Name: **Enrolment No:**	UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, 2019

Course: Oil and Gas Economics **Semester: II**
Programme: MA Energy Economics **Code: OGOG 7006**
Time: 03 hrs. **Max. Marks: 100**
Instructions: Please attempt all sections and questions
Instructions:

SECTION A

S. No.		Marks	CO
Q 1	Statement of question:	**20**	
	Please state true or false		
a.	The large population of India relates to a stricter economic regulation		**CO1**
b.	India ranks amongst the highest in economics growth rate but low in absolute terms .		**CO2**
c.	The main advantage of Natural Gas over crude oil is Eco-Friendliness and availability.		**CO2**
d	The Sedimentary basin in India number 26, covering 314 million Sq. km, with 44% offshore and 56 % onshore.		**CO3**
e	Actual Crude oil production in India is 38 MMTPA-which is very low considering the large size of the Indian continent.		**CO4**
f	MMBTU is a unit of heat in terms of Natural Gas measurement.		**CO3**
g	NELP stands for New Exploration Licensing Policy. The Objective is to benefit both public and private company participation.		**CO2**
h	ONGC is an Oil exploration and Production NOC of India.		**CO3**
i	RIL is an Indian Private Company . The largest Refinery in the World is at Jamnagar with a Capacity of 66 MMTPA.		**CO4**
j	CBM stands for Coal Bed Methane with Natural Gas recovered from Coal Sieves.		**CO1**

SECTION B			
Q 2	Statement of question	**20**	**CO**
	Please answer in brief.		
1	Explain how is Natural Gas different from LPG. Give your opinion on the comparative benefit of usage. Explain the LNG chain in detail with a neat diagram.		**CO3**
2	Name the process of conversion of crude oil to finished products. Explain the biogenic theory of formation of crude oil. Name a few Petroleum Products of 5 types and highlight their application		**CO3**
3	The high proportion of Crude oil imports is due to…….Name 5 reasons. Explain why maintaining good relations globally is important .		**CO2**
4	What was the main objective behind bringing about APM? . What is your opinion on the recent decontrol of Crude Oil prices. How would the participation of the private companies affect the oil economy in India?		**CO3**
5	Explain briefly the objective of NELP and DGH? Please give the objectives and the functions of the above.		**CO2**
SECTION-C			
Q 3	Statement of question	**30**	**CO**
	Please answer the following questions in brief.		
1	How is foreign exchange earning important to the developing country like in India. 'Crude oil conservation would mean foreign exchange earning". Please explain the importance of foreign exchange saving in this context.		**CO2**
2	Why is Energy conservation important in India. How would you relate to the statement that 'High Energy Consumption is an Indication of High Economic Development of any Country".		**CO3**
3	What is LNG? Explain briefly the LNG chain, with a neat diagram. Explain the cost implications of liquefying LNG gas.		**CO2**
SECTION-D			
Q4	Statement of question	**30**	**CO**

	Please read the case and answer the questions:		
	India's search for energy resources starts at home. The major areas of oil and gas production are the Bombay High and Northeast region and recent discoveries in Rajasthan and the Bay of Bengal point to substantial additional reserves. India certainly has great potential, with 5.6 billion barrels of proven reserves and an estimated 80 percent of territory unexplored for oil and gas. After years of neglect and an investment framework that did not foster international (and arguably, Indian) interest in upstream investment, the last decade has seen some reforms and increased interest in India's hydrocarbons potential. This said it is unlikely that India's domestic resources, however well exploited, will be enough to tackle the country's ever-growing needs. The result has been a mounting of India's international involvement in search of energy imports. When it comes to securing energy supplies, the world's leading importers have long recognized that the diversification of energy sources is a pivotal element, and accordingly they seek to build a rapport with energy producers worldwide. There are also obvious advantages to having a close relationship with energy producers nearer to home, including lower transport costs and the fostering of interdependence between neighboring economies .The picture provides us with a mix of opportunities and pitfalls. Three fourths of India's oil imports come from the Middle East (and 23 percent from Saudi Arabia alone) which, at 60 percent of total proven reserves, is also the world's largest concentration of hydro- carbon deposits. The domination of the Middle East in international energy markets is mostly accepted as a fact of life in India and elsewhere, and India's relationship with oil producers in the region has been affable for the past decades. However it received no special reatment during difficult moments such as the 1973-74 oil disruptions, a harbinger of difficulties to come. Now that India's rise as an economic power is taken for granted by many in the Middle East, price deals are less and less likely (in fact Asian importers have paidan "Asian premium" to Middle Eastern exporters for most of the past decades).Recent attempts by India to extract price concessions from Middle East producers were rebuffed with the argument that one of the world's leading importers of oil can no longer claim special status with producers. This increase in Indian absolute needs, together with the geopolitical risks posed by excessive dependence on the region and its fragile sea lanes (problems include potential bottlenecks in the Hormuz Straits and increased piracy in the Redand Arabian Seas) are pushing Indian policymakers to rethink their relative dependency on the Middle East and look elsewhere, and closer to home.		

	Greater South Asia does contain much of the energy resources needed to power India's growth. But for a host of reasons, the region has one of the least integrated economies in the world. The obvious synergies between energy-rich and energy-dependent societies have not yet been realized but India's pressing energy demand has brought these concerns to the forefront of regional politics. Several initiatives have been mooted. Perhaps the most talked about is a longstanding idea, of a 2600-km Iran-Pakistan-India pipeline Q1. Explain the dependence of India on the middle eastern countries for its energy supplies as given in the text……(10) Q2. Explain the turn of the events that has made India realize that it is imperative to look for other supply sources and give YOUR opinion about this will affect the geopolitical scenario globally……(10)		**CO3** **CO3**

Name: **Enrolment No:**	UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: Oil and Gas Economics **Semester: II**
Programme: MA Energy Economics **Code: OGOG 7006**
Time: 03 hrs. **Max. Marks: 100**
Instructions: Please attempt all sections and questions

SECTION A

S. No.		Marks	CO
Q 1	Statement of question:	**20**	
	Please state true or false		
a.	The large population of India relates negatively primarily to the Energy Resource availability problems.		**CO1**
b.	India ranks amongst the highest in economics growth rate but low in absolute terms .		**CO2**
c.	The main advantage of Natural Gas over crude oil is Eco-Friendliness and availability.		**CO2**
d	The Sedimentary basin in India number 26, covering 314 million Sq. km, with 44% offshore and 56 % onshore.		**CO3**
e	Actual Crude oil production in India is 38 MMTPA-which is very low considering the large size of the Indian continent.		**CO4**
f	DGH acts is a regulatory body and acts between the government and companies and advises the government on the feedback received from the companies		**CO3**
g	NELP stands for New Exploration Licensing Policy. The Objective is to bring to a common platform the public and private sector for Competitive Bidding and level playing field in India.		**CO2**
h	ONGC is an Oil exploration and Production NOC of India.		**CO3**
i	RIL is an Indian Private Company . The largest Refinery in the World is at Jamnagar with a Capacity of 66 MMTPA.		**CO4**
j	CBM stands for Coal Bed Methane with Natural Gas recovered from Coal Sieves.		**CO1**

SECTION B

Q 2	Statement of question	**20**	**CO**
	Please answer in brief.		
1	"Shale Gas is also a form of Natural Gas with Canada being a global producer and exporter". Explain the above statement. What is the necessity and linkage between Shale Gas and Natural Gas.		**CO3**
2	Name the process of conversion of crude oil to finished products. Explain the biogenic theory of formation of crude oil. Name a few Petroleum Products of 5 types and highlight their application		**CO3**
3	The high proportion of Crude oil imports is due to…….Name 5 reasons. Explain why maintaining good relations globally is important .		**CO2**
4	What was the main objective behind bringing about APM? . What is your opinion on the recent decontrol of Crude Oil prices. How would the participation of the private companies affect the oil economy in India?		**CO3**
5	Explain briefly the objective of NELP and DGH? Please give the objectives and the functions of the above.		**CO2**
	SECTION-C		
Q 3	Statement of question	**30**	**CO**
	Please answer the following questions in brief.		
1	What is LNG? Explain briefly the LNG chain, with a neat diagram. Explain the cost implications of liquefying LNG gas.		**CO2**
2	Why is Energy conservation important in India. How would you relate to the statement that 'High Energy Consumption is an Indication of High Economic Development of any Country".		**CO3**
3	What is LNG? Explain briefly the LNG chain, with a neat diagram. Explain the cost implications of liquefying LNG gas.		**CO2**
	SECTION-D		
Q4	Statement of question	**30**	**CO**
	Please read the case and answer the questions:		

India's search for energy resources starts at home. The major areas of oil and gas production are the Bombay High and Northeast region and recent discoveries in Rajasthan and the Bay of Bengal point to substantial additional reserves. India certainly has great potential, with 5.6 billion barrels of proven reserves and an estimated 80 percent of territory unexplored for oil and gas.

After years of neglect and an investment framework that did not foster international (and arguably, Indian) interest in upstream investment, the last decade has seen some reforms and increased interest in India's hydrocarbons potential. This said it is unlikely that India's domestic resources, however well exploited, will be enough to tackle the country's ever-growing needs. The result has been a mounting of India's international involvement in search of energy imports. When it comes to securing energy supplies, the world's leading importers have long recognized that the diversification of energy sources is a pivotal element, and accordingly they seek to build a rapport with energy producers worldwide. There are also obvious advantages to having a close relationship with energy producers

nearer to home, including lower transport costs and the fostering of interdependence between neighboring economies .The picture provides us with a mix of opportunities and pitfalls.

Three fourths of India's oil imports come from the Middle East (and 23 percent from Saudi Arabia alone) which, at 60 percent of total proven reserves, is also the world's largest concentration of hydro- carbon deposits. The domination of the Middle East in international energy markets is mostly accepted as a fact of life in India and elsewhere, and India's relationship with oil producers in the region has been affable for the past decades. However it received no special reatment during difficult moments such as the 1973-74 oil disruptions, a harbinger of difficulties to come. Now that India's rise as an economic power is taken for granted by many in the Middle East, price deals are less and less likely (in fact Asian importers have paidan "Asian premium" to Middle Eastern exporters for most of the past decades).Recent attempts by India to extract price concessions from Middle East producers were rebuffed with the argument that one of the world's leading importers of oil can no longer claim special status with producers.

This increase in Indian absolute needs, together with the geopolitical risks posed by excessive dependence on the region and its fragile sea lanes (problems include potential bottlenecks in the Hormuz Straits and increased piracy in the Redand Arabian Seas) are pushing Indian policymakers to rethink their relative dependency on the Middle East and look elsewhere, and closer to home.

Greater South Asia does contain much of the energy resources needed to power India's growth. But for a host of reasons, the region has one of the least integrated economies in the

	world. The obvious synergies between energy-rich and energy-dependent societies have not yet been realized but India's pressing energy demand has brought these concerns to the forefront of regional politics. Several initiatives have been mooted. Perhaps the most talked about is a longstanding idea, of a 2600-km Iran-Pakistan-India pipeline Q1. Explain the dependence of India on the middle eastern countries for its energy supplies as given in the text……(10) Q2. Explain the turn of the events that has made India realize that it is imperative to look for other supply sources and give YOUR opinion about this will affect the geopolitical scenario globally……(10)		**CO3** **CO3**