

24/12/22

Printing Pages : 1

Paper Code : BPT-101

(C) (SVSU) : 2022-2023/R

Enrollment No.

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BPT

**I YEAR I SEMESTER EXAMINATION
HUMAN ANATOMY-I**

[Time : 1:30 Hours]

[Max. Marks : 35]

Note : 1. Attempt all the questions as per given instructions.
2. Draw well labeled diagrams where necessary.

[01×10=10]

1. Multiple Choice Questions (MCQs)

- I What percentage of body calcium is stored in the bones ?
(a) 90% (b) 80% (c) 97% (d) 75%
- II Which of the following is a ball & socket joint ?
(a) Ankel joint (b) Shoulder joint (c) Atlantoaxial joint (d) Elbow joint
- III Myocyte with multiple nuclei are -
(a) Smooth (b) Cardiac (c) Skeletal (d) All of the above
- IV All are heads of triceps brachii, except -
(a) Long head (b) Short head (c) Lateral head (d) Medial head
- V Axillary sheath is derived from which fascia?
(a) Pretracheal (b) Prevertebral (c) Investing layer of cervical (d) Pharyngobasilar
- VI Erb's paralysis is caused by -
(a) Lower Cord (b) Middle Cord (c) Erb's point (d) Femoral Nerve
- VII Which part of Deltoid is multipennate ?
(a) Clavicular fibres (b) Acromial fibres (c) Scapular spine fibres (d) Whole muscle
- VIII Lateral boundary of cubital fossa is formed by -
(a) Biceps brachii (b) Brachioradialis (c) Brachialis (d) Ext. carp. radialis longus
- IX Which of the following is single at the root of each lung ?
(a) Pulmonary vein (b) Pulmonary artery (c) Bronchus (d) Bronchial artery
- X Gametogenesis results in -
(a) Haploid gametes (b) Diploid gametes (c) Triploid gametes (d) Polyploid gametes

[3×5=15]

2. Answer in long (any three)

- I Classify types of bones and write briefly about Clavicle.
- II Describe the origin, course, relations, branches and applied of Brachial Plexus.
- III Describe in detail articulation, ligaments, movements and applied aspect of shoulder joint.
- IV Describe in detail about the boundaries, contents and clinical importance of cubital fossa.

[2x5=10]

3. Answer in short (any five)

- I Synovial joints
- II Gross anatomy of Lungs.
- III Oogenesis
- IV Enumerate muscles of forearm.
- V Erb's palsy
- VI Classify types of muscles with examples
- VII Gross anatomy of heart.

Printing Pages : 1

Paper Code : BPT-102

(B) (SVSU) : 2022-2023/R

Enrollment No.

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BPT
I YEAR I SEMESTER EXAMINATION
HUMAN PHYSIOLOGY-I

[Max. Marks : 35]

[Time : 01:30 Hours]

Note: Attempt all questions as per the instructions

Section – A

(MCQ's)

-(10x1=10)

1. I. Objective questions (Answer all questions):
2. Erythropoiesis is completed in
a. 3 days b. 7 days c. 14 days d. 20 days
3. The largest WBC in peripheral blood is
a. Neutrophil b. Large lymphocyte c. Monocyte d. Eosinophil
4. The spontaneous arrest of bleeding is called
a. Homeostasis b. Hemostasis c. Coagulation of blood d. Thrombosis
5. Contractile proteins in myofibrils are all except:
a. Actin b. Myosin c. Troponin and tropomyosin d. Sarcoplasmic reticulum
6. The form of transport that requires the expenditure of energy is :
a. Diffusion b. Osmosis c. Active transport d. Facilitated diffusion
7. Pushing the wall is an example of :
a. Isotonic contraction b. Isometric contraction
c. Relative refractory period d. Absolute refractory period
8. Carbon dioxide is carried in the following form except:-
a. Bicarbonates b. Carbamino compounds
c. Simple solution d. Carboxyhemoglobin Venous capacitance
9. Normal respiration is called:-
a. Apnea b. Eupnoea c. Dyspnea d. Orthopnea
10. Calcitonin is produced by:
a. Thyroid gland b. Parathyroid gland c. Thymus d. Kidney
11. Adrenal glands are present over the
a. Spleen b. Pituitary c. Kidney d. Liver

SECTION –B

(5x2=10)

II. Very Short questions (Answer any five only)

1. Isotonic contraction
2. Define Immunity
3. Define Sarcomere
4. Diffusion
5. Iron deficiency Anemia
6. Define Cyanosis

(3x5=15)

III. Short Questions (Answer any three)

1. Functions of blood
2. Intrinsic mechanism of clotting
3. Explain the O₂-Hb dissociation curve.
4. List cardio-respiratory changes during exercise

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Printing Pages : 1

Paper Code : BPT-103

(C) (SVSU) : 2022-2023/R

Enrollment No.

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BPT
I YEAR I SEMESTER EXAMINATION
EXERCISE THERAPY-I

[Time : 03:00 Hours]

[Max. Marks : 70]

Note: Attempt the all question as per the given instructions.

Q1- Nodding movement of the head is example for ____

- a) 1st order lever
- b) 2nd order lever
- c) 3rd order lever
- d) None of the above

Q2- In hanging ____ muscles work stronger to lift the body on the arms.

- a) Serratus anterior
- b) Latissimus dorsi
- c) Deltoid
- d) Trapezius

Q3- ____ alters the state of the rest of a body or its uniform motion in a straight line.

- a) Force
- b) Movement
- c) Gravity
- d) Power

Q4- When two unequal force acting at different points & in opposite direction produces ____ movements in the body?

- a) Flexion
- b) Extension
- c) Rotation
- d) Adduction

Q5- Tension is measured in ____

- a) Joules
- b) Watt
- c) Newton
- d) Power

Q6- Which joint doesn't have Flexion/extension movement in frontal axis ____?

- a) Hip joint
- b) Knee joint
- c) Ankle joint
- d) Thumb

Q7- Medial & lateral rotation occurs at ____

- a) Coronal
- b) Sagittal
- c) Frontal
- d) Vertical

Q8- Examples of pivot joint is ____

- a) Knee
- b) Shoulder
- c) Atlanto axial
- d) Metacarpophalangeal joint

Q9- Vertical suspension is done for ____

- a) Promote strengthening
- b) Promote support
- c) Improves range of motion
- d) Reduces friction

[P.T.O]

Q10- Kneeling with four limbs is called as _____

- a) Kneel sitting
- b) Kneel standing
- c) Prone kneeling
- d) Side sitting

Q11- Point of the elbow joint in suspension to promote flexion/extension is _____

- a) Medial epicondyle
- b) Ulnar styloid process
- c) Olecranon process
- d) Lateral epicondyle

Q12- Balance training can be actively done by _____

- a) Wobble board
- b) Bolster
- c) Swiss ball
- d) Suspension

Q13- Newton's second law of motion is also called as _____

- a) Law of inertia
- b) Law of acceleration
- c) Law of gravity
- d) Law of reflection

Q14- Sitting on the side of the seat with one buttock supported is called as _____

- a) Half lying
- b. Side sitting
- c. Half sitting
- d. Long sitting

Q15- Suspension position for the shoulder abduction/adduction is _____.

- a) Supine lying
- b. Prone lying
- c. Side lying
- d. Half lying

Q16- Line of gravity falls _____ to the knee joint.

- a) Anterior
- b. Posterior
- c. Medial
- d. Through the knee joint

Q17- Petrissage massage includes all, except _____

- a) Kneading manipulation
- b. Wringing manipulation
- c. Tapping manipulation
- d. Rolling manipulation

Q18- Oil which is used is massage _____

- a) Lanolin oil
- b. Almond oil
- c. Clove oil
- d. Fennel oil

Q19- Contra indication for massage is _____

- a) Pain
- b. Scar tissues
- c. Burns
- d. Spasm

Q20- Percussion manipulation includes all, except _____

- a) Hacking
- b. Friction
- c. Beating
- d. Vibrations

Section – B (Short Answer questions)

Question 2 – Attempt any five questions

(5*2=10)

- (a) Type of kneading
- (b) Base of support
- (c) 2nd order of lever with example
- (d) Torque
- (e) Universal goniometry
- (f) Gravity

Question 3 – Attempt any two questions

(2*5=10)

- (a) Explain the equipments in therapeutic gymnasium
- (b) Define Active & passive insufficiency
- (c) Define Equilibrium & types with example

Section – C (Long Answer questions)

Question 4 – Attempt any two questions

(2*15=30)

- (a) Describe the massage techniques with its Classification, therapeutic effect, indication & contraindication?
- (b) Discuss about aerobic & anaerobic exercises. Write down its Components of fitness with physiological effects & uses?
- (c) Define suspension therapy with its types, Principles, effects & uses?

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Printing Pages : 2

Paper Code : BPT-104

(A) (SVSU) : 2022-2023/R

Enrollment No.

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BPT
I YEAR I SEMESTER EXAMINATION
YOGA THERAPY

[Time : 01:30 Hours]

[Max. Marks : 35]

Note: Attempt the all question as per the given instructions.

Section A (MCQ's)

Question 1- Attempt all questions.

(10*1=10)

1- Complete the slog "sthiram sukam"

- a) Asanam
- b) Pranayamam
- c) Mudram
- d) Kriyam

2-Standing series of asana is

- a) Padmasan
- b) Trikonasan
- c) Vajrasan
- d) Bhujangasana

3- Anulom-vilom is called as

- a) Single nostril breathing
- b) Rapid breathing
- c) Alternate nostril breathing
- d) Shallow breathing

4- Trikonasan is also called

- a) Boat pose
- b) Fish pose
- c) Cat pose
- d) Triangle pose

5- Skull Shining Breath is also called as

- a) Anulom-vilom
- b) Bastrika
- c) Kapalbathi
- d) Nadishuddi

6-Asanas should not be practiced immediately after

- a) Food
- b) Drinking water
- c) Sleep
- d) Empty stomach

7-Pranayama should be practiced under

- a) Dusty environment
- b) Industrial area
- c) Clean environment
- d) Polluted area

8-Number of chakras in a human body

- a) 10
- b) 21
- c) 7
- d) 6

9- Surya namaskar contains steps

- a) 14
- b) 12
- c) 13
- d) 24

10-kriyas is a

- a) Building process
- b) Energizing process
- c) Cleansing process
- d) Draining process

Section – B (Short Answer questions)

Question 2 – Attempt any five questions

(5*2=10)

- (a) Define Yoga according to Maharshi Arobindo.
- (b) Write the benefits of Trikonasan.
- (c) What is the sloka for hanty mantra?
- (d) Define Yoga according to Bhagavad Gita.
- (e) Write the benefits of Kapalbathi.
- (f) Write the contraindication of Padahastasan.

Question 3 – Attempt any three questions

(3*5=15)

- (a) Write in brief about rules and regulations of Pranayama.
- (b) Explain Tadasan.
- (c) Write the procedure indication and contraindication of Nadi-Shuddhi pranayama.
- (d) Explain Nadis.

Printing Page(s) : 2

Paper Code : BPT 101

(A) (SVSU:2020-21/S)

Enrollment No.

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BPT

**1st YEAR EXAMINATION
HUMAN ANATOMY**

[Time : 3:00 Hours]

[Max. Marks : 70]

Note:- Draw labeled diagrams wherever necessary.

SECTION-A

20X1=20

Q.1 Multiple choice questions.

- 1 Coronary artery supplies

(a) Brain	b. Heart
c Kidney	d. None of the above
- 2 Left lung has

a one fissure	b Two fissures
c Three fissures	d No fissure
- 3 Patella is a

a Pneumatic bone	b Long bone
c Sessamoid bone	d None of the above
- 4 Which of the following is NOT a male genital organ

a Testis	b Prostate
c Ovary	d Seminal vesicles
- 5 Cranial nerves arise from

a Brain	b Spinal cord
c Kidney	d None of the above
- 6 Deltoid is a

a Muscle	b Bone
c Artery	d Nerve
- 7 Inferior vena cava opens in

a Right atrium	b Left atrium
c Right Ventricle	d Left ventricle
- 8 Erb's paralysis is due to injury of

a Lower trunk	b Upper Trunk
c Medial cord	d Lateral cord
- 9 Number of thoracic vertebrae is

a 10	b 12
c 5	d 14
- 10 Cerebrum is a part of

a Nervous system	b digestive system
c respiratory system	d None of the above
- 11 Heart has

a Three chambers	b Two chambers
c Four chambers	d five chambers
- 12 Femur is a bone of

a Upper limb	b Lower limb
c Skull	d Thorax
- 13 Which of the following is NOT a endocrine gland

a Thyroid gland	b Pituitary gland
c Adrenal gland	d Salivary gland
- 14 Aorta arises from

a Left ventricle	b Right ventricle
c Left atrium	d Right atrium

[P.T.O.]

- 15 Study of bones is
 a Cardiology b Myology
 c Osteology d None of the above
- 16 Which of the following is NOT a part of respiratory system
 a Trachea b Ureter
 c Lung d Nose
- 17 The term "cranial" means
 a Toward head b Toward tail
 c Toward belly d Toward back
- 18 Which of the following is the position of body in "Anatomical position"
 a Sitting b lying down with face upwards
 c lying down with face downwards d Erect
- 19 Which of the following is a example of synovial joint
 a Sutures of skull b Knee Joint
 c Pubic symphysis d Gomphosis
- 20 Action of biceps brachii muscle is
 a Flexion of knee joint b Flexion of elbow joint
 c Abduction of wrist joint d Abduction of shoulder joint

SECTION-B

- Q.2 Answer any five.**
- Branches of cords of brachial plexus
 - Movements of shoulder joint
 - Structures in hilum of lung
 - Wrist drop
 - Parts of corpus callosum
 - Muscles of tongue

5X2=10

- Q.3 Answer any two.**
- Types of bone
 - Muscles of anterior compartment of arm
 - Cubital fossa

2X5=10

SECTION-C

- Q.4 Define synovial joint and describe its structure and classification.**
- Q.5 Discuss origin, course, branches and applied of median nerve.**

3+5+7=15

2+3+5+5=15

OR

Discuss external features, internal features and applied of heart

8+4+3=15

Printing Pages : 2

Paper Code : BPT- 102

(A) (SVSU:2021-2022/S)

Enrollment No.

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BPT

**1st YEAR EXAMINATION
HUMAN PHYSIOLOGY**

Time: 3:00 Hrs.

Max. Marks:70

Note: Attempt the all question as per the instructions.

I. Objective questions (Answer all questions):-**(20x1=20)**

1. Saltatory conduction :
 - a) Increase the velocity of nerve impulse
 - b) Increase the velocity of nerve impulse
 - c) Has no influence on the velocity of nerve impulse
 - d) Alters the direction of nerve impulse
2. The site of fatigue in an intact animal is :
 - a) Neuromuscular Junction
 - b) Synapse
 - c) Spinal cord
 - d) Medulla
3. The normal WBC count in adults is :
 - a) 400-1100 cells/mm³
 - b) 4000-11000 cells/mm³
 - c) 4-11 lakh cells/mm³
 - d) 4-11 million cells/mm³
4. _____ are called resistance vessels
 - a) Arterioles
 - b) Veins and venules
 - c) Capillaries
 - d) Large-sized arteries
5. Cardiac muscle work as a single unit, this is called functional:
 - a) Myocardium
 - b) Syncytium
 - c) Endocardium
 - d) Pericardium
6. The functions of saliva include:
 - a) Lubrication of food
 - b) Keeps the mouth moist
 - c) Digestion of starch
 - d) All of the above
7. Milk ejection reflex is mediated by hormone:
 - a) Oxytocin
 - b) Vasopressin
 - c) Prolactin
 - d) Estrogen
8. 'C' cells are present in:
 - a) Thyroid gland
 - b) Adrenal cortex
 - c) Parathyroid gland
 - d) Pituitary gland
9. Peptic ulcer is caused due to:
 - a) Anti-inflammatory drugs
 - b) Alcohol
 - c) Smoking
 - d) All of the above
10. The normal serum calcium level ismg/dl:
 - a) 4-6
 - b) 6-8
 - c) 9-11
 - d) 14-16
11. Cholecalciferol is :
 - a) Vitamin D
 - b) Parathyroid hormone
 - c) Calcitonin
 - d) Thyroxin
12. Urine is temporarily stored in:
 - a) Gallbladder
 - b) Urinary bladder
 - c) Kidney
 - d) Nephrons
13. The structural and functional unit of the nervous system is:
 - a) Neuron
 - b) Nephron
 - c) Neuroglia
 - d) Giant cell
14. The powerhouse of the cell is
 - a. Centriole
 - b. Centrosome
 - c. Mitochondria
 - d. Lysosomes

[P.T.O.]

15. The life span of an RBC is :
- 100 days
 - 102 days
 - 120 days
 - 135 days
16. The receptor for stretch reflex is:-
- Muscle spindle
 - Golgi tendon organ
 - Pacinian corpuscles
 - Ruffini's end organ
17. SA node is the dominant pacemaker, because:-
- Located higher
 - Large in size
 - Has regular activity
 - Has fastest rate
18. The process of union of male and female gametes is called
- Luteinization
 - Implantation
 - Neutralization
 - Fertilization
19. The phase of a menstrual cycle occurring after ovulation is
- Proliferative phase
 - Secretory phase
 - Midluteal phase
 - Bleeding phase
20. All of the following are properties of cardiac muscle except:-
- Excitability
 - Contractility
 - Plasticity
 - Long refractory period

II. Very Short questions (Answer any five only)

(5x2=10)

- Define Cardiac Cycle
- Define Jaundice
- Motor Unit
- Refractory errors of Eye
- Define Hypoxia
- Puberty

III. Short Questions (Answer any two)

(2x5=10)

- Sodium-potassium pump
- Functions of WBCs
- Pulmonary Surfactant

IV. Long questions (Answer any two)

(2x15=30)

- Define Neuromuscular Junction. Explain the sequence of events across NMJ.
- Define Erythropoiesis. Explain the stages of Erythropoiesis.
- Enumerate the hormones of the anterior pituitary and write about the functions of the Growth hormone.

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Printing Pages : 2

Paper Code : BPT- 103

(C) (SVSU:2021-2022/S)

Enrollment No.

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BPT

1st YEAR EXAMINATION

FUNDAMENTALS OF EXERCISE THERAPY

Time: 3:00 Hrs.

Max. Marks:70

Note: Attempt the all question as per the instructions.

Section A (MCQ's)

MCQ's - Attempt all questions.

(20x1=20)

Q1- Degrees of freedom at shoulder joint is

- A. One
- B. Two
- C. Three
- D. Four

Q2- Joints are responsible for

- A. Mobility
- B. Stability
- C. Both of above
- D. None of above

Q3- Immoveable joint is called as

- A. Synarthrosis
- B. Amphiarthrosis
- C. Diarthrosis
- D. All of above

Q4- Benefit of suspension therapy is

- A. Reduces burden of therapist
- B. Can be applied for extended period of time
- C. Gravity elimination
- D. All of above

Q5 Pulleys are used to _____.

- a. Make the work easy
- b. Alter the direction of motion
- c. Gain mechanical efficiency
- d. All the above

Q6- Relaxed passive movement is useful for _____.

- a. Muscle strengthening
- b. Improving joint range of motion
- c. Remembrance of pattern of movement
- d. Improving co-ordination

Q7- _____ muscle is known as decelerator in normal human locomotion.

- a. Ilio-psoas
- b. Gastro-soleus
- c. Hamstring
- d. Quadriceps

Q8- Therapeutic exercise used by physiotherapist is

- A. Resistance exercise
- B. Combined exercise
- C. Multimodal exercise
- D. All of the above

Q9- Indication for passive movement is

- A. Maintain range of motion
- B. Minimize formation of adhesion
- C. Pain relief
- D. All of above

Q10- Effect of aerobic exercise is

- A. Lowers blood pressure
- B. Control blood sugar
- C. Decreases resting heart rate
- D. All of above

Q11- The characteristics of any starting position _____.

- a. Stable
- b. Comfortable
- c. Provide room for full range of motion
- d. All of the above

Q12- In normal standing, line of gravity passes _____ the knee joint.

- a. In front of
- b. Behind
- c. Through
- d. Lateral to

[P.T.O]

Q13. Which of these exercises may be used for the ankle?

- a. plantarflexion b. Dorsiflexion c. calf raise d. All of the above.

Q14- A massage therapist should wear gloves if

- A. There is no time to wash hands
B. Client is embarrassed
C. Her nails are long
D. Client has contagious infection

Q15- In suspension therapy, mechanical device is used to

- A. Increase the range of motion
B. Increase muscle power
C. Increase neuromuscular coordination
D. All of above

Q16- Massage therapy is said to originate from

- A. China
B. Japan
C. India
D. Greece

Q17-. Ankle DF/PF takes place _____.

- a. Sagittal plane & frontal axis
b. Frontal plane & sagittal axis
c. Transverse plane & vertical axis
d. Coronal plane & horizontal axis

Q18- The characteristics of any starting position _____.

- a. Stable b. Comfortable c. Provide room for full range of motion d. All of the above

Q19-. Nodding movement of head is the example of _____ order lever

- a. 1st b. 2nd c. 3rd d. 4th

Q20- In our body more numbers of _____ order levers are present

- a. 1st b. 2nd c. 3rd d. 4th

Section – B (Short Answer questions)

Question 2 - Attempt any five questions

(5*2=10)

- (a) Base of Support
(b) Axis
(c) Planes
(d) Equilibrium
(e) Resisted movements
(f) Levers

Question 3 – Attempt any two questions

(2*5=10)

- (a) Derived Positions
(b) Relaxation Technique
(c) Indications & contra-indications of Movements.

Section – C (Long Answer questions)

Question 4 - Attempt any two questions

(2*15=30)

- (a) Write in detail about Fundamental and derived Positions.
(b) Explain Soft Tissue Manipulation in detail.
(c) Write down about Suspension Therapy.

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Paper Code : BPT- 104

(B) (SVSU:2021-2022/S)

Enrollment No.

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BPT

1st YEAR EXAMINATION
FUNDAMENTALS OF ELECTROTHERAPY

Time: 3:00 Hrs.

Max. Marks:70

Note: Attempt the all question as per the instructions.

Section A (MCQ's)
(20x1=20)

MCQ's - Attempt all questions.

- Q1- Electrotherapy current used for electro diagnosis is
a) Faradic current b) Interrupted Direct current c) Both of above d) None of above
- Q2-Strength duration curve basically indicates about
a) Innervations status b) Muscle physiology c) Muscle anatomy d) Muscle pathology
- Q3-Presence of kink in strength duration curve suggest
a) Partial innervation b) Partial denervation c) Both of above d) None of above
- Q4-Physiological effect of cryotherapy is
a) Reduces blood flow b) Reduces local temperature c) Reduces metabolism d) All of above
- Q5-Effect of cryotherapy on smooth muscle is
a) Increases smooth muscle contraction
b) Decreases smooth muscle contraction
c) Both of above
d) None of above
- Q6-Cryotherapy induced pain is felt with cooling below
a) 15 degree b) 10 degree c) 5 degree d) Zero degree
- Q7-Cryotherapy is used for
a) Acute pain b) Acute exacerbation c) Both of above d) None of above
- Q8-Amount of cooling can be explained with
a) Lewis reaction
b) Lewis Huntington reaction
c) Newton's law of cooling
d) All of above
- Q9-Therapeutic laser is applied with
a) Point probe b) Cluster probe c) Both of above d) None of above
- Q10-Therapeutic LASER is applied at
a) Site of pain b) Tender spot c) Trigger point d) All of above
- Q11-Frequency used for short wave diathermy is
a) 27.12 MHz b) 45 MHz c) 13 MHz d) All of above
- Q12-Wavelength used for short wave diathermy is
a) 11 meter b) 7 meter c) 22 meter d) All of above
- Q13-Short wave diathermy is not indicated when the duration of pain is
a) Less than 72 hours
b) Less than one week
c) Less than one month
d) All of above
- Q14-Duration of treatment with short wave Diathermy in case of acute condition is
a) 5 minutes
b) 10 minutes
c) 20 to 30 minutes
d) 30 to 40 minutes
- Q15-Duration of treatment with short wave Diathermy in case of chronic condition is
a) 5 minutes
b) 10 minutes

[P.T.O.]

c) 20 to 30 minutes

d) 30 to 40 minutes

Q16-Frequency used for micro wave

Diathermy is

a) 2450 MHz

b) 433.92MHz

c) Both of above

d) None of above

Q17-Wavelength used for micro wave diathermy is

a) 12.25 meter

b) 69 meter

c) Both of above

d) None of above

Q18-Microwave diathermy can be preferred for the treatment of disorders of

a) Bone

b) Muscle

c) Tendon

d) Joint

Q19-Absolute contraindication for microwave diathermy is

a) Tumor

b) Tuberculosis

c) Area of arthroplasty

d) All of above

Q20-Iontophoresis is contraindicated in

a) Hypersensitivity

b) Impaired sensation

c) Pregnancy

d) All of above

Section – B (Short Answer questions)

Question 2 - Attempt any five questions

(5*2=10)

(a) Luminous generator

(b) Techniques of paraffin wax bath

(c) Therapeutic effect of heat

(d) PUVA apparatus

(e) Therapeutic effect of ultrasound

(f) Hydrocollator

Question 3 – Attempt any two questions

(2*5=10)

(a) Define MWD. Therapeutic effect, indication & contraindication?

(b) Describe cryotherapy. Method of techniques, indication & contraindication?

(c) Explain the Contrast bath. Techniques indication & contraindication?

Section – C (Long Answer questions)

Question 4 - Attempt any two questions

(2*15=30)

a) Discuss about the IFT. Physiological effect, indication and contraindication?

b) Define SWD. Physiological effect, indication and contraindication?

c) Define TENS. Physiological effect, indication and contraindication?

13/10/22

Printing Pages : 1

Paper Code : BPT- 105

(C) (SVSU:2021-2022/S)

Enrollment No.

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BPT

**1st YEAR EXAMINATION
BIOCHEMISTRY**

[Time: 1:30 Hrs.

Max. Marks:35]

Note: Attempt the all question as per the instructions.

Section A (MCQ's)

Question 1- Attempt all questions.

(10X1=10)

1). Which one of the following disease is not associated with pellagra?

- a). Hartnup disease b). Diabetes mellitus c). Carcinoid syndrome d). Isoniazid therapy in TB patients

2). Folate deficiency causes:

- a). Pernicious anaemia b). Microcytic anaemia c). Megaloblastic anaemia d). Normocytic anaemia

3). Plasma fasting glucose levels are in the range of:

- a). 65-85 mg% b). 70-110 mg% c). 85-120 mg% d). 100-140 mg%

4). Diabetes mellitus patients are characterized by following symptoms:

- a). Polyphagia b). Polydipsia c). Polyuria d). All of the above

5). Which are the risk factors of Coronary Heart Disease?

- a). Cholesterol b). Triglycerides c). LDL d). All of the above

6). Most useful test for acute pancreatitis is:

- a) Serum calcium b) Urinary amylase c) Serum lipase d) Serum amylase

7). The bonds responsible for quaternary structure are:

- a) Hydrogen bonds b) Electrostatic bonds c) Hydrophobic bonds d) All of the above

8). Glucose 6 phosphatase deficiency occurs in one of the following glycogen storage disorder:

- a). Cori's disease b). Von Gierk's disease c). Anderson's disease d). Mc Ardle's disease

9). Different types of Vitamins are:

- a). Fat-Soluble b). Water-Soluble c). Both A and B d). None of the above

10). Retinol is the scientific name of _____?

- a). Vitamin A b). Vitamin D c). Vitamin K d). Vitamin C

Ques2: Attempt any five questions:-

(5x2= 10)

- Isoenzymes
- Non Competitive Inhibition
- Classification of Carbohydrate with examples
- Classification of Enzymes with examples.
- Types of Protein structures with examples.
- Vitamin C- Deficiency manifestation, RDA and Sources

Ques 3: Attempt any five questions:-

(5x3= 15)

- Glycogen Storage Disease
- Factors affecting enzyme activity
- Glycolysis
- Kwashiorkor
- Definition & Classification of Lipids
- Regulation of Blood Glucose.

Printing Pages: 1

Paper Code : BPT-106

(C) (SVSU : 2021-2022/R)

ENROLLMENT NO.

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BPT
1st YEAR EXAMINATION
SOCIOLOGY

[Time : 1:30 Hours]

[Max. Marks : 35]

Attempt all MCQ

[10×1=10]

1. PNDT ACT is related to..
 A. Female foeticide. B. Cancer. C. Dowry. D. All
2. Write a full form of PHC
3. Write a full form of UHTC
4. Which one is non communicable disease.
 A. Hypertension B. stroke C. Cancer D. All
5. Joint family is a
 A. Modern family B. Rural family
 C. Three generation family D. None of them.
6. Industrial society called as
 A. farming B. Dressing C. factory D. None of them
7. Pharmacultural industry is related to
 A. Medicine B. Milk C. curd D. None of them
8. Agricultural society is found in
 A. Rural B. Urban C. Mall City D. Semi urban
9. Cancer is a...
 A. Non communicable Disease B. communicable disease
 C. epidemic Disease D. None of them
10. Dowry is related to
 A. Goods. B. Wealth. C. Property D. All

Q2. Write any five answer.

[2×5=10]

1. Describe the importance of physiotherapy and sociology?
2. What you know about the communicable diseases and non communicable?
3. What do you know about the Hindu marriage?
4. Write a short note on joint family?
5. What do you know about Social Security?
6. What is Caste System?

Q3. Write any three long answer.

[3×5=15]

1. Write the short note on urban and rural community
2. Write any social problem of society?
3. Write differences between joint and nuclear family?
4. Write Differences between Hindu and Muslim marriage?

15/10/22

Printing Pages : 2

Paper Code : BPT- 107

(8) (SVSU:2021-2022/S)

Enrollment No.

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BPT

1st YEAR EXAMINATION
YOGA THERAPY

[Time: 2:00 Hrs.

Max. Marks:50]

Note: Attempt all questions as per the instructions.

Section A (MCQs)

Question 1- Attempt all questions.

(10*1=10)

1- Swadhyaya means

- a) Study of the soul
- b) Study of texts.
- c) Study of body
- d) None of these

2- "Nishkama karma" means

- a) Equanimity of mind is the essence of yoga
- b) Yoga is the inhibition of the modification of the mind
- c) Do the action or duty without expecting the results or fruits
- d) Yoga is a state of separation from the soul

3- Yoga KarmasuKaushalam (BG 2/50).

- a) Yoga is the dexterity in action.
- b) Yoga is the elimination of toxins.
- c) Yoga is a balance of the body
- d) Yoga removes toxins

4- Contraindications of Vajrasana

- a) Leg pain
- b) Cervical pain
- c) Knee pain
- d) Headache

5- How many types of pranayama acc. To Patanjali.

- a) 2
- b) 5
- c) 9
- d) 8

6. Definition of yoga acc. To Bhagwat Geeta

- a) Nishkama karma
- b) Nasti yoga samambalam
- c) Manprasmanopay yoga ityabhidhyate
- d) Atmasaskatkari yoga

7-Contraindications of Dhanurasana.

- a) Hernia.
- b) Backache.
- c) Dysmenorrhea.
- d) None of these.

8-How many types of "Yamas"

- a) 4
- b) 5
- c) 1
- d) 2

9- Hatha yoga means

- a) Purification of brain
- b) Purification of nose
- c) Purification of the physical body
- d) Purification of mental state

10-"manprasmanopay yoga ityabhidhyate" means

- a) Equanimity of mind is the essence of yoga
- b) Yoga is a state of separation from the soul
- c) Yoga is a skillful trick to calm down the mind
- d) Yoga is dexterity inaction

Section – B (Short Answer Questions)

Question 2- Attempt any five questions (5*4=20)

- (a) Discuss manprasmanopay yoga ityabhidhyate the importance of pranayama.
- (b) Explain the Panch kosha.
- (c) Explain the spiritual values of meditation.
- (d) How many are there?
- (e) Difference between asana & exercise
- (f) Define samadhi & explain it.

Question 3 - Attempt any four questions (4*5=20)

- (a) Explain Astanga yoga.
- (b) Write rules & regulations of Practicing Yogasana.
- (c) Explain principles of yoga.
- (d) Write rules & regulations of Practicing Pranayama
- (e) Explain Karma Yoga in short.

17/10/22

Printing Pages : 1

Paper Code : AEC-01

(C) (SVSU:2021-2022/S)

Enrollment No.

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BPT

1st YEAR EXAMINATION
ENGLISH COMMUNICATION SKILL

[Time: 2:00 Hrs.

Max. Marks:35]

Note: Attempt the all question as per the instructions.

I Long Question : Answer Any Two

[5×2=10]

1. Write an application to *the Controller of Examination*, SVSU for making correction in your name's spelling in your report card.
2. What are the eight parts of speech in English Grammar?
3. Write a note on "Medical facilities in Subharti University".
4. Write an apology letter to your coordinator for using mobile phone in the class.

II. Short Question: Answer any Five

[2×5=10]

1. What is a sentence?
2. What are the do's and dont's of group discussion?
3. What is the difference between manners and etiquettes?
4. Write your introduction, Goals and Achievements.
5. "English is a Global Language". Justify.
6. What is grooming?
7. What are professional etiquettes?
8. Outline the elements of letters?

III. Objectives Question: Answer All Question

[15×1=15]

1. Each of the students ---- present in the class.
(A) is (B) am (C) are (D) None
2. Salutation in letter means
(A) Dear sir (B) respected sir (C) honorable sir (D) All
3. Goals can be (A) long term (B) short term (C) Both (D) None
4. Where do you study? Identify the kind of sentence-
(a) exclamatory (B) interrogative (C) SVSU (D) None
5. Subject verb agreement means
(A) singular verb with singular subject (B) Plural verb with plural subject (C) Both (D) None
6. Non verbal cue of communication is
(A) body language (B) paralanguage (C) A and B both (D) None
7. Extempore presentation is (A) already prepared presentation(B) presentation without preparation (C) all type presentation (D) None of the above
8. Effective communication is a communication in which
(A) The message is travelled successfully (B) and received by the receiver (C) Both (D) None
9. Letters are
(A) Formal letters B) Informal letters (C) Both (D) None
10. Application is a written document
(A) True (B) False (C) Both (D) None
11. Reports are written about
(A) present event (B)past event (C) future event (D) None
12. Etiquettes are a code of
(A) Conduct (B) dress (C) Both (D) None
13. Sender's address in a letter means
(A) Heading (B) Receiver's address (C) Both (D) None
14. The elements of body language are
(A)eye contact (B) facial expression (C) gestures and postures (D) All
15. Comprehension means
(A) reading (B) understanding (C) answering (D) None

18/10/22

Printing Pages : 2 Paper Code : AEC-02 (A) (SVSU:2021-2022/S)

Enrollment No.

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BPT

1st YEAR EXAMINATION
ENVIRONMENTAL STUDIES

[Time: 3:00 Hrs.

Max. Marks:70]

Note: Attempt the all question as per the instructions.

Section A- Objectives Question

(20x1=20)

- Full form of MOEFCC-
 - Ministry of Environment Forest Cabinet and Council
 - Ministry of Entertainment Finance Cabinet and Council
 - Ministry of Environment Forest and Climate Change
 - Ministry of Environment and Forest Climate Change
- Compressed form of biological diversity word was given by
 - W.G. Rosen
 - R.F. Dashmann
 - Walter G. Rosen
 - Both A & C
- Deforestation generally decreases
 - Soil erosion
 - Rainfall
 - Draught
 - Global warming
- Ecosystem word was coined by-
 - A. G. Tansley
 - R. F. Dashmann
 - G. J. Mendel
 - Einstein
- Ozone is present in which layer of atmosphere-
 - Stratosphere
 - Troposphere
 - Mesosphere
 - Thermosphere
- In ecosystem which one shows cyclic passage-
 - Nitrogen
 - Carbon
 - Potassium
 - All of the above
- World water day is on-
 - 22nd March
 - 23rd March
 - 21st March
 - 22nd April
- World Environment day is celebrated on-
 - 5th September
 - 5th October
 - 16th September
 - 5th June
- When trees are cut down, amount of carbon di oxide will-
 - Decreases
 - Increases
 - both i and ii
 - Remains same
- Producer are also called
 - Autotrophic
 - Heterotrophic
 - Consumer
 - Decomposers
- Which of the following is not a greenhouse gas?
 - CO₂
 - CH₄
 - O₃
 - N₂
- Energy flow in an ecosystem is
 - Reversible
 - Unidirectional
 - Transferable
 - Direct
- Food web are interconnection of-
 - Producer
 - Trophic level
 - Food chain
 - Trees
- Standard of noise for residential areas during day
 - 55
 - 45
 - 65
 - 35
- Vulture is-
 - Producers
 - Consumers
 - Decomposer
 - Scavenger
- The person who is responsible for the celebration of first world earth day?
 - Gaylord Nelson
 - George Washington
 - Narendra Modi
 - None of these

[P.T.O.]

17. Which one of the following trophic level is not considered in ecological pyramids?
(i) Producer (ii) Consumer (iii) Decomposer (iv) Detrivores
18. International Day for Biological Diversity is celebrated on-
(i) 22nd April (ii) 22nd March (iii) 22nd May (iv) 22nd June
19. Dominant gas present in the atmosphere-
(i) Oxygen (ii) Nitrogen (iii) Hydrogen (iv) Water
20. India ranks at----- place in world happiness index 2021
(i) 120 (ii) 113 (iii) 139 (iv) 129

Section B- Short answer question

Part I: Attempt any five questions

(5*2=10)

1. Define 10% law of energy?
2. Explain the existence of atmosphere at the earth surface.
3. Write the name of biodiversity hot spots of India.
4. Define Ecosystem?
5. Describe the importance of food web in ecosystem?
6. Explain the relation between atmospheric pollution and Health.

Part II: Attempt any two questions

(2*5=10)

1. Define atmosphere? Discuss the various layers of atmosphere?
2. How public awareness can help in conservation of environment?

Section C- Long answer question

(15x2=30)

1. Define biological diversity? Describe the different scales and conservation measures of biological diversity in details?
2. Define ecological succession? Describe the causes and process of ecological succession?
3. Define pollution? Discuss the cause, effects and control measures of air pollution in detail?

Printing Pages : 2

Paper Code : BPT- 101

(C) (SVSU:2021-2022/R)

Enrollment No.

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BPT

1st YEAR EXAMINATION

Human Anatomy

Time: 3:00 Hrs.

Max. Marks:70

Note:- Draw labeled diagrams wherever necessary.

SECTION-A

Q1 Multiple choice questions. Choose the correct response.

20X1=20

- 1 Pronation and supination are movements of -
 - a Radio ulnar joint
 - b Shoulder joint
 - c Ankle joint
 - d Wrist joint
- 2 Pulmonary trunk arises from-
 - a Left ventricle
 - b Right ventricle
 - c Left atrium
 - d Right atrium
- 3 Spinal nerves arise from-
 - a Spinal cord
 - b Brain
 - c Lungs
 - d Pharynx
- 4 Muscles of mastication are supplied by-
 - a Mandibular nerve
 - b Maxillary nerve
 - c Facial nerve
 - d Hypoglossal nerve
- 5 Intercalated disc is present in-
 - A Smooth muscle
 - b Cardiac muscle
 - c Skeletal muscle
 - d None of the above
- 6 Klumpke's paralysis is due to injury of-
 - a Lower trunk
 - b Upper trunk
 - c Lateral cord
 - d medial cord
- 7 Which of the following bones participate in nasal septum formation?
 - a Vomer
 - b Mandible
 - c Occipital
 - d Parietal
- 8 Number of ribs is-
 - a 12 Pairs
 - b 11 Pairs
 - c 10 Pairs
 - d 9 Pairs
- 9 Foramen magnum is present in-
 - a Sphenoid bone
 - b Maxilla bone
 - c Occipital bone
 - d Frontal bone
- 10 Which of the following does not participate in knee joint?
 - a Femur
 - b Patella
 - c Tibia
 - d Fibula
- 11 Cerebrum has-
 - a Four lobes
 - b Three lobes
 - c Five lobes
 - d Six lobes
- 12 Facial artery is a branch of-
 - a Internal carotid artery
 - b External carotid artery
 - c Common carotid artery
 - d Subclavian artery

[P.T.O.]

- ## SECTION-B

$$5 \times 2 = 10$$

- Q3** Answer any two.

$$2 \times 5 = 10$$

- ### SECTION-C

- $$3+2+5+5=15$$

$$8+3+4=15$$

Describe articular surfaces, ligaments, movements and applied anatomy of shoulder joint 3+4+4+4=15

SPcial

Physiotherapy

64

Printing Pages: 2

Paper Code : BPT-102

(A) (SVSU : 2021-2022/R)

ENROLLMENT NO.

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BPT

**1st YEAR 1st SEMESTER EXAMINATION
HUMAN PHYSIOLOGY**

[Time: 3:00 Hours]

[Max. Marks: 70]

I. Objective questions (Answer all questions):-**(20x1=20)**

1. The power house of the cell is
 - a. Centriole
 - b. Centrosome
 - c. Mitochondria
 - d. Lysosomes
2. The movement of solvent from the region of higher concentration to the region of lower concentration through the semipermeable membrane is
 - a. Diffusion
 - b. Osmosis
 - c. Endocytosis
 - d. Pinocytosis
3. The lifespan of an RBC is
 - a. 100 days
 - b. 102 days
 - c. 120 days
 - d. 135 days
4. Normal WBC count in adults is
 - a. 400-1100 cells/mm³
 - b. 4000-11000 cells/mm³
 - c. 4-11 lakh cells/mm³
 - d. 4-11 million cells/mm³
5. Saltatory conduction
 - a. Increases the velocity of nerve impulse
 - b. Decreases the velocity of nerve impulse
 - c. Has no influence on the velocity of nerve impulse
 - d. Alters the direction of nerve impulse
6. The site of fatigue in an intact animal is
 - a. Neuromuscular junction
 - b. Synapse
 - c. Spinal cord
 - d. Medulla
7. _____ are called resistance vessels
 - a. Arterioles
 - b. Veins and venules
 - c. Capillaries
 - d. Large-sized arteries
8. Normal diastolic blood pressure is
 - a. Less than 90 mm Hg
 - b. 60-90 mm Hg
 - c. 60-160 mm Hg
 - d. 100-140 mm Hg
9. Cardiac muscle work as a single unit, this is called functional
 - a. Myocardium
 - b. Syncytium
 - c. Endocardium
 - d. Pericardium
10. Lack of blood supply to the brain results in the condition called as
 - a. Stroke
 - b. Hypertension
 - c. Heart block
 - d. Seizure
11. The functions of saliva include
 - a. Lubrication of food
 - b. Keeps the mouth moist
 - c. Digestion of starch
 - d. All of the above
12. Peptic ulcer is caused due to
 - a. Anti-inflammatory drugs
 - b. Alcohol
 - c. Smoking
 - d. All of the above
13. Urine is temporarily stored in
 - a. Gallbladder
 - b. Urinary bladder
 - c. Kidney
 - d. Nephrons

[P.T.O.]

14. The structural and functional unit of the nervous system is
 a. Neuron b. Nephron c. Neuroglia d. Giant cell
15. The receptor for stretch reflex is
 a. Muscle spindle b. Golgi tendon organ c. Pacinian corpuscles d. Ruffini's end organ
16. Exhaustion of neurotransmitters results in
 a. Divergence b. Delay c. Fatigue d. Occlusion
17. The receptor for smell is
 a. Rods b. Hair cells c. Macula d. Olfactory bulb
18. Diabetes insipidus occurs due to the deficiency of
 a. Growth hormone b. Insulin c. ADH d. Thyroxin
19. The process of union of male and female gametes is called
 a. Luteinization b. Implantation
 c. Neutralization d. Fertilization
20. The phase of a menstrual cycle occurring after ovulation is
 a. Proliferative phase b. Secretory phase
 c. Midluteal phase d. Bleeding phase

II. Very Short questions (Answer any five only)

(5x2=10)

1. Jaundice
2. Dwarfism
3. Isometric contraction
4. Reflex Arc
5. Parkinsonism
6. Heart sounds

III. Short Questions (Answer any two)

(2x5=10)

1. Functions of Hypothalamus
2. Peristalsis
3. Functions of Blood

IV. Long questions (Answer any two)

(2x15=30)

1. Write the composition & functions of gastric juice. Discuss the mechanism of HCL secretion.
2. Define Erythropoiesis. Explain its stages and factors affecting it.
3. Discuss the synthesis, regulation and physiological actions of thyroid hormone.

Enrollment No.

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BPT

**1st YEAR EXAMINATION
FUNDAMENTAL OF ELECTROTHERAPY**

[Time : 3:00 Hours]

[Max. Marks : 70]

Note:- Draw labeled diagrams wherever necessary.

Section-A**MCQ'S**

Attempt all question

[10x2= 20 Marks]

- 1) Type of rheostat are ? 2
 - a) Series rheostat
 - b) Shunt rheostat
 - c) Both A & B
 - d) None of the above
- 2) Wavelength of UVA is ? 2
 - a) 280-315 nm
 - b) 260-280 nm
 - c) 315-400 nm
 - d) none of above
- 3) which type of current clinically used ? 2
 - a) AC
 - b) DC
 - c) Pulsed current
 - d) all of above
- 4) What is the characteristics of DC current ? 2
 - a) continous
 - b) monophasic
 - c) both A & B
 - d) none of above
- 5) ultrasound absorption is least in- ? 2
 - a) fat
 - b) blood
 - c) skin
 - d) bone
- 6) Therapeutic frequency of short wave is? 2
 - a) 27.12 kHz
 - b) 27.12 MHz
 - c) 27.12 GHz
 - d) None of the above
- 7) An Ammeter is a: 2
 - a) Low resistance galvanometer
 - b) High resistance galvanometer
 - c) Medium resistance
 - d) None of the above

[P.T.O.]

8) Type of TENS is:

- a. Low TENS
- b. high TENS
- c. Burst TENS
- d. All of the above

9) Types of wave:

- a) Longitudinal
- b) Transverse
- c) Both a & b
- d) None of the above

10) Contra indication of UVR include :

- a) Erythema
- b) Lupus erythematosus
- c) Both A & B
- d) None of the above

SECTION -B

Q-1 Attempt any five out of six

[5x2= 10 Marks]

- a- What is SWD
- b- Latent heat
- c- Galvanic current
- d- Resistance
- e- Transistors
- f- Earth shock

Q-2 Attempt any two out of three

[2x5= 10 Marks]

- a- What is low TENS
- b- What is WAX BATH therapy
- c- What is UVR therapy

SECTION -C

Q-1 Attempt any two out of three

[15x2= 30 Marks]

- 1- Write down in detailed about ultrasound therapy ?
- 2- What is infra red radiation therapy ? write down in detailed .
- 3- Define IFT ? write down in detailed .

ENROLLMENT NO.

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BPT
1st YEAR EXAMINATION
BIOCHEMISTRY

[Time : 1:30 Hours]

[Max. Marks : 35]

Section A

MCQ Select one most suitable answer:-

1X10=10

1. In proteins, the α -helix and β -pleated sheet are examples of;
 - (a) Primary structure
 - (b) Secondary structure
 - (c) Tertiary structure
 - (d) Quaternary structure
2. The highest concentration of cysteine can be found in;
 - (a) Melanin
 - (b) Collagen
 - (c) Keratin
 - (d) Myosin
3. In human beings, all the following amino acids are nonessential except;
 - (a) Glycine
 - (b) Tyrosine
 - (c) Cysteine
 - (d) Valine
4. All the following are composed of glucose except;
 - (a) Amylase
 - (b) Glycogen
 - (c) Maltose
 - (d) Insulin
5. The principal site for gluconeogenesis is;
 - (a) Kidney
 - (b) Muscle
 - (c) Liver
 - (d) Adipose tissue
6. The following substance lacks cholesterol;
 - (a) Eggs
 - (b) Butter
 - (c) Apple juice
 - (d) Chicken
7. Lipid bilayer membrane contains the following lipid;
 - (a) Cholesterol
 - (b) Cholesterol ester
 - (c) Linoleic acid
 - (d) Linolenic acid

[P.T.O]

8. Prostaglandins are synthesized from;
- (a) Oleic acid
 - (b) Linoleic acid
 - (c) Arachidonic acid
 - (d) Linolenic acid
9. Ketone bodies are;
- (a) Produced in large amounts during starvation and diabetes
 - (b) Converted to HMG CoA in peripheral tissues
 - (c) Synthesized mainly in the peroxisomes of extrahepatic tissues
 - (d) Used by brain in preference to glucose
10. Isoenzymes for a given reaction;
- (a) Have different substrate specificities
 - (b) Bind to at least two different substrates
 - (c) Have identical affinities for the same substrate
 - (d) Exhibit different electrophoretic mobilities

SECTION B

Q-2. Answer any Five out of Six

(5x2=10)

- a) Define Hetro-polysacchride with example.
- b) Essential fatty acids
- c) Denaturation of protein
- d) Significance of collagen
- e) Vitamin C- Sources & RDA
- f) Deficiency manifestations of Folic acid

Q-3 Answer any Five out of Six

(5x3=15)

- a) Types of Diabetes mellitus
- b) Trans Fat
- c) Structure of protein
- e) Transamination
- f) Isoenzymes
- g) Competitive inhibition.

Printing Pages : 2

Paper Code : BPT- 107

(C) (SVSU:2021-2022/R)

Enrollment No.

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BPT
1st YEAR EXAMINATION
YOGA THERAPY

Max. Marks:50

Time: 2:00 Hrs.

Note: Attempt all questions as per the instructions.

Section A(MCQs)

(10*1=10)

Question 1- Attempt all questions.

1-Indications of Padhastasana.

- a) Constipation
- b) Indigestion
- c) Flatulence
- d) All of the above

2-Third part of Niyama

- a) Saucha
- b) Tapas
- c) Swadhyaya
- d) Satya

3-Jnana yoga means.

- a) Purification of brain
- b) Yoga of knowledge
- c) Yoga of devotion
- d) Physical yoga.

4 - Samadhi means

- a) Action
- b) Gaining knowledge
- c) Fulfillment
- d) Karma

5-First part of "Yama"

- a) Asteya
- b) Satya
- c) Ahimsa
- d) Aparigraha

6-Another name of "Shavasana"

- a) Mritasana
- b) Jeevasana
- c) Mayurasana
- d) Makrasana

7-Which asana can be done just after taking the food

- a) Bhujangasana
- b) Mayurasana
- c) Vakrasana
- d) Vajrasana

[P.T.O.]

8-In Hatha. Ha means

- a) Sun
- b) Moon
- c) Light
- d) Exercise.

9-Moksha means.

- a) Stability
- b) Concentration
- c) Freedom
- d) Consciousness

10- Contraindications of "Utkatasana"

- a) High BP
- b) Sinusitis
- c) Impotence
- d) Obesity

Section – B (Short Answer Questions)

Question 2- Attempt any five questions

(5*4=20)

- (a) Trace the history of yoga.
- (b) Explain the concept of mind, body & soul in terms of yoga.
- (c) Difference between asana & exercise
- (d) Explain Pratyahara in short.
- (e) Explain Shloka of Asana with their meaning.
- (f) Discuss the various breathing exercises.

Question 3 - Attempt any four questions

(4*5=20)

- (a) Explain Niyama with their benefits.
- (b) Explain Samadhi in detail.
- (c) Explain Raja yoga in detail.
- (d) Write rules & regulations of Practicing yogasana.
- (e) Explain Yama with their benefits.

Printing Pages : 2

Paper Code : BPT- 101

(E) (SVSU:2021-2022/R)

Enrollment No.

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BPT

1st YEAR EXAMINATION

Human Anatomy

Time: 3:00 Hrs.

Max. Marks:70

Note:- Draw labeled diagrams wherever necessary.

SECTION-A

Q1 Multiple choice questions. Choose the correct response.

20X1=20

- 1 Diaphragm is a-
 - a Nerve
 - b Artery
 - c Muscle
 - d Bone
- 2 Pleura is the covering of -
 - a Lung
 - b Heart
 - c Kidney
 - d Liver
- 3 Maxilla is a-
 - a Pneumatic bone
 - b Sessamoid bone
 - c Long bone
 - d None of the above
- 4 Epiglottis has-
 - a Hyaline cartilage
 - b Elastic cartilage
 - c Fibro cartilage
 - d None of the above
- 5 Number of cranial nerves is-
 - a 10 pairs
 - b 12 Pairs
 - c 8 Pairs
 - d 16 Pairs
- 6 Right lung has-
 - a Two lobes
 - b Three lobes
 - c Four lobes
 - d Five lobes
- 7 Uterus is an organ of-
 - a Excretory system
 - b Male reproductive system
 - c Female reproductions
 - d Respiratory system
- 8 Which of the following is responsible for voice production?
 - a Trachea
 - b Lungs
 - c Larynx
 - d Pharynx
- 9 Stomach has-
 - a Smooth muscle
 - b Skeletal muscle
 - c Cardiac muscle
 - d None of the above
- 10 Superior Vena Cava opens in-
 - a Right atrium
 - b Left atrium
 - c Right ventricle
 - d Left ventricle
- 11 Cerebellum is a part of-
 - A Nervous system
 - b Digestive system
 - C Respiratory system
 - d Excretory system
- 12 Number of lumbar vertebrae is -
 - a 7
 - b 6
 - c 5
 - d 12
- 13 Ureter opens in-
 - a Uterus
 - b Urinary bladder
 - c Urethra
 - d None of the above

[P.T.O.]

- 14 Glenoid labrum surrounds-
 a Head of humerus b Head of radius
 c Glenoid cavity of scapula d None of the above
- 15 Fallopian tube arises from-
 a Ureter b Kidney
 c Uterus d Urinary bladder
- 16 Maximum movements occurs in-
 A Fibrous joint b Cartilaginous joint
 C Synovial joint d Gomphosis
- 17 Deltoid muscle takes origin from-
 A Radius b Scapula
 C Ulna d Humerus
- 18 Oropharynx is situated behind-
 a Nasal cavity b Larynx
 c Oral cavity d Trachea
- 19 Musculocutaneous nerve is a branch of-
 A Lateral cord b Medial cord
 C Posterior cord d Upper trunk
- 20 Thyroid gland is situated in front of-
 a Epiglottis cartilage b Thyroid cartilage
 c Arytenoid cartilage d Corniculate cartilage

SECTION-B

Q2 Answer any five in brief.

5X2=10

- a Movements of shoulder joint
 b Dangerous area of face
 c Femoral triangle and femoral hernia
 d Ligaments of knee joint
 e Enumerate muscles of hand
 f Muscles of mastication

Q3 Answer any two.

2X5=10

- a Origin, insertion, nerve supply and action of biceps brachii muscle
 b Classification of Bones with note on Sessamoid bone
 c Relation of hip joint

SECTION-C

Q4 Describe in detail the Scalp and enumerate muscles of facial expression

5+5+3+2=15

Q5 Describe lateral surface of cerebrum and its supplied

7+8=15

OR

Describe boundaries and contents of Posterior triangle of neck

7+8=15

Printing Pages: 1

Paper Code : BPT-102

(C) (SVSU : 2021-2022/R)

ENROLLMENT NO.

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BPT
1st YEAR EXAMINATION
HUMAN PHYSIOLOGY

[Time: 3:00 Hours]

[Max. Marks: 70]

I. Objective questions-(Answer all questions) :-

(20x1=20)

1. The thickness of the cell membrane is
a. 7-10 nm b. 15-25 nm c. 40-70 nm d. 85-95 nm
2. Cell drinking is also known as
a. Phagocytosis b. Pinocytosis c. Exocytosis d. Endocytosis
3. The normal RBC count in males is
a. 5-5.5 lac cells/mm³ b. 1.4-4 million cells /mm³ c. 4-11 million cells /mm³ d. 5-5.5 million cells /mm³
4. Erythroblastosis foetalis can occur when the Rh+ child is born to
a. Rh(-) mother b. Rh (+) mother c. Rh(+) mother and Rh (-) father d. Rh (-) father
5. Lifting a weight of 2 kg from the ground is an example of
a. Isotonic contraction b. Isometric contraction c. Clonus d. Fatigue
6. _____ are called exchange vessels.
a. Arterioles b. Veins and venules c. Capillaries d. Large-sized arteries
7. Normal systolic blood pressure is
a. Less than 90 mm Hg b. 60-90 mm Hg c. 60-160 mm d. Hg 100-140 mm Hg
8. Carbon dioxide transport occurs in blood in the form of
a. Physical solution b. Combination with Hemoglobin. c. As bicarbonate d. All of the above
9. Muscles of inspiration include all EXCEPT
a. Diaphragm b. External intercostals c. Sternocleidomastoid d. Internal intercostals
10. The site of fatigue in an intact animal is
a. Neuromuscular junction b. Synapse c. Spinal cord d. Medulla
11. Haemorrhages are seen in
a. Esophagus b. Stomach c. Small intestine d. Large intestine
12. Secretions of liver and bile enter the duodenum through
a. Hepatic duct b. Cystic duct c. Common bile duct d. Interlobular duct
13. The normal GFR is
a. 125 mL/min b. 125 mL/day c. 125 mL/min d. 125 L/day
14. The short branching process of a neuron is
a. Axon b. Dendrite c. Climbing fiber d. Mossy fiber
15. The process of formation of the myelin sheath is
a. Myelinogenesis b. Neurogenesis c. Dysgenesis d. Agenesis
16. Hypermetropia is corrected by
a. Concave lens b. Convex lens c. Cylindrical lens d. Bifocal lens
17. Deficiency of vitamin A causes
a. Myopia b. Astigmatism c. Cataract d. Nyctalopia
18. Failure of descent of testis is called
a. Cholecystitis b. Cryptorchidism c. Hypogonadism d. Sterility
19. Testosterone
a. Increases RBC count b. Causes muscular growth c. Influences bone growth d. All of the above
20. A permanent method of sterilization is
a. Use of condoms b. Copper T c. Oral contraception d. Tubectomy

II. Very Short questions (Answer any five only)

(5x2=10)

1. Diffusion
2. Synapse
3. Puberty
4. Reflex Arc
5. Peptic Ulcer
6. Diabetes Mellitus

III. Short Questions (Answer any two)

(2x5=10)

1. Contraceptive measures
2. Functions of Saliva
3. Basal Ganglia

IV. Long questions (Answer any two)

(2x15=30)

1. Define blood pressure. Give its normal values. Discuss the factors affecting blood pressure.
2. Enumerate the hormones secreted from the pituitary gland. Add a note on growth hormone and its actions.
3. Draw and explain the action potential curve of a skeletal muscle.

ENROLLMENT NO.

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BPT
1st YEAR EXAMINATION
FUNDAMENTALS OF EXERCISE THERAPY

[Time: 3:00 Hours]

[Max. Marks: 70]

Section A

Q.1 MCQ (Attempt All Questions)**(20 X1=20)**

- 1) Pendulum movement is mainly for-
 a. Shoulder b. Hip c. A and b d. Neck
- 2) _____ is not a component of postural reflex
 a. Joint proprioceptor b. Brain c. Skeletal muscle d. None
- 3) _____ is not an effect of massage.
 a. Improper circulation b. Induces relaxation
 c. Scar mobilization d. Strengthening the muscle
- 4) ROM of hip flexion is
 a. 120-130 degrees b. 150 degree c. 90 degree d. 180 degree
- 5) _____ is a contraindication of massage
 a. Local infection b. Edema c. Pain d. Spasm
- 6) _____ is an indication of massage
 a. Sweating b. Spasm c. Hypersensitivity d. None
- 7) ROM of any joint can be checked with the help of
 a. Inch tape b. Scale c. Goniometry d. Ask running
- 8) Measurement of vital capacity and range of respiratory exertion use-
 a. Inch tape b. Goniometry c. Spirometer d. None
- 9) Effects of free exercises are
 a. Relaxation b. Joint mobility c. Muscle power and tone d. All
- 10) Which of these is not piece of gymnasium
 a. Swiss ball b. Medicine ball c. Kettle d. Weights
- 11) Shoulder wheel is usually used for
 a. Elbow b. Hand c. Shoulder d. All
- 12) With the help of goniometer we measure
 a. ROM b. Muscle work c. Muscle power d. None
- 13) The placement of goniometer
 a. On bony prominence b. At the muscle c. Apart from the body d. None
- 14) Exercise performed by a person without any external force other than that of gravity
 a. Assisted exercises b. Resisted exercises c. Free exercises d. All
- 15) Walking aids are
 a. Pullies b. Crutches c. Suspension therapy d. Hydrotherapy
- 16) Rhythmically swinging movements are _____
 a. Increase the joint movement b. Increase the muscle power and tone
 c. Relaxation d. All
- 17) Suspension therapy comes under
 a. Electrotherapy b. Exercise therapy c. Manual therapy d. None
- 18) Types of goniometer are
 a. Audio b. ScientificTherapeutic
 c. All the above d. Development of muscle efficiency

[P.T.O.]

- 19) _____ is not a component of postural reflex
- Joint proprioceptor
 - Brain
 - Skel
 - Strengthening the muscle
- 20) _____ is a contraindication of massage
- Local infection
 - Edema
 - Pain
 - Spasm

Section B

Q.2 Answer Any Five (Very Short Answer Questions)

(5 X2=10)

1. Define posture .
2. Define passive movements.
3. Effects and uses of massage.
4. Define the Axial suspension.
5. Define 1st order lever.
6. Define goniometry .

Q.3 Attempt Any Two (Short Answer Questions)

(5 X2=10)

1. Write in detail about Shoulder wheel.
2. Define suspension therapy in detail .
3. Write in detail about different types of massage therapy.

Section C

Q.4 Long Answer Questions(Attempt Any Two)

(2x15=30)

1. What is the relaxation technique? Describe in detail.
2. What is levers? Discuss in detail types of lever .
3. Define different type of movement .write down in detail.

Printing Pages: 2

Paper Code : BPT-104

(A) (SVSU : 2021-2022/R)

ENROLLMENT NO.

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BPT

1st YEAR EXAMINATION

FUNDAMENTALS OF ELECTROTHERAPY

[Time: 3:00 Hours]

[Max. Marks: 70]

Note: Attempt the all questions as per the instructions.

Section-A

MCQ's Attempt all questions.

(10x1=10)

Q1- Which of the following technique of Therapeutic ultrasound uses to warm tissue?

- a) Conduction
- b) Convection
- c) Conversion
- d) Sublimation

Q2 -What is phonophoresis?

- a) Using ultrasound to drive topical medications into tissue
- b) Using electric current to drive medications into tissue
- c) Using massage to drive topical medications into tissue
- d) Using cold spray to numb a painful area

Q3 -What is iontophoresis?

- a) Using ultrasound to drive topical medications into tissue
- b) Using electric current to drive medications into tissue
- c) Using massage to drive topical medications into tissue
- d) Using cold spray to numb a painful area

Q4- Hot packs are typically maintained in water baths at what temperature?

- a) 40° to 50°C
- b) 60° to 70°C
- c) 70° to 80°C
- d) 80° to 90°C

Q5- Which of the following mechanisms is best described as the transfer of energy between two bodies at different temperature through direct contact?

- a) Convection
- b) Conduction
- c) Conversion
- d) Circumduction

Q6 -Which of the following is a contraindication to heat therapy?

- a) Muscle spasm
- b) Chronic inflammation
- c) Arthritis
- d) Scar tissue

[P.T.O.]

Q7 - Which of the following is the most effective type of transcutaneous electrical nerve (TENS) stimulator?

- a) High frequency, high intensity
- b) High frequency, low intensity
- c) Low frequency, high intensity
- d) Low frequency, low intensity

Q8- Which of the following is an appropriate therapeutic ultrasound frequency?

- a) 100 MHz
- b) 1,000 MHz
- c) 1 MHz
- d) 20 MHz

Q9- Which one is **not** a therapeutic effect of heat therapy?

- a) Increased nerve signal conduction
- b) Increased tendon extensibility
- c) Increased blood flow
- d) Decreased collagen extensibility

Q10 -All of the following are indications for heat therapy **except**:

- a) Arthritis
- b) Chronic inflammation
- c) Superficial thrombophlebitis
- d) Vascular Insufficiency

Section – B

Question 2 - Attempt any five questions (Short Answer questions

(5x3=15)

- (a) Faradic & galvanic current
- (b) Indication & contraindication of superficial heat
- (c) Therapeutic effect of heat
- (d) Shock
- (e) Semiconductor
- (f) Contrast bath

Question 3 – Attempt any three questions

(3x5=15)

- (a) Cryotherapy & its techniques
- (b) Luminous generator
- (c) Hydro collator pack
- (d) Interferential therapy

Section – C

Question 4 – Attempt any two Long Answer questions

(15x2 =30)

- (a) Define ultrasound therapy. Therapeutic and physiological effects, indications and contraindications?
- (b) Discuss about the SWD. Physiological effects, indications and contraindications?

OR

- (c) Describe PWB along with its indications and contraindications?

ENROLLMENT NO.

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BPT
Ist YEAR EXAMINATION
BIOCHEMISTRY

[Time : 1:30 Hours]

[Max. Marks : 35]

Section A

MCQ Select one most suitable answer:-

[1X10=10]

1. Which of the following vitamins is not a component of electron transport chain?
 - a) Nicotinamide
 - b) Ubiquinone
 - c) Biotin
 - d) Riboflavin
2. All the following are nutritional deficiencies, except:-
 - a) Tuberculosis
 - b) Marasmus
 - c) Xerophthalmia
 - d) Goiter
3. The mineral which is associated with muscular pain:-
 - a) Cobalt
 - b) Copper
 - c) Molybdenum
 - d) Selenium
4. The RDA among fat soluble vitamin is lowest for:-
 - a) Vitamin E
 - b) Vitamin D
 - c) Vitamin A
 - d) Vitamin K
5. The principal site for gluconeogenesis is;
 - (a) Kidney
 - (b) Muscle
 - (c) Liver
 - (d) Adipose tissue
6. The following substance lacks cholesterol;
 - (a) Eggs
 - (b) Butter
 - (c) Apple juice
 - (d) Chicken
7. Which one of the following enzymes is raised in first 8 hours after myocardial infarction?
 - a) Creatine kinase
 - b) Aspartate transaminase
 - c) Lactic dehydrogenase
 - d) Alanine transaminase
8. Which one of the following enzyme do not participate in removal of free radicals?
 - a) Catalase
 - b) Peroxidase
 - c) Creatine kinase
 - d) Superoxidase dismutase
9. The general test for identification of carbohydrate is :
 - a) Benedict's test
 - b) Bial's test
 - c) Molisch test
 - d) Fehling's test

[P.T.O]

10. Hydroxyapatite crystals consists of:-
a) Calcium
b) Phosphate
c) Hydroxyl
d) All of the above

SECTION B

Q-2. Answer any Five out of Six

- a) Define Polysaccharides with example
b) Types of Diet in Health and disease
c) Aromatic Amino Acids
d) Classification of enzymes
e) Vitamin D- Sources & RDA
f) Bery -Bery

[5x2=10]

Q-3 Answer any Five out of Six

- a) Define Ketonuria
b) Significance of BMI
c) Calcium regulation
e) Importance of HMP Shunt
f) Diagnostic uses of enzymes
g) Define Metabolic syndrome .

[5x3=15]

Printing Pages: 2

Paper Code : BPT-106

(A) (SVSU : 2021-2022/R)

ENROLLMENT NO.

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BPT

1st YEAR EXAMINATION

SOCIOLOGY

[Time : 1:30 Hours]

[Max. Marks : 35]

Attempt all MCQ:-

[10×1=10]

- Joint family is a
A.Modern family B.Rural family
C.Three generation family D.None of them.
- Industrial society called as
A. farming B.Dressing C.factory D.None of them
- pharmaceutical industry is related to
A.Medicine B.Milk C.curd D.None of them
- Agricultural society is found in
A.Rural B.Urban C.Mall City D. Semi urban
- Cancer is a...
A Non communicable Disease B.communicable disease
c.epidemic Disease D.None of them
- Dowry is related to
A. Goods. B. Wealth. C. Property D. All
- PNDT ACT is related to..
A. Female foeticide. B. Cancer. C. Dowry. D. All
- Write a full form of PHC
- Write a full form of UHTC
- Which one is non communicable disease.
A. Hypertension B. stroke C. Cancer D. All

Q2. Write any Five Answer.

[5×2=10]

- What do you know about the Hindu marriage?
- Write a short note on joint family?
- Describe the importance of physiotherapy and sociology?
- What you know about the communicable diseases and non communicable diseases?
- What do you know you about Social change?
- Write a short note on social work?

Q 3. Write any Three long Answer.

[3×5 =15]

- Write differences between joint and nuclear family?
- Write Differences between Hindu and Muslim marriage?
- Write the short note on urban and rural community?
- Write any social problem of society?

Printing Pages : 1

Paper Code : BPT- 107

(A) (SVSU:2021-2022/R)

Enrollment No.

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BPT
1st YEAR EXAMINATION
YOGA THERAPY

Time: 2:00 Hrs.

Max. Marks:50

Note: Attempt all questions as per the instructions.

Section A(MCQs)

(10*1=10)

Question 1- Attempt all questions.

1- Indication of Tadasna.

- a) Short height b) Diabetes mellitus c) Obesity d) Eye disorder

2- Yogaschittavrittinirodha" (PYS 1/2)

- a) Yoga is the modification of the Chitta.
 b) Yoga is the dexterity in action.
 c) Yoga is the elimination of toxins.
 d) Yoga is a balance of the body

3- 'Samatvam yoga uchyate (BG 2/48).

- a) Yoga is the equanimity of the mind.
 b) Yoga is the balance of mind.
 c) Yoga removes toxins.
 d) Yoga is the modification of the Chitta.

4- How many types of "Yamas"

- a) 5 b) 4 c) 1 d) 2

5- How many types of "Niyama"

- a) 2 b) 4 c) 6 d) 5

6- Yoga means

- a) Unity b) health c) break d) mind-body relax

7- Meaning of "Pranayama"

- a) Cessation of breath. b) Inhalation c) Exhalation d) Exercise

8- Yoga: KarmasuKaushalam (BG 2/50).

- a) Yoga is the dexterity in action.
 b) Yoga is the elimination of toxins.
 c) Yoga is a balance of body
 d) Yoga removes toxins

9- Contraindications of Dhanurasana.

- a) Hernia. b) Backache. c) Dysmenorrhea. d) Renal Calculi.

10- Contraindications of Shavasana.

- a) Mental Disorder. b) Emotional disorder c) Backache. d) Hernia.

Section - B (Short Answer Questions)

(5*4=20)

Question 2- Attempt any five questions

- (a) Definition of yoga acc. To Bhagwat Geeta.
 (b) Definition of yoga acc. To Patanjali.
 (c) Explain Karma Yoga in short.
 (d) Explain Bhakti Yoga in short.
 (e) Limitations of Sushkma Vyayama.
 (f) Explain meditation in short.

Question 3 - Attempt any four questions

(4*5=20)

- (a) Difference between pranayama & breathing exercise.
 (b) Explain Antaranga yoga.
 (c) Difference between asana & exercise
 (d) Explain Bahiranga yoga.
 (e) Explain principles of yoga.
