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Question Paper Code: 59871

B.E./B.Tech. DEGREE EXAMINATION, DEC 2021

Open Elective

Civil Engineering

15UIT971 – PC TROUBLESHOOTING

(Common to CSE,ECE,EEE,EIE,Mechanical,Chemical)

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer All Questions

PART A - (5 x 1 = 5 Marks)

1. DMA is used between CO1- R
(a) microprocessor and I/O (b) microprocessor and memory
(c) memory and I/O (d) none
2. SSD Stands for CO2- R
(a) Secured storage device (b) Solid storage drive
(c) Solid state drive (d) Secured solid drive
3. Which of the following microprocessor is considered to be the first 16-bit Microprocessor? CO3- R
(a) Intel 4004 (b) Intel 8088 (c) Intel 8086 (d) Intel 80286
4. From where can the boot option be selected? CO4- R
(a) Advanced BIOS Features (b) Advanced chipset Features
(c) CPU Soft menu (d) Power management setup
5. The Bootstrap loader program in which of the following device? CO5 -R
(a) RAM (b) Hard Disk (c) ROM Bios (d) None of the above

PART – B (5 x 3= 15Marks)

6. What are the two status bits to describe the current condition of the CPU. CO1- R
7. Write any of the solutions to backup data in a hard disk in case of a failure. CO2- R

8. Write the working principles of a SMPS device.. CO3- R
9. Mention some Anti-Virus Software for protect our project file. CO4 -R
10. How do you come to a conclusion that a Motherboard failure has occurred? CO5- R

PART – C (5 x 16= 80Marks)

11. (a) How to send a nice short message like 11010111 using the CRC CO1- App (16)
with the polynomial $x^3 + x^2 + 1$ as our generator.
- Or
- (b) An 8-bit byte with binary value 10101111 is to be encoded using CO1- App (16)
an even-parity Hamming code. Show the binary value after
encoding?
12. (a) The charge coupled device (CCD) Sensor in a Flatbed scanner is CO2- App (16)
replaced by a Contact Imaging sensor (CIS) in the recent days as
a technology update. Justify and explain why CIS is being
introduced instead of CCD
- Or
- (b) Justify Why IDE ports are replaced by SATA ports in a Hard CO2- App (16)
Disk Drive in detail. Compare and Contrast IDE and SATA Ports
and the types of connectors used for both the ports in detail
13. (a) Discover the Motherboard Logic OG and categorize the various CO3- Ana (16)
components in it.
- Or
- (b) Assume that we have encountered display problems in a CRT CO3- Ana (16)
display monitor and a LCD display monitor. Examine which of
the above problem will be easy to solve and illustrate the
troubleshooting techniques for both kinds of display monitors.
14. (a) Compare and Contrast Ink Jet printer and Laser Printer in detail. CO4- Ana (16)
Depict the technical constraints of using an Ink jet printer and
also conclude the advantages that laser printer have
comparatively
- Or
- (b) When you on your computer, The following warning message CO4 -Ana (16)
will display. “Warning! Your computer may be infected”. How
will you detect this error?

15. (a) Assume that you had brought an old computer machine in which you had moved some files into the recycle bin. However on rebooting ,the system checks the memory and comes with the message saying

CO5 -App (16)

FDC Failure

Primary HDC failure

Press F1 to continue.

Solve the above issue with proper solutions.

Or

- (b) Discover the Motherboard Logic OG and categorize the various components in it

CO5- App (16)

