Name: Enrolment No:



## **UNIVERSITY OF PETROLEUM & ENERGY STUDIES**

**End Semester Examination – May 2021** 

Program: open elective Subject/Course: Competitive intelligence

Course Code: GMST2201

Semester: 4th

Max. Marks: 100

**Duration: 3 Hours** 

## SECTION A

1. Each question carries 5 marks

Q.No		Marks	COs	
	Section A			
1	What is Industry Espionage	5	1	
2	True or False  1) Industry Espionage is ethically a right approach 2) PESTEL analysis is used to understand the internal strength of the	5	1	
	company 3) Google acquired Yahoo in 2016 4) CI is not essential for an IT Organization 5) Sunder Pitchai is the CEO of Nokia			
3	Explain Linchpin Analysis	5	4	
4	Explain SCIP	5	4	
5	Explain why AI is changing the competitive intelligence methods in business	5	1,2	
6	Explain three axes of competition	5	1,2	
Section B				
	h question will carry 10 marks ruction: Write short/brief notes			
1	Explain the importance of data gathering and data analysis phase	10	3	
2	Explain how AI is changing the business around the world	10	2	
3	Why do managers needs intelligence in today's environment. Explain with Examples.	10	2	

Explain how AI can be adapted in an organization to boost the Competitive intelligence unit	10	2			
		i I			
Explain malzingary 7C framaryarly		2			
Explain mckinsey 7S framework	10	2			
		3			
Section C					
1) Short Case Study					
Satellite broadband the future business					
It is super-fast and does not need wires or towers to connect to the world wide web. Satellite broadband promises to be the next big thing and a slew of big names are ready to roll it out as early as next year, reports ET's Kalyan Parbat.		3			
Imagine sitting in a remote mountain village north of the Rohtang Pass in Himachal Pradesh and chatting with colleagues in Delhi or Bengaluru over an uninterrupted video call. Or, watching a Clint Eastwood western on a laptop in the Andamans – without using a cellular network or wired broadband.					
This may soon turn into a reality once satellite broadband connections are rolled out across India, likely as early as next year.	20				
Some of the biggest global names – including OneWeb, SpaceX and Hughes - are betting big on the opportunity to deliver satellite-based fast internet services - anywhere, anytime.		2			
OneWeb, co-owned by Bharti Global and the UK government, is launching high-speed satellite internet services in the country by mid-2022.					
Tech billionaire Elon Musk's SpaceX Technologies is looking to do the same next year with a maze of satellites.					
Hughes Communications India, the local arm of US satellite maker Hughes Network Systems, is also ready to invest in a \$500 million satellite and pump in \$300 million more on ground-level gear to deliver such connectivity.					
There is growing buzz around satellite broadband and the far-reaching implications of the internet-from-space race.					
	Satellite broadband the future business  It is super-fast and does not need wires or towers to connect to the world wide web. Satellite broadband promises to be the next big thing and a slew of big names are ready to roll it out as early as next year, reports ET's Kalyan Parbat.  Imagine sitting in a remote mountain village north of the Rohtang Pass in Himachal Pradesh and chatting with colleagues in Delhi or Bengaluru over an uninterrupted video call. Or, watching a Clint Eastwood western on a laptop in the Andamans – without using a cellular network or wired broadband.  This may soon turn into a reality once satellite broadband connections are rolled out across India, likely as early as next year.  Some of the biggest global names – including OneWeb, SpaceX and Hughes - are betting big on the opportunity to deliver satellite-based fast internet services - anywhere, anytime.  OneWeb, co-owned by Bharti Global and the UK government, is launching high-speed satellite internet services in the country by mid-2022.  Tech billionaire Elon Musk's SpaceX Technologies is looking to do the same next year with a maze of satellites.  Hughes Communications India, the local arm of US satellite maker Hughes Network Systems, is also ready to invest in a \$500 million satellite and pump in \$300 million more on ground-level gear to deliver such connectivity.  There is growing buzz around satellite broadband and the far-reaching	Satellite broadband the future business  It is super-fast and does not need wires or towers to connect to the world wide web. Satellite broadband promises to be the next big thing and a slew of big names are ready to roll it out as early as next year, reports ET's Kalyan Parbat.  Imagine sitting in a remote mountain village north of the Rohtang Pass in Himachal Pradesh and chatting with colleagues in Delhi or Bengaluru over an uninterrupted video call. Or, watching a Clint Eastwood western on a laptop in the Andamans – without using a cellular network or wired broadband.  This may soon turn into a reality once satellite broadband connections are rolled out across India, likely as early as next year.  Some of the biggest global names – including OneWeb, SpaceX and Hughes - are betting big on the opportunity to deliver satellite-based fast internet services - anywhere, anytime.  OneWeb, co-owned by Bharti Global and the UK government, is launching high-speed satellite internet services in the country by mid-2022.  Tech billionaire Elon Musk's SpaceX Technologies is looking to do the same next year with a maze of satellites.  Hughes Communications India, the local arm of US satellite maker Hughes Network Systems, is also ready to invest in a \$500 million satellite and pump in \$300 million more on ground-level gear to deliver such connectivity.  There is growing buzz around satellite broadband and the far-reaching			

"The future is probably shifting now. If you extrapolate this 10 years from now, will there be ground networks at all? Who knows?" Bharti Enterprises chairman Sunil Mittal told ET in a recent interaction. "Every month you will see a launch; we need to send 650 satellites; they will go up by April 2022. Then, we'll be up and running. This will be nothing but telecom in space."

OneWeb is in constant touch with the Indian Space Research Organisation (Isro) and regulators to ensure all approvals for market access and landing rights are in place before it goes live in India, Mittal's UK-based son Shravin, the managing director of Bharti Global and the one responsible for driving the group's satellite business, told ET separately.

SpaceX is already offering a beta version of its Starlink satellite internet service on pre-orders.

This comes with a refundable deposit of \$99 (more than Rs 7,000) in India.

The Starlink beta service has even been opened up for pre-orders to potential customers in remote trans-Himalayan zones such as the Keylong-Leh road in the high-altitude Lahaul valley.

Once operational, the beta version alone will pack data speeds of 50-150 Mbps, which will increase sharply once more satellites are put into orbit, according to Starlink's website.

So, why are these names keen to enter the satellite broadband business in a country with a 63% reach of 4G services and one of the lowest mobile data rates in the world?

While existing telecom networks have largely delivered broadband connectivity to consumers in urban and suburban areas, industry experts say the Covid-19 pandemic painfully revealed how millions in India's rural and remote corners still do not have access to fast internet or reliable mobile connections.

"SpaceX's Starlink high-capacity, high-speed, low-latency satellite network would advance the goal of delivering broadband connectivity to all Indians, particularly those without access now or in the near-term to broadband services, traditionally available only to customers in urban and suburban areas," said Patricia Cooper, VP (satellite government affairs) of SpaceX, responding to the Telecom Regulatory Authority of India's paper on broadband speeds.

Nearly 75% of India's rural population do not have access to broadband since many locations go without cellular or fibre connectivity, according to the estimates of the Broadband India Forum (BIF), which represents OneWeb, Hughes, Amazon, Google, Facebook, Microsoft and Qualcomm.

Hence, powerful next-generation satellite systems are being touted as a viable alternative to connect the unconnected.

One reason why the likes of OneWeb and SpaceX are "attracted to the new stirrings in India's satellite broadband space is that satellite networks can be rolled out and scaled up a lot faster and more cost-effectively than terrestrial mobile/broadband networks, especially to connect a sizable chunk of the population living in remote and inhospitable regions," says Mahesh Uppal, a telecom analyst and director of Com First (India).

Satellite internet players also do not have to worry about securing rightof-way clearances which typically slow down terrestrial broadband network rollouts.

Last year, finance minister Nirmala Sitharaman said the government would create a level-playing field for private satellite builders, satellite launchers and space-based service providers under its new space communication policy, which would ring in a predictable regulatory regime.

Once the 'Open Space' policy is fully operational, satellite broadband services can be a \$500 million-plus near-term market opportunity, the Satcom Industry Association (SIA-India) says.

At present, satellite broadband services in India are a primarily B2B play with a market size of roughly \$100 million.

Satellite broadband is a key connectivity solution – for banks with numerous branches in remote areas where mobile coverage and wired internet are unreliable or even small and medium enterprises operating in far-flung regions.

The biggest potential money spinner - in a B2B scenario - is to use satellites to boost mobile broadband coverage in rural areas where there is not enough mobile towers or terrestrial backhaul links via fibre networks, industry executives point out.

"We believe satellite broadband can provide the vital 'backhaul' or connectivity between mobile towers and a telco's core mobile network in rural areas to ensure uninterrupted mobile coverage in such regions," K Krishna, vice president and CTO at Hughes Communications India, told ET.

The revenue opportunity is significant.

Each remote tower would need at least 20 Mbps to deliver cellular backhaul via satellite.

Since every Mbps of satellite connectivity can garner an average revenue per user (ARPU) of Rs 16,000-Rs 20,000 a month, the potential monthly ARPU for a satcom operator providing such connectivity in a remote area can be as much as Rs 3.2-Rs 4 lakh per month.

 Explain the impact of satellite communication on telecom business in India. Do you believe the technology has potential for Indian Consumer

**ANSWERS**