Q.P.Code: 201014 Reg. No.:.... Second Year BPT Degree Supplementary Examinations - April 2014 **BIOMECHANICS** Time: 3 hrs Max marks: 100 Answer all questions Draw diagrams wherever necessary **Essays** (2x10=20)1. Explain in detail the articulations of the shoulder complex and add a note on its static and dynamic stability 2. Define posture and explain sagittal analysis of posture **Short notes** (10x5=50)3. Describe COG, LOG and BOS 4. Explain in detail the biomechanics of lifting 5. Explain the phases and kinematics of stair climbing 6. Explain the structure of a synovial joint 7. Explain the role of intrinsic muscles of the hand 8. Define stress and strain. Add a note on load deformation curve 9. Describe the structure of the radio-ulnar joint 10. Define gait and classify the various phases & sub phases of the gait cycle 11. Explain the movements of the sacroiliac joint 12. Describe the role of patella in the knee joint **Answer briefly** (10x3=30)13. Define inertia 14. Describe the functional position of the wrist and the hand 15. Angle of pull of a muscle

- 16. Define cadence
- 17. Centre edge angle
- 18. Movements of the TMJ joint
- 19. Hysteresis
- 20. Angle of torsion of femur
- 21. Pivot joint with example
- 22. Palmar arches

Q.P.Code: 201014 Reg. No.:....

Second Year BPT Degree Supplementary Examinations - June 2013

BIOMECHANICS

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- 1. Explain in detail the kinetics and kinematics of the cervical spine
- 2. Briefly describe the structural components of the hip joint and explain the role of hip abductors in unilateral stance

Short notes (10x5=50)

- 3. Describe scapulohumeral rhythm
- 4. Explain in detail the biomechanics of throwing
- 5. Explain active and passive insufficiency with hamstring muscle as an example
- 6. How third order lever is converted into second order lever. Explain with an example
- 7. Tabulate the arthrokinematics of all the movements of the knee joint
- 8. Screw home mechanism of the knee
- 9. Explain various phases of the gait cycle
- 10. Planes and axis
- 11. Explain the movements of the pelvic girdle
- 12. Open and closed kinematic chains

Answer briefly (10x3=30)

- 13.Q angle
- 14. Concurrent forces
- 15. Define equilibrium
- 16. Define newton's laws of motion
- 17. Extensor mechanism
- 18. Genu varum
- 19. Pronation twist
- 20. Concave convex rule
- 21. Torque and moment arm
- 22. Define elasticity

Q.P.Code: 201014 Reg. No.:.....

Second Year BPT Degree Examinations - October 2012

BIOMECHANICS

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- Describe the role of cruciate ligaments and menisci in the kinematics of the tibiofemoral joint. Add a note or locking mechanism of the knee
- 2. Define gait and mention the phases of gait cycle. Describe kinetics and kinematics of stance phase of gait cycle.

Short notes (10x5=50)

- 3. Describe isotonic contraction with suitable examples
- 4. Explain the extensor mechanism of the hand with diagrams
- 5. Mention the different lever systems and describe them with examples
- 6. Define posture and add a note on sitting posture
- 7. Explain the structure of plantar arches and mention three functions.
- 8. Mention the motions available at the patella femoral joint. Add a note on the motions of patella during flexion and extension of the knee
- 9. Analyze the muscle forces at the hip during unilateral stance
- 10. What is stress and strain. Explain the load deformation curve with an example
- 11. Ligaments of the wrist complex
- 12. Describe the joint motions and muscle activity that occur in running gait

Answer briefly (10x3=30)

- 13. Forward head posture
- 14. Mechanical advantage of lever
- 15. Contractile unit of a muscle
- 16. Intrinsic minus hand
- 17. Centre edge angle of acetabulum
- 18. Pes planus
- 19. Measurement methods of crutches and canes
- 20. Movements of pelvis on femur
- 21...Deltoid ligament and lateral collateral ligament of ankle joint
- 22. Concave- convex rule with an example

Q.P.Code: 201014 Reg. No.:....

Second Year BPT Degree Examinations - October 2013

BIOMECHANICS

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- Explain in detail about analysis of posture in sagittal plane and mention the deviation from normal posture
- 2. What are the components of shoulder complex. Explain about the scapula humeral rhythm in detail

Short notes (10x5=50)

- 3. Resolution of forces
- 4. Explain the role of intrinsic muscles of the hand
- 5. Angulation of femur
- 6. Explain the structure and role of menisci in the knee joint
- Describe the sub-talar joint motions and the axis around which these motions occur
- 8. Deviations from optimal alignment in the sagittal plane of the knee
- 9. Mention the distance and time variables of gait
- 10. Radioulnar joint
- 11. Explain the kinematics of the cervical spine
- 12. Explain the role of patella as an anatomic pulley at the knee joint

Answer briefly (10x3=30)

- 13. Pronation twist of the foot
- 14. Explain ground reaction force
- 15. What is joint lubrication and mention its types
- 16. Closed chain exercises
- 17. Resting position of the scapula
- 18. What is osteokinematics and arthrokinematics
- 19. Mention the difference between active and passive insufficiency
- 20. Classification of joints
- 21. Waddling gait
- 22. Axis and planes of the body

Q.P.Code: 201014 (Old Scheme) Reg. No.:.....

Second Year BPT Degree Supplementary Examinations - September 2014 (2010 Scheme)

BIOMECHANICS

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- Explain different types of power and precision grip with muscle action and joint position
- 2. Explain in detail the hip joint forces and muscle function in unilateral and bilateral stance

Short notes (10x5=50)

- 3. Explain the lumbo-pelvic rhythm
- 4. Explain the effects of immobilization on ligament, tendon and bone
- 5. What are the components of muscle tension. Explain the length- tension relationship
- 6. Compare squat lifting with stoop lifting
- 7. Explain the kinematics of rib cage during ventilation
- 8. Name and describe the motions present in the temporomandibular joint
- 9. Which muscles contribute to dynamic stabilization of the glenohumeral joint. Briefly describe its role in dynamic stabilization.
- 10. Describe the arches of the hand with diagrams and mention any two functions
- 11. Explain the young's modulus of elasticity with an example
- 12. Explain the biomechanical role of inter vertebral disc

Answer briefly (10x3=30)

- 13. What is carrying angle and give its range
- 14. What is equilibrium and mention its types.
- 15. Cylindrical grip
- 16. Cross-eyed patella
- 17. Supination twist of the foot
- 18. Q-angle
- 19. Trabecular systems of the head and neck of femur
- 20. Functional position of wrist and hand
- 21. Triangular fibro cartilage complex of wrist
- 22. Explain creep with a diagram

Q.P.Code: 202014 Reg. No.:....

Second Year BPT Degree Supplementary Examinations - April 2014

ELECTROTHERAPY

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

1. Define pain. Explain the pain gate theory with a neat diagram.

2. Define electrodiagnosis. Explain in detail about characteristics of strength duration curve in denervated and partially denervated muscles

Short notes (10x5=50)

- 3. Treatment of psoriasis using ultra violet radiation.
- 4. Principles and uses of whirlpool therapy.
- 5. List out the methods of application of wax and explain any two in detail.
- 6. Physiological effects of cold.
- 7. What is coherence. Mention the therapeutic effects of LASER.
- 8. Effect of current flow in the tissues.
- 9. Safety devices.
- 10. Therapeutic uses and contraindications of fluido therapy.
- 11. Treatment of pain using lontophoresis.
- 12. Define beat frequency. Mention the physiological effects of interferential therapy.

Answer briefly (10x3=30)

- 13. Attenuation.
- 14. Contrast bath.
- 15. Accommodation.
- 16. Sinusoidal currents.
- 17. Faradism under pressure.
- 18. Photosensitization in ultra violet radiation.
- 19. Bio feedback.
- 20. Cross fire method in short wave diathermy.
- 21. Chronaxie and rheobase.
- 22. Ohms law

Q.P.Code: 202014	Reg. N	o.:
Second Year BPT D	egree Supplementary Examinat	tions - June 2013
	ELECTROTHERAPY	
Time: 3 hrs		Max marks:100
	Answer all questions Draw diagrams wherever necessary	
Essays		(2x10=20)
Explain physiological an	nd therapeutic effects of faradic currer	nt.
2. Define piezoelectric effe	ect. Explain the methods of application	of ultrasound therapy.
Short notes		(10x5=50)
3. Explain test dose for ult		
	I in physiotherapy department.	
5. Explain pain gate mech		
•	erapy with its physiological effects.	
7. Discuss non-luminous	IRR generators.	
8. Define LASER and exp	lain its principles.	
9. Absorption and attenuat	tion of ultrasound.	
10. Describe about hydroco	ollator pack.	
11. What is contrast bath. E	Explain its therapeutic effects and con-	traindications.
12. Anodal and cathodal ga	Ilvanism.	
Answer briefly 13. Indications of transcutar	neous electrical nerve stimulation	(10x3=30)
14. Notes on S D Curve		
15. Semiconductors.		
16. Lowering skin resistance	e for electrical stimulation	
17. Lewis hunting reaction.		
18.Coupling media.		
19. Dangers of SWD.		
20. lontophoresis.		
21. Russian currents.		
22. Uses of fluidiotherapy.		

Q.P.Code: 202014 Reg. No.:.....

Second Year BPT Degree Examinations - October 2012

ELECTROTHERAPY

Time: 3 hrs Max marks: 100

Answer all questions

Draw diagrams wherever necessary

Essays (2x10=20)

1. Define ultraviolet radiation. Explain the production of ultraviolet radiation in detail.

2. Illustrate and explain the production of short wave diathermy. Discuss the transmission of high frequency currents in the tissue.

Short notes (10x5=50)

- 3. Explain the various methods of wax application.
- 4. Explain the indications and contraindications of galvanic current.
- 5. Define TENS. Describe the indications and contraindications of TENS.
- 6. Describe the strength duration curve.
- 7. Explain the non thermal effects of ultrasound.
- 8. Define infrared radiation. Mention the types of infrared generators. Explain the indications and contraindications of the same.
- 9. What are the physiological effects of cryotherapy.
- 10. Discuss briefly the electrode spacing in short wave diathermy.
- 11. Mention the different methods of application of interferential therapy
- 12. Properties of LASER and its biophysical and biostimulation effects.

Answer briefly (10x3=30)

- 13. Condensors
- 14. Sinusoidal current
- 15.Accomodation
- 16. Merits of strength duration curve
- 17. Pulsed electromagnetic energy
- 18. Classification of LASER
- 19. Acoustic streaming
- 20. Whirlpool bath
- 21. Contraindications of hydrocollator packs
- 22. Eddy currents

Q.P.Code: 202014	Reg. No.:
	- 3 -

ELECTROTHERAPY

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- 1. Discuss physiological and therapeutic effects of short wave diathermy.
- 2. Explain in detail the production of LASER. Add a note on the therapeutic effects of LASER

Short notes (10x5=50)

- 3. Define low frequency currents. Explain therapeutic effects of interrupted direct current.
- 4. Define TENS. Explain with the help of a diagram the placement of electrodes and parameters for acute low back pain.
- 5. Describe about hydrocollator packs.
- 6. Any four methods of cold application.
- 7. Define Ohms law and explain the effective resistance of a circuit if the resistors are connected in parallel.
- 8. Explain the thermal effects of ultrasound therapy.
- 9. Indications and contraindications of interferential therapy.
- 10. Name the methods of application of wax therapy. Add a note on the Indication and contraindications of wax therapy.
- 11. Describe propagation of action potential.
- 12. Effects of whirlpool therapy.

Answer briefly (10x3=30)

- 13. Contrast bath method
- 14. Motor unit.
- 15. H.V.P.G.S.
- 16. Standing waves in ultrasound
- 17. Fuse and its importance.
- 18. Diadynamic currents.
- 19. Types of infrared radiation.
- 20. Faradism under pressure.
- 21. Piezoelectric effect.
- 22. Bio feedback.

Q.	P.Code: 211014 (New Scheme)	Reg. No.:
Se	econd Year BPT Degree Regular Examinations Scheme)	s - September 2014 (2012
Tin	me: 3 hrs • Answer all questions • Draw diagrams wherever necessions	Max marks: 100
Es	says	(2x14=28)
	Explain in detail the physiological effects and theraper current. Add a note on surging Discuss in detail the principle of production of short was indications and contraindications of SWD	(6+6+2=14)
Sh	ort notes	(4x8=32)
4. 5.	Method of application of LASER Nonthermal effect of ultrasound Methods of application of electrodes in TENS Resistance in series and parallel	
An	swer briefly	(10x4=40)
8. 9. 10. 11. 12. 13. 14.	Methods of application of Faradic type of current Uses of infra redrays Contraplanar method of SWD Mutual induction Prevention of earthshock Dangers of waxtherapy Types of UVR lamps Construction of condenser Accommodation Therapeutic uses of whirlpool bath	

No.:

Second Year BPT Degree Supplementary Examinations - April 2014

EXERCISE THERAPY

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- 1. Explain in detail the structures responsible for balance and various types of balance retraining (5+2+3=10)
- 2. Define massage. Describe the order of techniques for facial massage. Explain the therapeutic uses of each. (2+3+5=10)

Short notes (10x5=50)

- 3. Mention the types of active exercises and list out the uses of each type of active exercises
- 4. Define axis and plane. Mention the axis and plane of shoulder joint movements
- 5. Any five important principles of manual muscle test
- 6. Define stretching. Explain indications and contraindications of stretching
- 7. Classify the passive movements. Mention the indications, contraindications of passive movements
- 8. List out the difference between isometric, isotonic and isokinetic exercises
- 9. Postural drainage positions for right and left upper lobes
- 10.Briefly explain proprioceptive neuromuscular facilitation (PNF) with emphasis on contract-relax and rhythmic stabilization
- 11. Explain the sequences of functional re-education from lying to sitting
- 12. Explain the physiological adaptations to aerobic exercises

Answer briefly (10x3=30)

- 13. Define plyometric exercises
- 14. Reciprocal inhibition
- 15. Concave-convex rule and convex-concave rule
- 16. Any three properties of water
- 17. Disadvantages of group exercises
- 18. Benefits of yogasanas
- 19. Define vital capacity (VC)
- 20. Any three causes of limb length discrepancy
- 21. List the vital parameters
- 22. Define power and strength

Q.P.Code: 203014 Reg.No:.....

Second Year BPT Degree Supplementary Examinations - June 2013

EXERCISE THERAPY

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

1. What do you mean by Proprioceptive Neuromuscular facilitation (PNF). Discuss the principles of PNF and any three techniques of PNF.

2. Define postural drainage and discuss its indications & contra indications

Short notes (10x5=50)

- 3. Describe the types of breathing exercises in brief.
- 4. Concentric and eccentric contractions.
- 5. Principles of Frenkel's exercises
- 6. Closed chain exercise
- 7. Discuss in brief regarding the types of balance training
- 8. Describe the types of suspension therapy
- 9. List the effects and precautions of stretching
- 10. Describe contract relax and hold relax techniques
- 11. Phases of aerobic exercises
- 12. Discuss the principles of goniometry

Answer briefly (10x3=30)

- 13. Muscle tone
- 14. Muscle energy techniques
- 15. Pulleys
- 16. Endurance
- 17. Free exercises
- 18. Roll and slide
- 19. List the components of balance
- 20. Yoga
- 21. Diagrammatic representation of levers
- 22. List any four abnormal postures

QP.Code: 203014	Reg. No.:
-----------------	-----------

EXERCISE THERAPY

Time: 3 hrs Max marks : 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- 1. Define breathing exercise. Explain the types, indications and precautions of breathing exercise. (2+3+3+2=10)
 - 2. Define muscle strength and mention the methods of strengthening quadriceps muscle from grade 1 to grade 5 (2+8=10)

Short notes (10x5=50)

- 3. Indications, precautions and contraindications for hydrotherapy.
- 4. Immediate physiological response to aerobic exercises
- 5. Define passive movements and list out the advantages & disadvantages of passive movements
- 6. Anterior and posterior pelvic tilt.
- 7. List out the difference between true and apparent limb length measurement
- 8. Effleurage
- 9. Precautions, do and don't for stretching exercises
- 10. Define in-cordination. List the equilibrium and non equilibrium co-ordination tests
- 11. Classification of walking aids
- 12. Explain the types of suspension therapy with examples

Answer briefly (10X3=30)

- 13. Define trick movements
- 14. Line of gravity
- 15. One muscular endurance test
- 16. Medical research council (MRC) grading
- 17. Superficial sensory assessment
- 18. Types of goniometers
- 19. Muscle spindle
- 20. Karvonen's formula
- 21. Indications and contraindication of breathing exercises
- 22. Define hold-relax

Q.	P.Code: 203014 Reg. No.:									
	Second Year BPT Degree Examinations - October	2013								
T:	EXERCISE THERAPY									
H	ne : 3 hrs Ma	x marks : 100								
Ea	Answer all questionsDraw diagrams wherever necessary	/2×10-20\								
	says	(2x10=20)								
1.	Define stretching. Discuss the techniques, effects and precautions stretching. Add a note on hamstrings muscle stretching.	of								
2.	Describe the types, measurements and prescription of walking aids	3								
Sh	ort notes	(10x5=50)								
3.	Discuss the causes for decreased muscle performance									
4.	Principles of mobilization									
5.	Merits and demerits of hydrotherapy									
6.	Principles of pranayamas									
7.	Physiological responses to aerobic exercises									
8.	Discuss the determinants of stretching exercises									
9.	Multiple angle isometrics									
10	Active assisted exercises									
11	Forced expiratory techniques									
12	Rhythmic initiation									
An	swer briefly	(10x3=30)								
13	Petrissage									
14	. Gravity									
15	List any two pulmonary function tests									
16	. Define posture									
17	. Define mobilization									
18	Define passive movements									
19	. Define range of motion									
20	. Momentum									
21	List the vital parameters									
22	. Power									

Q.P.Code: 212014 (New Scheme)	Reg. No.:
-------------------------------	-----------

(2012 Scheme)

EXERCISE THERAPY

Time: 3 hrs Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x14=28)

- 1. Define suspension therapy. Explain in detail about the principles, types, indications and contraindications of suspension therapy.
- 2. Define coordination. What are the principles of coordination exercises. Explain in detail about Frenkel's exercises.

Short notes (4x8=32)

- 3. Describe concentric and eccentric exercises with examples.
- 4. Describe the indications, contraindications and goals of stretching exercises.
- 5. Explain progressive resisted exercises. Describe Delorme's technique.
- 6. What is good posture. Discuss about corrective methods and patient education to maintain good posture.

Answer briefly (10x4=40)

- 7. Explain Jacobson's relaxation techniques.
- 8. Limb length measurement.
- 9. Indications and contraindications for joint mobilization.
- 10. Explain the grades of muscle strength.
- 11. Types of walking aids.
- 12. Physiological effects of aerobic training.
- 13. Therapeutic effects of exercises in water.
- 14. Principles of goniometry.
- 15. Explain rhythmic stabilization.
- 16. Therapeutic effects of massage.

Reg.	N	n	•											
ı ıvg.		Ο.	•	•	•	 ••	•	 •	 •	• •	•	-	• •	 1

Second Year BPT Degree Supplementary Examinations - April 2014

MICROBIOLOGY AND PATHOLOGY

Time: 3 hrs Max marks: 100

- Answer all questions
- Write section A and section B in separate answer books(32 Pages).
 Do not mix up questions from section A and section B.

Q P Code: 205014 Section A – Microbiology Marks: 50

Essay: (10)

1. Define and classify sterilization. Name the moist heat methods of sterilization. Describe the autoclave in detail.

Short notes: (5x5=25)

- 2. Laboratory diagnosis of urinary tract infections.
- 3. Nosocomial infection.
- 4. Explain Hypersensitivity reactions and types
- 5. Prophylaxis against tetanus.
- 6. Laboratory diagnosis of hepatitis B virus infection.

Answer briefly: (5x3=15)

- 7. Bacterial capsule.
- 8. Name the opportunistic infections seen in HIV.
- 9. Name any six disinfectants used in a hospital.
- 10. Name the dermatophytes and infections caused by them.
- 11. Oral polio vaccine.

Q P Code: 206014 Section B – Pathology Marks: 50

Essay: (10)

1. Classify bone tumors. Explain the clinical and morphological features of osteosarcoma.

Short notes: (5x5=25)

- 2. Graves disease.
- 3. Basal cell carcinoma.
- 4. Osteoporosis.
- 5. Pathological calcification.
- 6. Sickle cell anemia.

Answer briefly: (5x3=15)

- 7. Marasmus
- 8. List the population at risk of developing AIDS.
- 9. Types of Gangrene with examples
- 10.Explain Osteomyelitis
- 11. Enumerate the transfusion transmitted infections.

		Reg.	No.:
	Second Year BP	${f T}$ Degree Supplementary Examinat	ions - June 2013
Tiı	me: 3 hrs •	Max marks: 100 e answer books. Do not tion B.	
Q	P Code: 205014	Section A- Microbiology	Marks:50
Es	ssay:		(10)
1.	Describe the pathog pulmonary tuberculo	enesis, laboratory diagnosis and methods osis	of prevention of
Sh	ort notes:		(5x5=25)
3. 4. 5.	Candida albicans Laboratory diagnosi Hot air oven Pathogenesis of po		

- 3. Laboratory diagnosis of cholera
- 4. Hot air oven

6. Functions of T cells

Answer briefly: (5x3=15)

- 7. Classification of bacteria based on morphology
- 8. Rapid plasma reagin card test
- 9. Significant bacteriuria
- 10. Routes of transmission of HIV
- 11. Enumerate the parasites causing malaria

Q P Code: 206014 Section B - Pathology Marks: 50

Essay: (10)

1. Classify meningitis. Describe the pathology and laboratory diagnosis of tuberculosis meningitis.

Short notes: (5x5=25)

- 2. Gangrene
- 3. Brain Abscess
- 4. Cardiac oedema
- 5. Leukoplakia
- 6. Malignanat melanoma

(5x3=15)**Answer briefly:**

- 4. Hypertrophy
- 5. Scurvy
- 6. Sickle cell anemia
- 7. Gastritis
- 8. Alcoholic cirrhosis

P	eg.	No	=														
1.	eg.	140	=		=	=	=	=	=	=	=	=	=	=			=

MICROBIOLOGY AND PATHOLOGY

Time: 3 hrs Max marks: 100

- Answer all questions
- Write section A and section B in separate answer books. Do not mix up questions from section A and section B.

Q P Code: 205014 Section A - Microbiology Marks: 50

Essay: (10)

1. Enumerate the agents causing meningitis. Discuss the laboratory diagnosis of acute bacterial meningitis.

Short notes: (5X5=25)

- 2. Opportunistic fungal infections in AIDS
- 3. Chemical disinfectants
- 4. Mechanisms of acquired immunity
- 5. Mycobacterium
- 6. Laboratory diagnosis of syphilis

Answer briefly: (5x3=15)

- 7. Post streptococcus sequelae
- 8. Bacteroides
- 9. Ridley and jopling classification of leprosy
- 10. Routes of transmission of bacillus anthracis
- 11. Structure of an enveloped virus

Q P Code: 206014 Section B – Pathology Marks: 50

Essay: (10)

1. Classify arthritis. Describe the features of rheumatoid arthritis.

Short notes: (5X5=25)

- 2. Pathogenesis of shock.
- 3. Fracture healing
- 4. Megaloblastic anemia
- 5. Filariasis
- 6. Thrombosis

Answer briefly: (5x3=15)

- 7. Atrophy
- 8. Necrosis
- 9. Asbestosis
- 10. Ulcer
- 11. Tuberculosis meningitis

Raa	No ·		
neg.	140	 	

MICROBIOLOGY AND PATHOLOGY

Time: 3 hrs Max marks: 100

- Answer all questions
- Write section A and section B in separate answer books. Do not mix up questions from section A and section B.

Q P Code: 205014 Section A – Microbiology Marks: 50

Essay: (10)

1. Define pyrexia of unknown origin (PUO). Name the causes for PUO. Describe the laboratory diagnosis of typhoid fever.

Short notes: (5x5=25)

- 2. Laboratory diagnosis of HIV.
- 3. Hot air oven.
- 4. Laboratory diagnosis of cholera.
- 5. Bacterial cell wall.
- 6. Streptococcus pyogenes infections and its laboratory diagnosis.

Answer briefly: (5x3=15)

- 7. Define zoonosis and mention three examples.
- 8. Name the causative agents of gas gangrene
- 9. Blood agar.
- 10. Name three bacteria and three viruses causing meningitis.
- 11. Acid fast staining.

Q P Code: 206014 Section B – Pathology Marks: 50

Essay: (10)

1. Define and classify shock. Describe the pathogenesis of septic shock.

Short notes: (5x5=25)

- 2. Pathogenesis of gouty arthritis.
- 3. Diabetic nephropathy.
- 4. Lab diagnosis of AIDS.
- 5. Pathogenesis of atherosclerosis.
- 6. Metastasis.

Answer briefly: (5x3=15)

- 7. CSF findings in pyogenic meningitis.
- 8. Four causes of hematuria.
- 9. List cardinal signs of inflammation.
- 10. Fallot's tetralogy- components.
- 11. What is necrosis. Explain the types

(New Scheme) Reg. No.:.....

Second Year BPT Degree Examinations - September 2014 (2012 Scheme)

MICROBIOLOGY AND PATHOLOGY

Time: 3 hrs Max marks: 140

- Answer all questions
- Write section A and section B in separate answer books(32 Pages). Do not mix up questions from section A and section B.

Q P Code: 214014 Section A – Microbiology Marks: 50

Essay: (14)

 Define sterilization. List the various physical methods of sterilization. Explain use of autoclave in detail

Short notes: (2x8=16)

- 2. Enumerate the causes of pyrexia of unknown origin. Describe in detail pathogenesis and laboratory diagnosis of typhoid fever
- 3. Describe in detail pathogenesis and laboratory diagnosis of syphilis

Answer briefly: (5x4=20)

- 4. Dermatophytes
- 5. Life cycle of malarial parasite
- 6. Polio vaccines
- 7. ELISA
- 8. Source of infection

Q P Code: 215014 Section B – Pathology Marks: 50

Essay: (14)

1. Define thrombosis. Discuss the pathogenesis and fate of thrombosis

Short notes: (2x8=16)

- 2. Clinical features and laboratory diagnosis of iron deficiency anemia
- 3. Mention the types and morphological changes in shock

Answer briefly: (5x4=20)

- 4. Gross and microscopy of ulcerative colitis
- 5. Gumma
- 6. Components of Fallots tetralogy
- 7. Bronchiectasis
- 8. Complications of diabetes mellitus