

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0424]

APRIL 2024

Sub. Code: 2471

BACHELOR IN PROSTHETICS AND ORTHOTICS

THIRD YEAR (Regulation 2017-2018 onwards)

PAPER I – COMPUTER SCIENCE AND GRAPHICAL COMMUNICATION

Q.P. Code: 802471

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. What is an Operating System? Describe the service provided by Operating System.
2. Explain about the “Product Cycle” with neat flowchart.
3. Explain about CNC machine and its application in Prosthetics and Orthotics.

II. Write notes on:

(8 x 5 = 40)

1. Enumerate the general rules of dimensioning.
2. Define Tolerance, Limit and Fit.
3. Explain the various graphic display devices.
4. Describe different ways for creating presentation using MS-Power Point.
5. System software.
6. State the functions of AutoCAD.
7. CAD-CAM system in Prosthetics.
8. Explain with diagram microcomputer hardware system unit.

III. Short answers on:

(10 x 3 = 30)

1. Define Graphical Communication. Write its applications in Prosthetics and Orthotics.
2. What is French curve? Write its uses.
3. Construct an isometric scale.
4. What is a scale?
5. What is the Representative Fraction (R.F.) or Scale Factor (S.F.)?
6. What are the standard sizes of drawing sheets according to I.S.I. and which is suitable for drawing work?
7. Difference between RAM and ROM.
8. List out the operating system functions.
9. Explain the peripherals of computer system.
10. Differentiate application software and system software with two examples for each.
