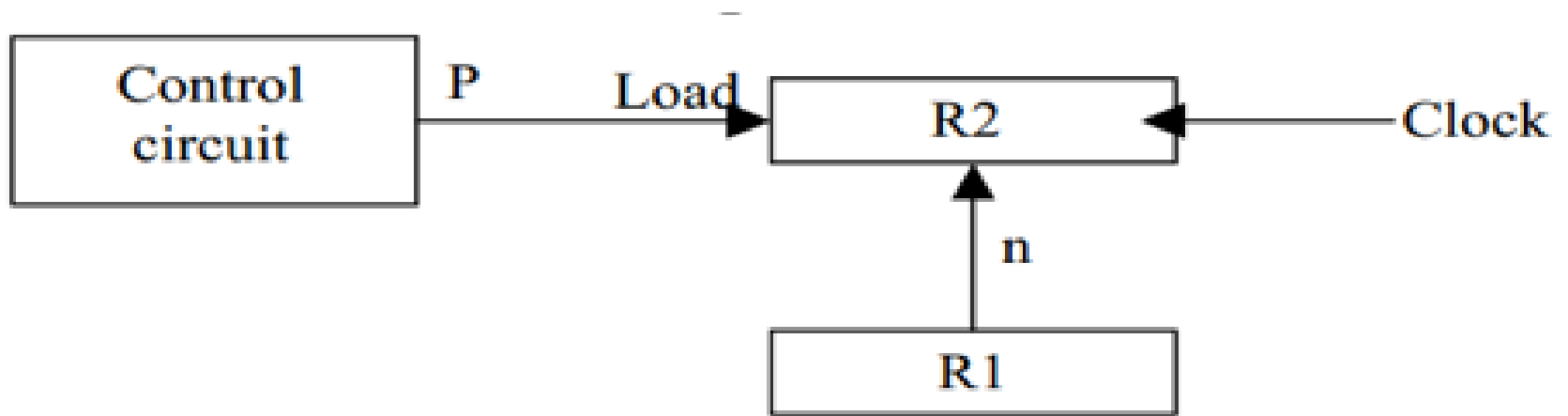
- A. Random transfer language
- B. Register transfer language
- C. Arithmetic transfer language
- D. All of these

11. In which transfer the computer register are indicated in capital letters for depicting its function **(20 sec)**

- A. Memory transfer
- B. Register transfer
- C. Bus transfer
- D. None of these

12. The register that includes the address of the memory unit is termed as the _____ (20sec)

- a. MAR
- b. PC
- c. IR
- d. None of these



(a) Block diagram

13. The diagram represents which operation ?
Write the microoperation for that ?(40sec)

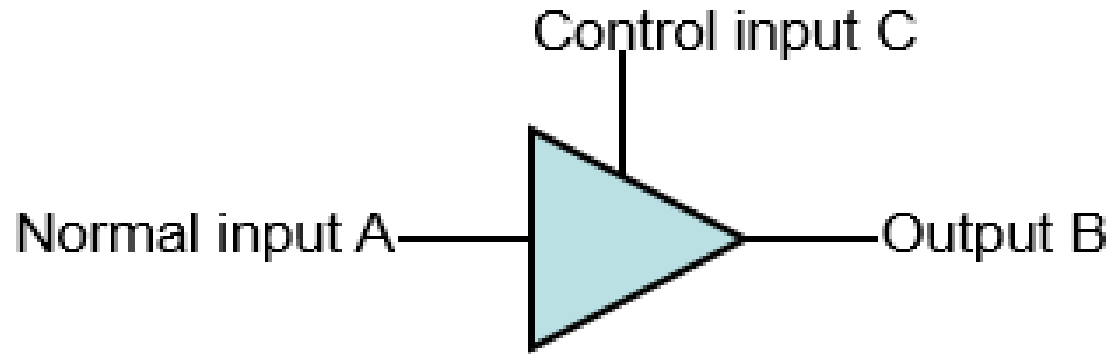
14. The register for the program counter is signified as
(20 sec)

A. MAR

B. PC

C. IR

D. None of these



15. The diagram represents (30sec)

- A. NOT gate
- B. OR gate
- C. Control gate
- D. Three state buffer

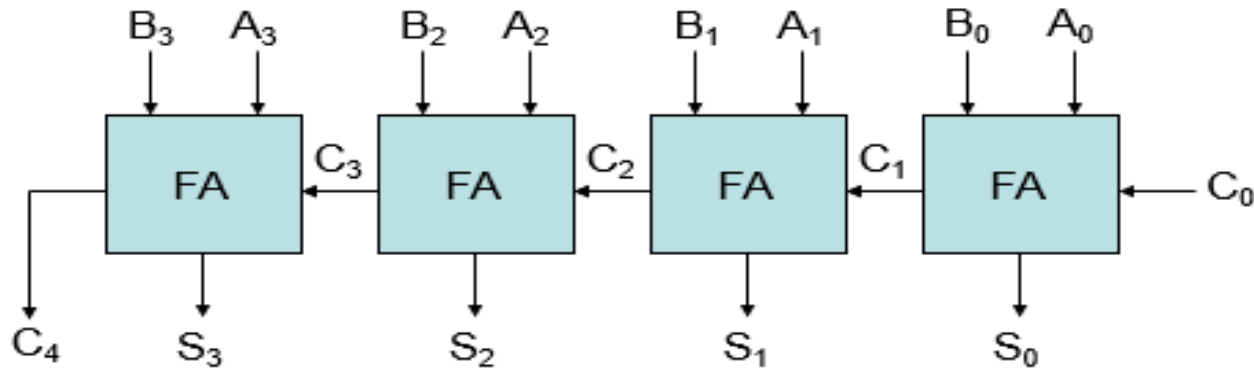
16. The microoperations most often classified into the categories (35 sec)

- A. Register transfer microoperations
- B. Arithmetic microoperations (on numeric data stored in the registers)
- C. Logic microoperations (bit manipulations on non-numeric data)
- D. Shift microoperations
- E. All of the above
- F. Only A & B

17. In register transfer the instruction register is (15 sec)

- A. MAR
- B. PC
- C. IR
- D. None of these

18. The diagram is of (30sec)

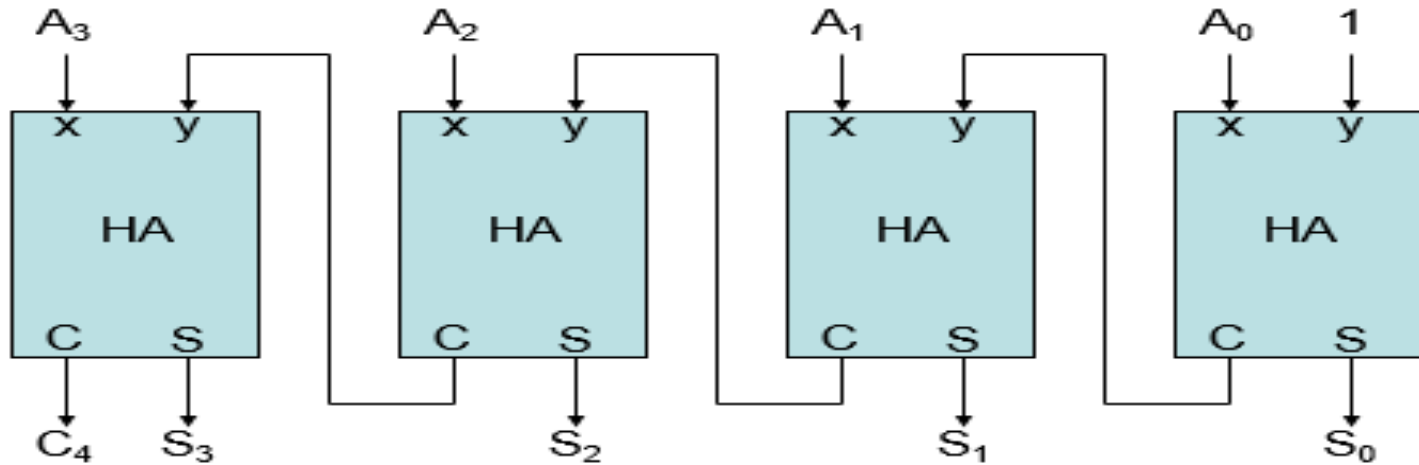


- A. 4-bit adder
- B. 4-bit subtractor
- C. 4-bit complement
- D. 4-bit incrementer

19. How many types of micro operations are there? (20sec)

- a. 2
- b. 4
- c. 6
- d. 8

20. The following block diagram is of (40 sec)



- A. 4-bit adder
- B. 4-bit subtractor
- C. 4-bit complement
- D. 4-bit incrementer

21. Which micro operations carry information from one register to another (15sec)

- A. Register transfer
- B. Arithmetic
- C. Logical
- D. All of these

22. Micro operation is shown as (15sec)

- A. $R1 \rightarrow R2$
- B. $R1 \leftarrow R2$
- C. Both
- D. None

23. A binary decrementer can be implemented
by adding (40 sec)

A. 0000

B. 1010

C. 1111

D. Complement of the number

24. How many types of memory transfer operation(15 sec)

A. 1

B. 2

C. 3

D. 4

25. How to set all bits to one ? (40 sec)

26. Operation of memory transfer are?
(15 sec)

- a. **Read**
- b. **Write**
- c. **Both**
- d. **None**

27. In memory read the operation puts memory address on to a register known as (20 sec)

- a. PC
- b. ALU
- c. MAR
- d. All of these

28. Arithmetic operation are carried by such micro operation on stored numeric data available in ? (20 sec)

- a. **Register**
- b. **Data**
- c. **Both**
- d. **None**

29. Which operation are implemented using a binary counter or combinational circuit ? (20 Sec)

- a. **Register transfer**
- b. **Arithmetic**
- c. **Logical**
- d. **All of these**

30. If $R1=11001110$ then after Arithmetic shift right twice the $R1$ will be (50 sec)

- A. 11110011
- B. 00111000
- C. 11100111
- D. 10011100

31. Which operation are binary type, and are performed on bits string that is placed in register (20 Sec)

- A. Logical micro operation
- B. Arithmetic micro operation
- C. Both
- D. None

32. Which operation is extremely useful in serial transfer of data ?
(20 sec)

- a. Logical micro operation
- b. Arithmetic micro operation
- c. Shift micro operation
- d. None of these

33. In register transfer which system is a sequential logic system in which flip-flops and gates are constructed(30Sec)

- a. Digital system
- b. Register
- c. Data
- d. None

34. Which is the straight forward register transfer the data from register to another register temporarily?(20sec)

- a. Digital system
- b. Register
- c. Data
- d. Register transfer operations

35. Register are assumed to use positive-edge-triggered (15sec)

- a. Flip-flop
- b. Logics
- c. Circuit
- d. Operation

36. In 3 state gate third position termed as high impedance state which acts as (20 sec)

- a. Open circuit
- b. Close circuit
- c. None of these
- d. All of above

37. In every transfer, selection of register by bus is decided by ? (20 sec)

- a. Control signal
- b. No signal
- c. All signal
- d. All of above

38. Which operation are associated with serial transfer of data ?(15 sec)

- a. Logical micro operation
- b. Arithmetic micro operation
- c. Shift micro operation
- d. None of these

39. Which shift is a shift micro operation which is used to shift a signed binary number to the left or right ?
(30 sec)

- a. Logical
- b. Arithmetic
- c. Both
- d. None of these

40. which shift is used for signed binary number

(20 sec)

- a. Logical
- b. Arithmetic
- c. Both
- d. None of these

41. Arithmetic left shift is used to _____ a signed number by _____? (20 sec)

- A. Multiply by 2
- B. Divide by 2
- C. Addition by 2
- D. XOR by 2

42. Write a 2's complement of
10100010 (1 min)

43. Arithmetic right shift is used to _____ a signed number by _____? (30 sec)

- A. Multiply by 2
- B. Divide by 2
- C. Addition by 2
- D. XOR by 2

44. The operation executed on data stored in registers is called (20 sec)

- A. Macro-operation
- B. Micro-operation
- C. Bit-operation
- D. Byte-operation

45. RTN stands for(20 sec)

- A. Register Transfer Notation
- B. Register Transmission Notation
- C. Regular Transmission Notation
- D. Regular Transfer Notation

46. In a system, which has 32 registers the register id is _____ long ?(20 Sec)

- A. 16 bits
- B. 8 bits
- C. 5 bits
- D. 6 bits

47. In computers, subtraction is generally carried out by?
(15 Sec)

- A. 9's complement
- B. 10's complement
- C. 1's complement
- D. 2's complement

48. The circuit used to store one bit of data is known as(15 sec)

- A. Register
- B. Encoder
- C. Decoder
- D. Flip Flop

49. What are the types of shifts ? (25 sec)

- A. Circular shift
- B. Logical shift
- C. Arithmetic shift
- D. All of the above
- E. Only A & C

50. If $R1=0110$ and $R2=1010$ then after the micro operation $R1 \leftarrow R1 - R2$ the contents of $R1$ and $R2$ will be ?(2 min)

- A. 0110 , 1010
- B. 1100 ,1010
- C. 1010,1010
- D. 0110,1010

END OF QUIZ-I