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Unit 1 - UNIT - I : Transcendental Polynomial & Simultaneous equations and Interpolations

Assessment -- 2

The due date for submitting this assignment has passed.

Due on 2023-04-13, 23:59 IST.

As per our records you have not submitted this assignment.

1) The operator E is *1 point*

- Forward difference operator
- Backward difference operator
- Shifting operator
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
Shifting operator

2) When f(x)=k then Δf(x) =_____ *1 point*

- f(x + k) – f(x)
- f(k)- f(0)
- 0
- 1

No, the answer is incorrect.
Score: 0
Accepted Answers:
0

3) The formula for Ef(x) is *1 point*

- f(x-h)-f(x+h)
- f(x)-f(x-h)
- f(x+h)
- f(x+h)f(x)

No, the answer is incorrect.
Score: 0
Accepted Answers:
f(x+h)

4) Which of the following is an unit operator *1 point*

- 1
- Ñ
- μ
- E

No, the answer is incorrect.
Score: 0
Accepted Answers:
1

5) Find the seventh term of the sequence 2, 9, 28, 65, 126, 217 *1 point*

- 344
- 434
- 443
- 444

No, the answer is incorrect.
Score: 0
Accepted Answers:
344

6) Find the first term of the series whose second and subsequent terms are 8, 3, 0, -1, 0, ... *1 point*

- 15
- 10
- 8
- 11

No, the answer is incorrect.
Score: 0
Accepted Answers:
15

7) Find y(-1) if y(0) = 2, y(1) = 9, y(2) = 28, y(3) = 65, y(4) = 126 and y(5) = 217. ***1 point***

- 1
- -1
- 0
- -3

No, the answer is incorrect.
Score: 0
Accepted Answers:
1

8) Solve by Gauss-Seidel method: 30x -- 2y + 3z = 75; x + 17y -- 2z = 48; x + y + 9z = 15 ***1 point***

- x = 2.58; y = 2.798; z = 1.069
- x = 2.5; y = 2.824; z = 1.667
- x = 2.05; y = 2.84; z = 1.7
- x = 2.55; y = 2.84; z = 1.72

No, the answer is incorrect.
Score: 0
Accepted Answers:
x = 2.58; y = 2.798; z = 1.069

9) If the system of equations are 5x-y+z=10,2x+4y+z=12 and x+y+5z=1, then the first iteration values by Gauss-Seidel method are ***1 point***

- 2,1,1
- 3,2,1
- 2,2,-1
- 2,2,-0.6

No, the answer is incorrect.
Score: 0
Accepted Answers:
2,2,-0.6

10) Comment on the statement: Gauss-Seidel method always converges ***1 point***

- True
- False
- no idea
- none of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

11) Convergence in Gauss-seidel is rapid when compared with convergence in Gauss-Jacobi method ***1 point***

- False
- Depends on the problem
- True
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
True

12) Gauss Jacobi method is used to solve ***1 point***

- Differential equations
- Algebraic equations
- system of simultaneous equations
- none of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
system of simultaneous equations

13) Gauss Jacobi's method is known as ***1 point***

- Simultaneous displacement method
- Displacement method

- Simultaneous method
- Displacement method

No, the answer is incorrect.
Score: 0

Accepted Answers:
Simultaneous displacement method

14) Gauss Seidel method is used to solve **1 point**

- system of simultaneous equations
- algebraic quations
- Differential equations
- none of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
system of simultaneous equations

15) Gauss-Jacobi method is successful if _____ **1 point**

- Large coefficients are not along the leading diagonal of the coefficient matrix
- no condition on large coefficients of the coefficient matrix
- Large coefficients are along the leading diagonal of the coefficient matrix
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Large coefficients are along the leading diagonal of the coefficient matrix