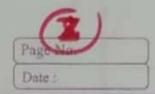
ULTIMATE MATHEMATICS (1) Solution T-5 & T-6 Date: (sduhens) 2 + Lhs Cos2 A + Cos2 (A+2) + cos2 (A-23) = (032A + (032 (A+120) + (032 (A-120) [+ (0)(2A) + (1+ cos (2A + 240)) + [1+ cos (2A - 240) 1 (3+ cos(2A) + cos(2A+240) + cos(2A-240) \$ (3 + cos(2A) + 2 cos (2A) - cos (240) -- -- GCOIA +COIB = 2(0) (ATB) COI (A-B) 1 3+ cos(2A) + 2cos(2A) cos(180+60) 2/3+ (os(2A) + 2 cos(JA) (-cos(60)) [3+ (OS(2A) + ZCOS(2A) x(-1) (3+(cs(xA) - cs(zA) = 3 AM J2+ J2+ 2(05/80) 2+ 12+ 12(1+ (05(80))

Solution T-5 & T-6 Page



$$= \sqrt{24} \sqrt{24} \sqrt{2} \times 2 \cos(40)$$

$$= \sqrt{2} + \sqrt{2} \times 2 \cos(40)$$

$$= \sqrt{2} + \sqrt{2} \times 2 \cos(40)$$

$$= \sqrt{2} + \sqrt{2} \times 2 \cos(20)$$

$$= \sqrt{2} + 2 \cos(20)$$

$$= \sqrt{2} \times 2 \cos^{2}(0)$$

$$=$$

Solution T-5 & T-6

Page He.

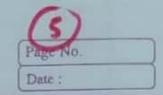
$$= \frac{(\alpha(2x2x))}{-1-2\sin^2(2x)} - \cdots - \frac{1}{2}(\alpha(20) = 1-2\sin^2(0)$$

Schukan T-5 & 7-6

Page No.

a can = ± s → CdY = J 1 x y y/4 Euodeanty we know that 1-can= 25, n2/ 2) 1+cdx = 2cd (2) 1-5 = 25m2(2) 1+ 1 = 2(a2(2) 2-53 = 2512(2) 2+13 = 2(a2(x) car(x) = 2+13 Sin2(2) = 2-5 Ca(7) = ± 52+53 Sin(2) = + / 2-13 1/2 - 2 Juid COS(3/2) = - J2+5 Sin(2)= \ 2-5 fen(M2) - Sin(x/2) Rahandley = = (2-55) - (2-V)

Solution T-5 & T-6



13 + Do youself 144 1/1) Sin(54) - 2 sin(34) + Sinx (05(54) - (05x = [SIN(SX) + SINX] - 251n(3x) (05(54) - can - 25m (3n) .col (2n) - 25m (3n) - 25in (37) Gn(27) = \$Sin(37) (ca(24)-1) - 25m (3m) 5m (27) = cos(2x) --577(2n) $= + \left(1 - \cos(2x)\right)$ 7514(24) = Asinyx - for x Ans 1+ Lns fon A + ton (60+A) - ton (60°-A)

= fan A + fan (60) + fan A - tan (60) - tan A 1 - fan (60) fan A 1+ fan (60) fan A

Solution T.5 & 7-8 + B + tonA JJ - for A 1+B+mA 1-13 ton A (13+tma)(1+13tma) - (55-tma) (1-13tma) 1-3 ton2 A

= tenA + SSA 3tenA + tenA + 15 telA - 58+ 3 tenA + to

- tens + 8tens 1-3/m2A

tenA - 3 ten3 A + 8 tonA 1-3 ton2 A

= 9 ton A - 3 ton 3 A 1-3 ten 2 A

= 3 (3 tanA - fon3A)

3 ton (3A) Any

(+ LM 5m (4A) = 5in (2x2A)

- 25 m(2A) cos(2A) - - - Sin (20) = 25 m Ocal of

= 2 (23InACOA) [TCOSA - SINTA]

= 2 (& SINACOPA - asini ACOLA)

= 45nAca3A - 453ACOA ANS