<u>CHAPTER – 10. SPACE MISSIONS</u>

Jul. '24

0 411					
1.	Give Scientific Reasons		[2]		
	It is a	It is necessary to manage the space debris.			
2.	Give	the names of the following satellite series developed by India:	[3]		
	(a)	Satellite series actively working in the field of telecommunication, television and meteorologi services.	cal		
	(b)	Satellite series specially working in the field of education.			
	(c)	Satellite series to exactly locate position of any place on earth's surface.			
Mar.	'24				
1.	Wha	t is meant by satellite launch vehicle? Name any one Indian satellite launch vehicle.	[2]		
2.	The orbit of a satellite is exactly 35780 km above the earth's surface and its tangential velocity is 3.08				
	km/s	. How much time the satellite will take to complete one revolution around the earth? (Radius of	the		
	earth	a = 6400 km	[3]		
Jul. '	23				
1.	Wha	t is meant by artificial satellite? Name the first satellite launched by Russia.	[2]		
2.	Wha	t is the contribution of India in space technology?	[3]		
Mar.	'23				
1.	Choo	ose the correct alternative and write the correct option alphabet.	[1]		
	The	height of medium earth orbit above the surface of the earth is			
	(A)	1,500 km			

- (B) 250 km
- (C) 45,000 km
- (D) 25,000 km
- Write the name of small satellite made by a group of students from COEP (College of Engineering, Pune) sent to the space through ISRO in 2016. [1]
- 3. Complete the following table.

	Туре	The names of Indian Satellite and Launcher
1.	Navigational Satellite	Satellite : launcher :
2.	Earth Observation Satellite	Satellite : launcher :

Jul. '22:

1. Choose the correct alternative and write the correct option alphabet.

[1]

[2]

The formula for escape velocity is

(A)
$$\sqrt{\frac{2m}{R}}$$

(B) $\sqrt{\frac{2GM}{R}}$

(C)
$$\sqrt{\frac{\mathrm{GM}}{\mathrm{R}^2}}$$

	(D) $\sqrt{\frac{GMm}{R^2}}$		
2.	What is the height of Low Earth Orbit Satellite above the Earth's surfa	ce? [1]	
3.	Give one function of each of the following satellites:	[2]	
	(a) Communication satellite		
	(b) Earth observation satellite		
Mar	r. '22:		
1.	Choose the correct alternative and write the correct option alphabet.	[1]	
	The functioning of the satellite launch vehicle is based on		
	(A) Newton's first law of motion		
	(B) Newton's second law of motion		
	(C) Newton's third law of motion		
	(D) Newton's universal law of gravitation		
2.	Find the odd one out: INSAT, GSAT, IRS, PSLV	[1]	
3.	State the importance of Space Mission.	[3]	
Jul.	. '21:		
1.	Choose the correct alternative and write the correct option alphabet.		
	is a satellite vehicle.	[1]	
	(A) PSLV		
	(B) GSAT		
	(C) IRNSS		
	(D) INSAT		
2.	What is meant by space debris?	[1]	
*3.	Complete the following table.	[3]	
	IRNSS		
	Weather study and		

Mar. '21 No Exam

Jul. '20

1.	Choose the correct alternative and write the correct option alphabet.	[1]
	The minimum velocity of the spacecraft to escape from earth's gravitational force must be	·

Earth's observation

- (A) 112 km/s
- (B) 11.2 km/s
- (C) 1.12 km/s
- (D) 0.112 km/s

2.	Which satellite is used in educational field among INSAT and GSAT series?			
3.	Answer the following questions.			
	(a) What is the principle behind the working of satellite launch vehicle?			
	b) Write the formula for the escape velocity.			
	(c) Write the long form of 'ISRO'.			
Mar.	r. '20			
1.	Choose the correct alternative and write the correct option alphabet.	[1]		
	The astronomical object closest to us is is our galaxy.			
	(A) Mars			
	(B) Venus			
	(C) Jupiter			
	(D) Moon			
2.	Name the first artificial satellite sent by Russia in space.			
3.	What is an artificial satellite? Name any two types of artificial satellite and state their functions.			
		[3]		
Jul. '	'19			
1.	Fill in the blank and rewrite the sentence.			
	The initial velocity (during launching) of the Mangal-Yaan must be greater than of the ear	rth. [1]		
2.	What is a geostationary satellite? Why are geostationary satellites not useful for studies of polar re-	egion?[2]		
3.	If mass of a planet is eight times the mass of the earth and its radius is twice the radius of the earth, what			
	will be the ratio of escape velocity of earth to the escape velocity on the planet?	[2]		
Mar.	r. '19			
1.	By considering first correlation complete the second correlation.			

 By considering first correlation complete the second correlation. Hubble telescope: 569 km high from earth surface:: Revolving orbit of Hubble telescope: [1]
What is meant by space debris? Why there is need to manage the debris? [3]