

**S.Y.B.Sc. Semester IV April 2021**

**Physics Paper III**

**Sample Questions**

1	In 8085 $\mu$ P the address is from	
	(a)	0000H to 65536H
	(b)	0000H to FFFFH
	(c)	0000H to 00FFH
	(d)	1200H to 1000H

2	There are _____ general purpose registers in 8085 processor	
	(a)	5
	(b)	6
	(c)	7
	(d)	8

3	The transfer of the data between the microprocessor and memory or peripheral devices is done using	
	(a)	Accumulator
	(b)	Control bus
	(c)	Data bus
	(d)	Address bus

4	The Program Counter is used to	
	(a)	Perform arithmetic and logical operations
	(b)	Store data
	(c)	To point to in a special area called the stack.
	(d)	Control the sequencing of the execution of instructions.

5	The stack is usually accessed in a	
	(a)	Last in last out fashion
	(b)	Last in first out fashion
	(c)	First in first out fashion
	(d)	First in last out fashion

6	What is the formula for noise temperature	
	(a)	$T=300(F-1)$
	(b)	$T=300(F-2)$
	(c)	$T=300(F-3)$
	(d)	$T=300(F-4)$

7	The signals which are obtained by encoding each quantized signal into a digital word is called as_____.	
	(a)	PAM signal
	(b)	PWM signal
	(c)	PCM signal
	(d)	PPM signal

8	A 4 KHz telephone signal is modulated to a 60 KHz carrier. The length of antenna will reduce to a fraction _____.	
	(a)	1/5th
	(b)	1/10th
	(c)	1/15th
	(d)	1/20th

9	A frequency modulated wave is represented by $10 \cos (3.7704 \times 10^5 t + 7 \sin 1571 t)$ . Find the bandwidth?	
	(a)	3.7 KHz
	(b)	3 KHz
	(c)	3.5 KHz
	(d)	4 KHz

10	An RF amplifier has an input resistance of 10 KW and works in the frequency range 10 MHz to 16 MHz. Calculate the rms noise voltage at the input of this amplifier at 300 K temperature ?	
	(a)	20.16 $\mu$ V
	(b)	31.52 $\mu$ V
	(c)	40.34 $\mu$ V
	(d)	50.00 $\mu$ V

11	<p>One of the statement is wrong :</p> <ul style="list-style-type: none"><li>a) The oceanic crust is thinner than the continental crust</li><li>b) The oceanic crust is made up of SiMa while the continental crust is made up of SiAl</li><li>c) The oceanic crust is denser than the continental crust</li><li>d) The oceanic crust is much older than the continental crust</li></ul>
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12	<p>For exploration of resources, one of the following geophysical technique cannot be used:</p> <ul style="list-style-type: none"><li>a) seismic</li><li>b) electromagnetic</li><li>c) radiometric</li><li>d) Archeological</li></ul>
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13	<p>The super continent was called _____</p> <ul style="list-style-type: none"><li>a) Gondwanaland</li><li>b) Laurasia</li><li>c) Pangea</li><li>d) Tethys</li></ul>
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14	<p>In Rayleigh Waves the particle motion is_____</p> <ul style="list-style-type: none"><li>a) Retrograde</li><li>b) Horizontal</li><li>c) transverse</li><li>d) Random</li></ul>
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The migration of earth's magnetic poles over its surface through geological time is called \_\_\_\_\_

- a) Paleomagnetism
- b) Polar wandering
- c) Seismicity
- d) Sea floor spreading