

# WANDOOR GANITHAM - S S L C UNIT TEST 2021

**8.02AE**

## SOLIDS – ANSWER KEY

Qn no.	Key	Score	
<b>1</b>	a) $\sqrt{6^2+8^2}=10\text{ cm}$	1	2
	b) $\pi \times 6^2 + \pi \times 6 \times 10 = 96\pi\text{ cm}^2$	1	
<b>2</b>	a) $\sqrt{15^2-9^2}=12\text{ cm}$	1	2
	b) $\frac{1}{3} \times \pi \times 9^2 \times 12 = 324\pi\text{ cm}^3$	1	
<b>3</b>	a) $r^2+h^2=l^2$	1	2
	b) 20 cm	1	
<b>4</b>	a) 12 cm	1	3
	b) $\frac{90}{360} \times 12 = 3\text{ cm}$	1	
	c) $\pi \times 3 \times 12 = 36\pi\text{ cm}^2$	1	
<b>5</b>	a) 4r	1	3
	b) 45:96 = 15:32	1	
	c) $\frac{180\pi \times 32}{15} = 384\pi\text{ cm}^3$	1	
<b>6</b>	a) $\pi \times 18^2 \times 24 = 7776\pi\text{ cm}^3$	1	4
	b) $\frac{1}{3} \times \pi \times 6^2 \times 8 = 96\pi\text{ cm}^3$	1	
	c) $\frac{7776\pi}{96\pi} = 81$ <b>or</b> $\frac{\pi \times 18^2 \times 24}{\frac{1}{3} \times \pi \times 6^2 \times 8} = 81$	1	
	d) $\frac{7776\pi}{24\pi} = 324$ <b>or</b> $\frac{\pi \times 18^2 \times 24}{\frac{1}{3} \times \pi \times 3^2 \times 8} = 324$	1	

7	a) $\sqrt{64}=8\text{ cm}$	1	4
	b) $\sqrt{8^2+15^2}=17\text{ cm}$	1	
	c) $\pi\times 8^2+\pi\times 8\times 17=200\pi\text{ cm}^2$	1	
	d) $\frac{200\times 3.14}{10000}\times 10000\times 5=\text{Rs } 3140$	1	

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