

Department of Physiology, JNMC
Up-dation of PG Curriculum in 5 Themes for Ph.D. entrance
Examination
5 Themes

Theme- 1 – General & Cellular Physiology including Genetic Basis
& Historical perspectives & comparative physiology.

1. Physiology of cell, various cellular mechanism & genetic control mechanism.
2. Haemodynamics, bio-electrical potentials, body fluids, method of measurement
3. History of Physiology
4. Comparative Physiology

Theme-2 – Systemic Physiology (System providing transport & energy)

1. Blood & immunity
2. Cardiovascular system
3. Respiratory system

Theme- 3 –Systemic Physiology (System concerned with regulation & neural control)

1. Nerve – Muscle physiology including muscle mechanics
2. Endocrine physiology
3. Nervous system (Central peripheral & autonomic)
4. Special senses

Theme-4 – Systemic Physiology (System concerned with nutrition, procreation, growth, aging & excretion)

1. Gastro intestinal tract (GIT) & dietary requirements.
2. Reproduction and family planning / foetal & neonatal Physiology.
3. Growth & Development including aging
4. Excretion, pH, water & electrolyte balance.

Theme-5 - Applied Physiology including Recent advances

1. Patho-physiology pertaining to systemic Physiology
2. Physiological basis of various clinical investigation tests
3. Interaction of human body in ambient environment- high altitude, space and deep sea
4. Sports physiology
5. Yoga and Meditation
6. Recent advances relevant to Physiology

7. Social responsibilities of physiologists

