27. (a) From the following table of values of x and $f(x)$ determine $f(0.23)$:

x :	0.2	0.22	0.24	0.26	0.28	0.30
$f(x)$:	1.6596	1.6698	1.6804	1.6912	1.7024	1.7139

Or

(b) Differentiate interpolation with equally spaced and unevenly spaced points.

28. (a) Use Predictor-Corrector formulae $\frac{dy}{dx} = x + y$, $y(0) = 0$, $h = 0.1$ for $0.4 < x \leq 0.6$ find the values.

Or

(b) Apply Runge-Kutta method to find an approximate value of y when $x = 0.2$ given that $\frac{dy}{dx} = x + y^2$ and $y = 1$ when $x = 0$, $h = 0.1$.

29. (a) Write a note on Integer and real constants. Give examples for each.

Or

(b) Explain the structure of DO Loop. Give its rules.

30 (a) Discuss the Input and Output statements used in FORTRAN program. Give its structure with example.

Or

(b) Write a simple Fortran program using a control statement to select the biggest of the given three numbers.
