

**BACHELOR OF PHYSIOTHERAPY
THIRD SEMESTER
ELECTROTHERAPY II
BPT – 302**

**SET
B**

[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

- In UVR, Antibiotic effect is due to stimulation of
 - Epithelial system
 - melanocytes
 - Reticuloendothelial system
 - All
- The percentage of aquasonic gel transmissivity
 - 71%
 - 72%
 - 73%
 - 74%
- Pen electrode is used in this device
 - Ultrasound
 - IFT
 - Retrox
 - Russian
- The term that defines the line "Laser rays has single colour; is
 - Monochromaticity
 - Collimation
 - Coherence
 - All
- Damage to cells causes release of histamine like substance from epidermis and superficial dermis resulting:
 - Erythema
 - Carcinogenesis
 - Pigmentation
 - Desquamation
- Fluorescent tubes are
 - 100cm
 - 110cm
 - 120cm
 - 130cm
- The property by which depth of Ultrasound is reduced to half distance is called
 - Full value distance
 - Half value distance
 - scattering
 - Attenuation
- The distance of scanning method of direct contact in laser
 - 0-5mm
 - 5-10mm
 - 10-15mm
 - 15-20mm
- Carrier frequency of Russian current is
 - 2000
 - 3000
 - 1500
 - 4000

10. Rebox currents was given in
- | | |
|---------|---------|
| a. 1950 | b. 1960 |
| c. 1970 | d. 1980 |
11. Electromagnetic waves of Infrared Radiation is-
- | | |
|-----------------|-----------------|
| a. 750-60000nm | b. 750-400000nm |
| c. 750-500000nm | d. 750-600000nm |
12. The other name of applicator in microwave diathremy
- | | |
|------------|-------------|
| a. Emitter | b. Ammitter |
| c. All | d. All |
13. What is the other name of burns caused by moist heat
- | | |
|-------------|-----------|
| a. Gangrene | b. Burns |
| c. Erythema | d. Scalds |
14. The part of laser component which is used to excite electrons is called
- | | |
|------------------|-----------------------|
| a. Lasing medium | b. Resonating chamber |
| c. Flashgun | d. All |
15. High pressure mercury vapour lamp is
- | | |
|-------------|-------------|
| a. W shaped | b. X shaped |
| c. Y shaped | d. Z shaped |
16. A material which can withstand repeated heating and cooling is-
- | | |
|-------------|--------------|
| a. Fireclay | b. Porcelain |
| c. Tungsten | d. All |
17. Diode laser have a wavelength of
- | | |
|----------|----------|
| a. 902nm | b. 903nm |
| c. 904nm | d. 905nm |
18. Water cooled mecury vapour lamp is
- | | |
|--------------------------|-------------------------|
| a. Ultraviolet radiation | b. Kroyamer lamp |
| c. Laser | d. Tridy mite formation |
19. Which of the following is also called burst alternating currents?
- | | |
|---------------------|-------------------|
| a. Russian currents | b. Rebox currents |
| c. Ultrasound | d. IFT |
20. Who gave the statement that any chemical change is capable of being accelerated or decelerated with temperature--
- | | |
|----------------------|--------------|
| a. Scientist rebox | b. Vant hoff |
| c. Scientist Russian | d. All |

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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 Short Wave diathermy? Write about the different placement of electrodes in SWD? Mention any two dangers of short wave diathermy? 10
2. What is electromagnetic spectrum? How many types of Infrared radiation are present? Write about luminous generators? 10
3. What is microwave diathermy? Write about the production of microwave diathermy? 10
4. What is laser? Write about the production of LASER? Write about techniques of application of laser 10
5. What is tridymite formation? What is the action of a laser? Also mention how fluorescent tubes work in UVR? 10
6. Define ultrasound? What is phonophoresis? Write about how phonophoresis work? Mention any four contraindications of ultrasound explaining why it is contraindicated. 10
7. What is IFT? What is accommodation? Write about the different physiological effects of IFT. 10
8. What is rebox current? Write about the different indications of rebox current in details? Draw the diagram of a rebox machine. 10

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