



SOLUTION OF WORKSHEET-6

SUBJECT – STATISTICS

Term : 1st

Topic – INTERPOLATION

(a)750

Full Marks: 15

Class: XI

Date:22.06.2020

- Select the correct alternative of the following questions. Q1.
 - $f(2) = 9, f(4) = 63, f(6) = 221, f(8) = 506, then \Delta^3 f(2) =$ (i)
 - (d) none of these (a)53 (b) 55 c) 57

(c) 760

- $u_0 = 5, u_1 = 12, u_2 = 81, u_3 = 200, u_4 = 100, u_5 = 8, then u_0^5 =$ (ii) (d) none of these
- (iii) Arguments are variables which have differences (b) different (c) only linear (d) none of these (a) Same
- (iv) Entries are variables which have differences

(b) 755

- (c) only linear (d) none of these (a)Same (b) different
- h denotes the difference which is (v) (a)monotonic (b) random (c) constant (d) none of these
- The arguments are in order (vi) (a) Random (b) monotonic (c) stable (d) none of these
- If the second order difference is zero, then $\Delta f(x)are$ (vii) (a) increasing (b) decreasing (c) costant (d) none of these

(viii)	If all the	entries have same	value, then	the polynomial is of degree
	(a) -1	(b) 0	(c) 1	(d) none of these

- (ix) If all the entries have same 2^{nd} order differences as same value, then the polynomial is of degree (a) 1 (b) 1 (c) 2 (d) none of these
- (x) If the arguments are first n even natural numbers (starting from 2), then $x_0 + h =$ (a) 4 (b) 6 (c) 8 (d) none of these
- (xi) The values of x and y are mathematically(a) related (b) not related (c) independent(d) none of these
- (xii) In interpolation there can be only one way to find entry(a) true (b) false (c) sometimes (d) none of these
- (xiii) Given n arguments and entries the polynomial is of degree (a) n (b) n+1 (c) n-1 (d) none of these
- (xiv) The entries have differences different in columns of difference table(a) always (b)sometimes (c) both (d) none of these
- (xv) If the entries are linear in nature, then the second order difference is
 (a) -1
 (b) 1
 (c) 0
 (d) none of these

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