|  |  | MARCH 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Q1 | (A) | Select correct alternative and rewrite the following : | (4) |  |
|  | (a) | ALU is .................bit unit in 8025 microprocessor. <br> (1) 8 <br> (2) 16 <br> (3) 32 <br> (4) 64 |  |  |
|  | (b) | The flag bit that gets affected on execution of RCC instruction in 8085 Processor is <br> (1) zero <br> (2) Parity <br> (3) Carry <br> (4) All |  |  |
|  | (c) | $\qquad$ is Microcontroller chip . <br> (1)8085 <br> (2) 8086 <br> (3) 8051 <br> (4) Pentium |  |  |
|  | (d) | $\ldots . . . . . . . . .$. cable type is ideal for connecting between two building. <br> (1) UTP <br> (2) STP <br> (3) co-axial <br> (3) flat |  |  |
| Q1 | (B) | Answer any two of the following : | (6) |  |
|  | (a) | Write a short note on Interrupts in 8085 Microprocessor. |  |  |
|  | (b) | Explain any three addressing modes of 8085 Microprocessor with an example Of each. |  |  |
|  | (c) | Explain various application of microcontroller. |  |  |
| Q2 | (A) | Answer any two of the following: | (6) |  |
|  | (a) | Explain functions of following registers of 8085 Microprocessor : <br> (1) Accumulator <br> (2) flag <br> (3) Program counter |  |  |
|  | (b) | Explain the following instruction of 8085 Microprocessor with suitable example of Each : <br> (1) XTHL <br> (2) DAD rP |  |  |
|  | (c) | Explain the following characteristics of transmission media : <br> (1) Bandwidth <br> (2) Band Usage <br> (3) Attenuation |  |  |
| Q2 | (B) | Answer any two of the following: | (6) |  |
|  | (a) | ) Draw Block diagram of 8085 microprocessor |  |  |
|  | (b) | Compare any four attributes of UTP and Optical fiber cable . |  |  |
| Q3 | (A) | Answer any two of the following : | (6) |  |
|  | (a) | The flag register of 8085 microprocessor contain the data AAH ,Interpret its meaning . |  |  |
|  | (b) | Describe in brief the functions of the following pins of 8085 microprocessor : <br> (1) $\mathrm{IO} / \mathrm{M}$ <br> (2) SID <br> (3) HLDA |  |  |
|  | (c) | Define Bus ,Ring and Star Topology . Draw simple diagram for each . |  |  |
| Q3 | (B) | Answer any one of the following : | (4) |  |
|  | (a) | Explain the following instruction diagram : <br> (1) RLC <br> (2) RRC <br> (3) RAL <br> (4) RAR |  |  |
|  | (b) | Compare any four attributer of 80286 and Processors. |  |  |
| Q4 | (A) | Answer any two of the following : | (6) |  |
|  | (a) | The accumulator of 8085 processor contains data B8H and register B contain 44 H . what Will be the content of accumulator after execution of each of the following instruction Independently ? <br> (1)ORI FOH <br> (2) ANA B <br> (3) XRI OFH |  |  |


|  | (b) | Explain the following instruction of 8085 microprocessor with suitable <br> example of each. <br> (1) STA add r (2) ADD r (3) CMP r |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | (c) | Explain Hub and Repeater in detail . |  |  |
| Q4 | (B) | Answer any one of the following : | (4) |  |
|  | (a) | Explain advantages of the following features of the Pentium : <br> (1) Dual pipelining (2) On Chip Caches <br> (3) Brach Prediction (4) 64-bit Data Bus |  |  |
|  | (b) | What is meant by protocol ? Explain concept of TCP/IP Protocol . |  |  |
| Q5 | (A) | Answer any two of the following : | (10) |  |
|  | (a) | Write assembly language program to count number of even data bytes <br> occurring in a block Stored from memory location CO51H and onwards. The <br> length of block is stored in location C050H.Stored result in location C060H. |  |  |
|  | (b) | Write an assembly language program to perform multiplication of two 8-bit <br> number where Multiplicand is stored at the memory location C051H and <br> C052H and multiple is stored at C053H.The result is to be stored at memory <br> location address C054H to CO55H. (Note: 8-bit multiplicand is extend to 16- <br> bit). | A hex numbers stored at location 3000H.Write an assemble language program <br> to inter- Change its digits. The new number is to be stored at 3001 H. Add <br> original number with New number and store result at location 3010H. |  |
|  | (c) |  |  |  |
|  | Q5 | (B) | Answer any two of the following : | OR |

