## **Organic: Polymers**

1. Choose from the list of compounds given below. The most likely compound used as a starting compound for plastic is

Number	Compound				
1	CH <sub>4</sub>				
2	C <sub>2</sub> H <sub>4</sub>				
3	CO <sub>2</sub>				
4	$C_2H_2$				
5	CCI <sub>4</sub>				
6	C <sub>3</sub> H <sub>8</sub>				
7	нооссоон				

		Ö		C <sub>3</sub> ⊓ <sub>8</sub>							
			7	НООССООН							
		۵,	2		<b>L</b> .\	2					
		a)	2		p)						
		c)	5		d)	6					
2.		The	process used t	to ioin individual molecules	of an orga	nic com	oour	nd together to form a cl	hain of identical repeating units		
		The process used to join individual molecules of an organic compound together to form a chain of identical repeating units is called									
				<del></del> -							
		a) Fractional distillation				b)		Catalytic cracking			
		c)	Esterification			d)		Polymerization			
									1		
	3.	An organic compound most commonly used as a starting compound in the manufacture of products such as antifreeze,									
		tetraethyl lead, paints, drugs, and polyester is									
		a) methane			b)	ca	carbon tetrachloride				
		c) ethylene			d)	bι	butan- 1- ol				
			•								
4.		Diamonds are artificially made by subjecting powdered graphite to high temperatures and pressures to make a									
		tremendously large molecule composed only of carbon. This process is called a(n) reaction.									
			, ,			•		, , <u></u>			
		a) Hydrocarbon combustion			b)	Po	Polymerization				
		c)	Catalytic	cracking	d)	El	min	nation			
5.		The conversion of smaller hydrocarbon molecules into large molecules is known as									
		۵۱	Eliminatio	n n	b\	Da	مصداد	orization			
		a)	Elimination		b)		•	nerization 			
		c)	Substitut	ion	d)	De	ecor	mposition			
_		<b>.</b>									
6.			-		-		-	•	nd. His process increased the		
		leng	th of the synth	netic material. A description	of the pro	ocess is t	nat i	it involves	_		

- - a) Cracking long hydrocarbon chains into shorter usable chains.
  - b) Polymerization of long hydrocarbon chains into shorter usable chains.
  - Cracking short hydrocarbon chains into longer usable chains. c)
  - Polymerization of short hydrocarbon chains into longer usable chains. d)

## 7. Consider the diagram as follows:

[······CH<sub>2</sub>CHCI-CH<sub>2</sub>CHCI CH<sub>2</sub>CHCI ·······]

Which of the following monomers is required to produce the polymer in the structural diagram above?

- a) [CH<sub>2</sub>CICHCI]<sub>n</sub>
- b) [CH<sub>3</sub>CH<sub>2</sub>CI]<sub>n</sub>
- c) [CH<sub>2</sub>=CHCl]<sub>n</sub>
- d)  $[CH \equiv CCI]_n$

## **Solutions:**

- 1. A
- 2. D
- 3. C
- 4. B
- 5. B
- 6. D
- 7. C