B.Pht. [Final Prof.]

BF/J/2006/11

P.T. in Surgical Conditions

[Old Scheme]

M.M. : 100 **Time : 3 Hours**

Section - A

All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks. [20]

1. Difference between Cauda equina & Conus medullaris lesion.
2. What is Q angle and its clinical importance.
3. What are the differences between Arterial and Venous insufficiency.
4. Mention various surgeries used in chest wall.
5. Explain the special test used to diagnose Meniocal injury.
6. Write short note on Fallots Tetrology.
7. Write short note on Cervical rib.
8. Write short note on Triple Arthrodesis.
9. What is Lordosis and its clinical significance.
10. What are the various joint positions in CTEV.

Section - B

Attempt any 8 questions. Answer to each question upto 2 pages in length. Each questions carries 6 Marks. [48]

1. Mention various abdominal surgeries & its corresponding incisioins. Add note to post incisional abdominal muscle training.
2. Role of physiotherapy in arterial insufficiency.
3. Write role of P.T. in Pneumonectomy patient.
4. Write role of P.T. after laminectomy.
5. Write role of P.T. after tendon transfer surgery.
6. Write note on post operative physiotherapy in a Total knee replacement patient.
7. Explain & illustrate donning and doffing of above knee prosthesis.
8. Explain the role of physiotherapy in Spasmodic Torticollis patient.
9. Write note on role of physiotherapy in adhesive capsulitis of shoulder.
10. Explain the role of P.T in Pott's fracture.
11. What are all the early & late complications of fracture. Add note on physiotherapy in it.
12. Explain the role of physiotherapy in post surgical Scoliotic patient.

Section - C

Attempt any ONE questions. Answer to each question upto 5 pages in length. Each question carries 16 Marks. [32]

1. Explain the Pre and Post natal physiotherapy in a pregnant lady. Add note on post operative physiotherapy after Caesarean surgery.
2. Explain in detail about assessment and post operative physiotherapy of CABG patient. Add a short note on Cardiac rehabilitation.
3. Explain the mechanism & assessment of ACL injury. Also explain about role of physiotherapy in ACL reconstruction.
4. Write note on CDH. Explain the assessment and physiotherapy of a CDH patient.

B.Pht. [Final Prof.]

BF/J/2006/11

P.T. in Medical Conditions

[Old Scheme]

M.M. : 100 **Time : 3 Hours**

Section - A

All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks. [20]

1. Discuss symptoms of Ankylosing Spondylitis.
2. Describe about Fibromyalgia diagnostic criteria.
3. What are the grades of Dyspnoea.
4. What are the phases of Cough.
5. Write a note on FEV_1.
6. Write a note on Athetoid cerebral palsy.
7. What is Dysdiadocokinesia?
8. What are the causes of Syringomyelia.
9. Discuss about Bucket handle movement.
10. Write briefly about V/Q matching.

Section - B

Attempt any 8 questions. Answer to each question upto 2 pages in length. Each questions carries 6 Marks. [48]

1. Describe about control of breathing.
2. Write a short note on Childhood asthma.
3. Describe vibration and Percussion as an adjunct to Chest physiotherapy.
4. What are the Cardinal features of Myocardial infarction.
5. Write briefly on features of Cerebellar ataxia.
6. Write down the differentiating features of Polyneuritis and Poliomyelitis.
7. Describe balance problem in elderly.
8. Describe the clinical features of Rickets.
9. Describe the features of Basal Ganglia Lesion.
10. Write down the management for Deep Vein Thrombosis.
11. Write a short note on Retrocalcaneal bursitis.
12. Write down the clinical features of Congestive Cardiac failure.

Section - C

Attempt any Two questions. Answer to each question upto 5 pages in length. Each question carries 16 Marks. [32]

1. What is Rheumatoid arthritis? Describe the deformities in R.A.
2. Describe the Physiotherapy management of 3 months old D_{10} level complete paraplegia.
3. Write down the clinical reasoning process for a 60 year old man with right Sciatica.
4. What is COPD? Write briefly on Pulmonary rehabilitation for them.

B.Pht. [Final Prof.]
BF/J/2006/11

Psychiatry

[Old Scheme]

M.M. : 50 **Time : 2 Hours**

Section - A

All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks. [10]

1. Hallucinations.
2. Play therapy.
3. Concept of normal mental health
4. Id.
5. Classification of anti-psychotic drugs.

Section – B

Attempt any 4 questions. Answer to each question upto 2 pages in length. Each questions carries 6 Marks. [24]

1. Causes of mental retardation.
2. Management of Obsessive compulsive disorder.
3. Genetics of mood disorders.
4. Side effects of Benzodiazepines.
5. Contributions of Sigmund freud.
6. Cerebral Palsy.

Section – C

Attempt any ONE questions. Answer to each question upto 5 pages in length.[16]

1. Discuss the theory and practice of classical Psychoanalysis.
2. Classify and discuss the development disorders in children.

B.Pht. [Final Prof.]

BF/J/2006/11

Rehabilitation Medicine

[Old Scheme]

M.M. : 50 **Time : 2 Hours**

Section - A

All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks. [10]

1. Define Orthotics.
2. Sensory foot.
3. Define employment.
4. Disability.
5. Diplegia.

Section – B

Attempt any 4 questions. Answer to each question upto 2 pages in length. Draw diagrams wherever necessary. *Each questions carries 6 Marks.* [24]

1. Describe clinical features of post polio residual paralysis.
2. Describe history taking in a case with amputation of lower limb.
3. Management of Volkman Ishchaemic contracture.
4. Write a short note on Educational rehabilitation.
5. Describe briefly the role of social worker in rehabilitation of a person with hemiplegia.
6. Describe components of Taylor Brace and its use in spinal injuries.

Section – C

Attempt any ONE questions. Draw diagrams wherever necessary. *Answer to each question upto 5 pages in length.* [16]

1. Define Aphasia. Describe its management in a child with Cerebral palsy.
2. What is community based rehabilitation ? Describe community resources in rural areas.

B.Pht. [Final Prof.]

BF/J/2006/11

Applied Mathematics & Statistics

M.M. : 50 **Time : 2 Hours**

Note : Simple calculator is allowed.

Section - A

All questions are compulsory. Each question carries 2 Marks. [10]

1. Give the properties of a good measure of Central value.
2. Define 'Histogram' and 'Frequency Polygon'.
3. What is 'Correlation'.
4. Prove that $\log_{10}\left[\frac{35}{78}\right] = \log_{10}7 + \log_{10}5 - \log_{10}2 - \log_{10}3 - \log_{10}13$
5. Without using tables prove that $\tan(45^\circ - A)\tan(45^\circ + A) = 1$

Section - B

Attempt any 4 questions. Each questions carries 6 Marks. [24]

1. Calculate the Karlk Pearson's Coefficient of Correlation from the following date and interpret the result:

Marks in Medicine(X):	77	54	27	52	14	35	90	25
Marks in Statistics(Y):	35	58	60	40	50	40	35	56
(X):	56	60						
(Y):	34	42						

2a. Differentiate $\sqrt{x}$ using Delta method w.r.t. x.

2b. Draw the graph of Sin in $[0, 2\pi]$.

3a. The vectors from the origin 'O' to the points 'P' and 'Q' are respectively $2\hat{i} - 6\hat{j} + \hat{k}$ and $-2\hat{i} + \hat{j} + 2\hat{k}$. Determine the area of the parallelogram formed by OP and OQ as adjacent sides.

3b. A boy 1.8 m tall is 15 m away from a tower and observes the angle of elevation of the top of the tower to be 66. Find the height of the tower.

4a. Evaluate using log tables $\frac{(62.34)^{3/4} \times (525)^{1/2}}{(.0004)^{1/4}}$ using log.

4b. The side of a square sheet is increasing at the rate of 4 cm per minute. At what rate is the area increasing where the side is 8 cm long.

5. The Scores of 3 batsmen A & B in ten innings during a certain season are:

A:	32	28	47	63	71	39	10	60	96	14
B:	19	31	48	51	67	90	10	62	40	80

5. Out of a sample of 120 persons in a village, 76 persons were given a new drug for preventing Influenza and out of them 24 person were attacked by Influenza. Out of those who were not administered the new drug, 12 persons were not affected by Influenza.
Prepare a 2 x 2 table and use x^2 (Chi-square) test for finding out whether the new drug is effective or not at 5% level.

$X^2_{.05} = 3.841 \quad v=1$

Section - C

Attempt any ONE questions. [16]

1a. Find the Centroid of a Tetrahedron with mass density 1 and bounded by the planes $x=0,\ y=0,\ z=0,\ x+z=1$

1b. Find the moment of inertia of a rectangular region of uniform density 1 ands of sides of length 2a and 2b about side of length 2a.

2a. In a test given to two groups of students, the marks obtained are as follows:

First group	41	18	20	36	50	49	36	34	49
Second group	29	28	26	35	30	44	46		

Examine the significance of difference between the arithmetic mean of the marks obtained by the students of the above two groups.

$t_{.05} = 2.14 \quad v=14$

2b. Explain in brief the uses of 'F' test.