47_ YASH SARANG



Assignment 4: Beam Reactions
나 마셨다는 이게 그 사이트를 하면 하다면 하다면 하다는 하다는 사람들은 사람들이 없을 때에 다른 사람들이 하다면 하지만 어떻게 하지만 하게 되었다면 하지만 되었다면 하지만 되었다.
A realther box 4m long is placed at in a horizontal position
on the small ending on shown Find a at which the
A weightless box 4m long is placed at in a horizontal position on the smooth incline as shown. Find is at which the soon force should be placed from point B to keep the box horizontal.
1911 SALVAS SE PRINCE
400N 100N Resin45"
Im I show the
A-justed /
Rishly 18 250° 45×B
Re Re
System is in aquitibrium, : \(\sum_F = 0. (-> tve)\)
Races 60 - Races 45 = 0
Also
ΣF4=0 (1+4e)
· Rasin60 + Rasin45 - 400-200 = 0_ 0
from @ and @,
L_{res} get $R_{\text{A}} = 439.2N$
$R_{\rm B} = 310.58N$
ΣM ^c _a = 0
- Rasin60 x4 + 400x3 + 200 x = 0.
$\int : \gamma = 1.607 \text{m}$



- 3)	Find the reactions of the supports of the beam AB located as shown
	24×1/m
	<u> </u>
	and skeller
	10LNm Bovies
	A DELLINE B
	34W Sam
	Gm 9m
	FBD: IX6XXXIII
	4×MN
	35.65
	12 Harry Batte
	Sustice V8
	System is in equilibrium, is EME =0 () tre)
	J. S.
	(8x2) + (36645x4) + (6x13) - Rex15 = 0.
	[RA = 7.5 KN (1)
	Also, $\sum F_{x} = 0 (\rightarrow tve)$ $-3 \sin 45^{\circ} - H_{x} = 0.$
	$\Sigma F_{x} = 0 (\rightarrow tve)$
	$H_{8} = -31. = 2.12kN ()$
	• • Ha= 2.12kN(←)
	Also,
	\(\sum_{\text{Fy}} = 0 (1 tre) \text{ \ Va - 36845 - 8 - 6 + Ra = 0.}
	(: V ₈ = 8.622 kN (1)

Name of Street, or other Designation of the Street, or other Desig	47_YASH SARANG
3)	Assignment 4: Find support ventions at A and B for the beam.
	20kn/m 80kn 80kn
•	FBD. 20x6 3x 3x 5x60x6 FBD. 20x6 5x60x6 14A A
200 13	System is in equilibrium,
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

- 7	Figure shows beam AB hinged at A and roller supported at B The I shaped partion DEF is an extended part of beam AB. For the loading shown, find support reaction.
1650	The shaped portion DEF is an extended port of
	beam AB. for the bading shown, find support macrion.
	FBD:
	20005/10°
	E 2m 46 1
	2014N 2514N F 3036,40°
	Ha _ О
	A D A B
	V _A
	2m " 2m " 2m 4m
	Since system is in quilibrium, EME = 0 (U +ve)
	- 20x2 - 25x4 - 30sin40x8 + 30cos40x1.5 + Rox10=0
	1: Ke = 25.98 KN (1)
	also,
	$\Sigma E = 0 (\rightarrow t \kappa)$
AL SHARE	2 Fg - U (NC)
	Ha -30 cos 40 i =0.
	Ha -30 cos40° =0. (.*, Ha = 22.98 kN (→))
	$H_{a} = 30 \cos 40^{\circ} = 0$. (, $H_{a} = 22.98 \text{kN} (-)$) and also,
	$H_{a} = 30 \cos 40^{\circ} = 0$. L° , $H_{a} = 22.98 kN (->)$ and also, $EF_{4} = 0$ (* 1 tre)
	$H_{A} = 30 \cos 40^{\circ} = 0$. L° , $H_{A} = 22.98 \text{kN} (-)$ and also, $\Sigma F_{V} = 0 (\uparrow \uparrow \downarrow \uparrow $
	$H_{a} = 30 \cos 40^{\circ} = 0$. L° , $H_{a} = 22.98 kN (->)$ and also, $EF_{4} = 0$ (* 1 tre)
	$H_A = 30 \cos 40^{\circ} = 0$. $C: H_A = 22.98 km (-)$ and also, $EF_V = 0$ (* 1 tre) $V_A = 20 - 25 - 30 \sin 40 + R_B = 0$.
	$H_A = 30 \cos 40^{\circ} = 0$. $C: H_A = 22.98 kN (-)$ and also, $EF_V = 0$ ('A tre) $V: -20 - 25 - 30 \sin 40 + R_0 = 0$. $V: V_A = 38.3 kN (1)$
	$H_{A} = 30 \cos 40^{\circ} = 0$. $C: H_{A} = 22.98 km (\rightarrow)$ and also, $EF_{V} = 0$ ($\uparrow + tve$) $V: -20 - 25 - 30 \sin 40 + Re = 0$. $C: V_{A} = 38.3 km (\uparrow)$
	$H_{A} = 30 \cos 40^{\circ} = 0$. $C: H_{A} = 22.98 km (\rightarrow)$ and also, $EF_{V} = 0$ ($\uparrow + tve$) $V: -20 - 25 - 30 \sin 40 + Re = 0$. $C: V_{A} = 38.3 km (\uparrow)$