

Q.2 Answer the following (Any two).

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1. Explain: Arithmetic logic unit and Memory unit.
2. Draw a flow chart to find largest of four numbers.
3. Draw a flow chart to find the average height of female and male separately in certain class.

Q.3 Answer the following (Any two).

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1. Write FORTRAN equivalent for the following given expression:
(i) $\frac{mr^3}{3.5} + \frac{ds}{4t}$ (ii) $\frac{1}{\sqrt{2\pi\alpha}} e^{-\sqrt{\sigma(x - \mu)^2}}$
2. If $X = 1.0, Y = 2.0, Z = 3.0, I = 4$ then evaluate the following:
I. $X+Y+Z$
II. $X**2+I$
III. $I**3$
IV. $X/Y + Z/I$
V. $X***I + X/Y$
3. Explain Real variable name with illustrations.

Q.4 Answer the following (Any two).

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1. Explain Mix mode of arithmetic statement with illustration.
2. What is the final value of A in the following?
 $A = 10.0$
 $b = 18.0$
 $I = A$
 $J = B$
 $A = I+J/I+I *J$
 $B = A/I + I /J+J$
3. Evaluate:
(i) $ISUM = 6/2+3*(2 ** 3) ** 25 - 50 * 10$
(ii) $KSUM = 15/2 + 3 ** (2 * 5) - 14 * 40/10$

Q.5 Answer the following (Any two).

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1. Mango's cost per dozen is given. It is required to prepare a bill for customer in Rupees and Paisa. Write a program to prepare it.
2. Write a program to find sum of series
$$sum = 1 + x + \frac{x^3}{2} + \frac{x^3}{3} + \frac{x^4}{4} + \frac{x^5}{5}.$$
3. Explain Input statement with illustration.
