2024/11

SET A

BACHELOR OF PHYSIOTHERAPY
THIRD SEMESTER
ELECTROTHERAPY II
BPT – 302 [REPEAT]

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

(Objective)

Time: 30 min. **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. Rebox currents was given in
   a. 1950 b. 1960
   c. 1970 d. 1980
2. What is the primary purpose of Short Wave Diathermy (SWD)?
   a. Reduce body temperature b. Deep heating to soft tissues
   c. improve muscle strength d. decrease range of motion in joints
3. Which of the following is also called burst alternating currents?
   a. Russian currents b. Rebox currents
   c. Ultrasound d. IFT
4. Which of the following is a contraindication for the use of SWD?
   a. Muscle strain b. Acute inflammation
   c. Osteoarthritis d. Metal implants
5. The wavelengths of electromagnetic radiation is
   a. 550- 300000nm b. 650-350000nm
   c. 750-400000nm d. 800-450000nm
6. The name of insulating material of infrared radiation is-
   a. Tungsten b. Porcelain
   c. Linking electrode d. Quartz crystal
7. What are the two main types of Short Wave Diathermy application?
   a. Pulsed and continuous b. Acute and Chronic
   c. Low frequency and high frequency d. Direct and indirect
8. The colour of luminous generator of IRR is
   a. Green b. Yellow
   c. Red d. Black
9. Gowther's law is based on
   a. Electro magnetic waves b. Electro magnetic frequencies
   c. Electro magnetic pulses d. Electro magnetic spectrums

10. In which of the following devices, pen electrode is used?
    a. Ultrasound Therapy
    b. Interferential therapy
    c. Rebox currents
    d. Russian currents

11. X-ray is used for
    a. Radiology
    b. Hepatology
    c. Neurology
    d. Urology

12. The property by which depth of Ultrasound is reduced to half distance is called as-
    a. Full value distance
    b. Attenuation
    c. Half value distance
    d. Scattering

13. Contraindications of MWD
    a. Pregnancy
    b. Chronic pain
    c. Both a and b
    d. None of the above

14. The antibiotic effect is produced from which modality?
    a. UVR
    b. IFT
    c. Ultrasound
    d. IRR

15. Function of LWD
    a. reduce joint flexibility
    b. stimulate muscle contractions
    c. provide deep heating to soft tissues
    d. cool down muscle tissues

16. E2 time dosage is.....
    a. E1 X 2.5
    b. E1 x5
    c. E1 x10
    d. All

17. Which frequency range is typically used for Long Wave Diathermy?
    a. 30 Hz to 300 Hz
    b. 1 MHz to 3 MHz
    c. 30 kHz to 300 kHz
    d. 300 Hz to 3,000 Hz

18. How many fluorescent tubes are present?
    a. 1
    b. 2
    c. 3
    d. 4

19. Inverse square law is dependent on
    a. Object and distance
    b. Object and amplifier
    c. Object and size
    d. Object and frequency

20. Spectrum of fluorescent tubes are
    a. 300-500nm
    b. 350-450nm
    c. 280-400nm
    d. 300-500nm

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Descriptive

Time: 2 hrs 30 min **Marks: 50**

[Answer question no.1 & any four (4) from the rest]

1. What is IFT? What is accommodation? Write about the different physiological effets of IFT? **10**

2. What is SWD? Its types and physiological and therapeutic effects. **10**

3. What is cavitation? Explain about stable and unstable cavitation? AndWhat is phonophoresis? Explain the procedure of phonophoresis? **10**

4. What is MWD and their indications and contraindications. Mention the dangers associated with it. **10**

5. What are ultraviolet radiations? Explain about the production of ultraviolet radiations. **10**

6. Write the differences and similarities between MWD and LWD. **10**

7. What is infrared radiations? Write about production of luminous and non luminous generator in details? **10**

8. Write the three laws related to electro magnetic waves with proper examples. **10**

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