

S.S. Jain Subodh College of Global Excellence
Pre-University Exam-2022
BCA (Part-I)
COMPUTER ORGANIZATION (Paper-V)

Time Allowed: Three Hours

Maximum Marks: 100

NOTE: All the three parts are compulsory.

PART – I

10x2=20

1. (a) What is cache memory?
- (b) What is system clock?
- (c) What is the function of program counter?
- (d) Explain the EEPROM.
- (e) What is system bus?
- (f) What are accumulators?
- (g) Write the name of auxiliary storage devices.
- (h) What is sound card?
- (i) What are the major parts of central processing unit?
- (j) Write basic instruction processing steps.

PART – II

5x4=20

2. Explain Von NeuMann architecture.
3. Discuss about the control unit and its functions.
4. What do you mean by decoding of instruction?
5. Explain static and dynamic RAM.
6. Give the difference between microcontroller and microprocessor.

PART – III

7. Describe the historical evolution of generations on the computers.

12

OR

Write short note on

3x3=12

- (a) Computer Ports
- (b) Network Cables
- (c) MotherBoard

8. What do you mean by instruction? Explain different types of instructions.

2+10=12

OR

Write the classification of computer. Compare mini computers, micro computers and mainframe computers. 6+6=12

9. Explain the phases of instruction cycle of the computer system.

12

OR

What do you mean by system buses? Draw the common bus system diagram and explain it.

2+10=12

10. List and describe different registers for the basic computer.

12

OR

Draw the diagram for memory hierarchy in a computer system. Discuss.

12

11. Differentiate between the RISC and CISC computers.

12

OR

Explain about 8085 microprocessor with suitable diagram.

12

105/135

Comp. Org.

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B.C.A. (Part-I) EXAMINATION - 2022

(Faculty of Science)

(Three-Year Scheme of 10+2+3 Pattern)

COMPUTER ORGANIZATION

Time Allowed : Three Hours

Maximum Marks : 100

No supplementary answer-book will be given to any candidate. Hence the candidates should write the answer precisely in the main answer-book only.

All the parts of one question should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book.

Write your roll number on question paper before start writing answers of questions.

PART - I

Very short questions.

10x2=20

1. (a) What is computer architecture ?
- (b) What is a system clock in computer ?
- (c) What is an AGP slot ?
- (d) What is palmtop computer ?
- (e) What is USB port ?
- (f) What is meant by memory buffer ?
- (g) What is stack pointer ?
- (h) What is a microprocessor in computer ?
- (i) What is DMA controller ?
- (j) What is Auxiliary memory ?

PART - II

Short questions.

5x4=20

2. What is Von Neumann Architecture ? Explain with diagram.
3. What are the main types of computer ? Explain.
4. What is ALU ? Explain the operations performed by ALU.
5. What is Virtual memory and how does it works ?
6. What is bus architecture and explain its types ?

PART - III

7. What are the five generations of computer ? Explain. 12

OR

Write a short notes on :

4x3=12

- (a) Motherboard
- (b) Plotter
- (c) Random and Sequential access
- (d) Tracks and Sectors

8. What is instruction cycle and its steps ? Explain with the help of diagram. 12

OR

What is control unit ? How does the control unit work ? 12

9. What is Register Transfer Language ? Explain with example. 12

OR

What are the types of instructions in Computer Architecture ? 12

10. What is the use of addressing modes ? Explain the types of addressing modes. 12

OR

What is memory hierarchy and why it is needed ? 12

11. (a) Differentiate between Microprocessor and Microcontroller. 6

(b) Explain the features of 8085 microprocessor. 6

OR

What are the different features of CISC and RISC architectures ? Explain. 12

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