

MZ-9007

Seat No.

Second Year B. Physiotherapy Examination January - 2018 Electrotherapy - I

Time: 3 Hours] [Total Marks: 100

- SECTION I Long essay: (any two) $2 \times 10 = 20$ 1 Discuss in detail about production of infrared and its therapeutic effects. Describe microwave diathermy and its physiological effect. Write indication and contra- indications of cryotherapy. Write various methods of application of cryotherapy. 2 Short essay: (any two) $2 \times 5 = 10$ (1) Contrast bath (2)Hydrocolleteral pack Draw bloc diagram of SWD (3)Very short essay: (any five) 3 $5 \times 2 = 10$ Latent heat (1)PEME (2)Contra-indication of SWD (3)**(4)** Whirl pool bath (5)cavitation phonophorosis (6) $10 \times 1 = 10$
- Multiple choice questions: (MCQ) 4

- This is one of the danger of infrared
 - unstable cavitation (b) (a) skin cancer
 - (c) constipation (d) conjuctivitis
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	(c)	920 nm	(d)	180 nm	
	(a)	30 nm	(b)	630 nm	
	at _	nm			
(10)		um - neon laser which	n pro	duces a red light l	oeam
	(c)	paracetamol	. ,	dopamine	
		coal-tar		psoralens	
(0)		ved from		a sensitizing	ar ag
(9)	` /	ents on PUVA regim	` ′		drug
	` ,	2 cm		2.5 cm 3 cm	
		oft tissue. 4 cm	(b)	9.5 cm	
(8)				cm	
	(c)	E3	(d)	E4	
	(a)	E1	(b)	E2	
(7)	(7) Which UVA dose is used for Acne?				
	(c)	ultra sound	(d)	microwave	
	(a)	UVR	(b)	Infra red rays	
(6)	Neo	natal jaundice can be	trea	ted by	
	(c)	US	(d)	HOT PACKS	
	(a)	SWD	(b)	UVR	
(5)	Whi	ch is best treatment	for to	ennis elbow?	
	(c)	any hot or cold	(d)	none of above	
	(a)	hot	(b)	cold	
(-)		water.			
(4)	` '	contrast bath treatmer	nt us	ually start and er	nd in
	(d)	all of above			
	(c)	cryoglobulinemia	iseas	е	
	(a) (b)	peripheral vascular d	iaana	0	
(3)		s is contra - indication raynaud's disease	ıor	cryotherapy	
(2)	(c)	20 - 30	(d)	30 - 40	
	(a)	40 - 44	(b)	40 - 50	
(2)		perature for the perra			. Co.
(2)	Tom	inorature for the norre	fin v	voy both is	C^0

SECTION - II

5	Lon	Long essay (any two)							
	(1)	Write in detail about methods of application of Peraffin wax bath and its physiological effect							
	(2)	Write in detail about LASER and its therapeutic effect.							
	(3)	Define SWD. Write indication and danger of SWD.							
6	Shor	ort essay : (any two) 2×5=							
	(1)	Attenuation of ultrasound							
	(2)	(2) Dosage in UVR							
	(3)	Spacing of electrode in SWD							
7	Very	ery short answer (any five) 5×2=10							
	(1)	Checking of ultrasound appratus							
	(2)	Vapocoolunt spary							
	(3)	Hubbard tank							
	(4)	Conduction and radiation							
	(5)	Electromagnetic spectrum							
	(6)	Coupling media							
8	Multiple choice questions : (MCQ) 10×1=1								
	(1) The commonly used therapeutic frequency of SWD is								
		(a) 20.19 MHz (b) 27.12 MHz							
		(c) 30.12 MHz (d) 12.27 MHz							
	(2)	2) What treatment should be used immediately after an injury like sprain?							
		(a) SWD (b) Infrared rays							
		(c) hot packs (d) cold pack							
	(3) Unit for ultrasound intensity is								
		(a) watts (b) cm							
	(4)	(c) w/cm ² (d) Pascal	ndon						
	(4) The distance between Infra red lamps and part under treatment should be								
		(a) 20 - 25 cm (b) 25 - 50 cm							
		(c) 50 - 75 cm (d) 75 - 100 cm							
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(5)	Which is not type of LASER ?					
	(a)	Power	(b)	Soft		
	(c)	Mid	(d)	Hard		
(6) Most commonly used therapeutic frequency of m						
	diathermy is MHz.					
	(a)	230	(b)	2450		
	(c)	2000	(d)	400		
(7)	Special type of valve used in microwave is called					
	(a)	magnetron	(b)	neutron		
	(c)	diode	(d)	none of above		
(8)	Device that measures electric resistance is					
	(a)	Ohmmeter	(b)	Potentiometer		
	(c)	Voltmeter	(d)	Transformer		
(9)	The electrode spacing material used in SWD should					
	be of					
	(a) high dielectric constant					
(b) low dielectric constant						
	(d)	none of above				
(10) Test dose of UVR can be done on(a) flexor aspect of the forearm						
	(c) medial aspect of thigh					
	(d)	anterior aspect of thi	gh			