## **PHYSIOLOGY**

S. No.	Topic	
Experimental		
1.	A study to evaluate effect of ketogenic diet on gastric function, motility and immunity in human subjects.	
2.	Effect of 5G mobile radiofrequency radiations on development of musculoskeletal system in rat animal model.	
3.	Evaluation of heart rate variability and baroreflex sensitivity in Parkinson's disease patients following curcumin administration.	
4.	A prospective study on effect of aerobic exercise on cognitive performance in patients with mild cognitive impairment: a randomized control trial.	
5.	Effect of oral nifedipine and intravenous labetalol cerebral haemodynamic in severe hypertension in pregnancy.	
Observational (Descriptive)		
6.	Characterizing cortical plasticity in Alzheimer disease patients temporally using Transcranial Magnetic Stimulation and Functional Magnetic Resonance Imaging (fMRI).	
7.	A mechanistic study of prenatal music exposure on attention and decision making in children.	
8.	Assessment of cognitive domains in children with Attention Deficit Hyperkinetic Disorders (ADHD) in response to cognitive behaviour therapy/ treatment.	
9.	Does transcranial magnetic stimulation of dorsolateral prefrontal cortex affect executive function in depression/schizophrenia?	
10.	To study the effect of mindfulness-based intervention on stress during perinatal period in mother: An open labelled, randomized control trial.	
11.	To study the Quantitative electroencephalogram (EEG) based cortical sources and connectivity of working memory in patients with Internet addictive disorder.	

12.	To study the event related potential during emotional processing in
	children with attention deficit hyperkinetic disorder.
13.	Exploratory study of stress among nursing students.
14.	Exploratory study of autonomic Nervous System Functioning in medical
	students.
15.	Pulmonary functions in various age groups who had COVID-19 in
	various waves of infections.
16.	Obesity among general population and its relationship with pulmonary
	functions and body plethesmography.
17.	Assessment of cerebral haemodynamic using transcranial doppler and
	their correlation with neuroaxonal injury biomarkers in preeclampsia.
18.	Application of Transcranial Doppler (TCD) in detection of
	stroke/Transient Ischemic Attack.
19.	Assessment of cognition in patients on chemotherapy- using paper
	pencil tasks or evoked potentials.
20.	Assessment of autonomic functions in patients on chemotherapy.
21.	Pulmonary function tests after 6 minute walk test in patients recovered
	from COVID-19 and stayed in Intensive Care Units.
22.	Assessment of Pulmonary Function tests in miners exposed to
	sandstone dust/carpenters/sculptors (occupational exposure).
23.	Autonomic function testing among patients with hypo and hyper-
	thyroidism.
	Observational (Analytical)
24.	Does exercise improve vascular functions in obese/ diabetic patients?
25.	Is sleep architecture/quality related to the extent of cognitive decline in
	newly diagnosed dementia patients/mild cognitive impairment.
26.	Is duration of abstinence from smoking correlated with recovery of
	Chronic Obstructive Pulmonary Disease patients as assessed by
	spirometry parameters.
27.	Is psychological stress associated with early onset Parkinson's disease?
28.	Will the level of hypertension influence post-partum blood pressure level
	and autonomic functions in women who had gestational hypertension
	with normal fetomaternal outcomes.
29.	Will the nitric oxide synthase gene polymorphism be responsible for
	maternal and neonatal outcomes in women with gestational diabetes.

30.	Will the level of glycated haemoglobin affect cognition and sleep
	behavior in patients with type-II diabetes receiving and not receiving insulin therapy.
31.	Will the lesion of amygdala influence sympathetic and
	parasympathetic outputs from hypothalamus in rat model of Parkinson's disease.
32.	Effect of sleep deprivation on perceived stress and cognitive performance
	in healthcare workers.
33.	Assessment of pulmonary and cardiovascular pulmonary performance
	due to high altitude in mountain climbers.
34.	Impact of dietary habits on gastrointestinal functions among different
	age group of people.
35.	Association between sleep patterns and cognitive functions in health
	care professionals working in Intensive Care Units (ICUs).
36.	Extent of impact of Yoga and Meditation in a population from low-
	resource urban community on stress-induced physiological parameters.
37.	Comparative evaluation of magnetic resonance (MR) arterial spin
	labelling and transcranial Doppler (TCD) in cerebrovascular diseases.
38.	Study to assess the prophylactic potential of non-invasive vagal nerve
	stimulation therapy (nVNST) in depression.
39.	Study to assess the prophylactic potential of non-
	invasive vagal nerve stimulation therapy (nVNST) in patients of migraine.
40.	Non-invasive assessment of myocardial work performance in stable
	coronary artery disease. A prospective observational follow-up study.
41.	Prognostic role of Cardiopulmonary testing (CPET) in patients with
	combined heart failure with reduced ejection fraction and Chronic
	Obstructive Pulmonary Diseases: a prospective observational study.
42.	Will the glycaemic control in diabetes mellitus affect the cardiovascular
	autonomic functions in patients with long standing diabetes.
43.	Correlation of severity of Chronic Obstructive Pulmonary Diseases
	(COPD) with autonomic functions.
44.	Quantification of cardiac autonomic tone, cardiopulmonary exercise
	testing and strain rate echocardiography in patients with heart disease.
45.	Comparative study of music listening among those with mild cognitive
10	impairment and age matched controls.
46.	Comparative evaluation of autonomic functions among normotensives
	and hypertensive subjects.

47.	Cardiac autonomic functions comparison among regular practitioners
	of yoga, and sedentary workers.
48.	Assessment of cognitive functions among sleep deprived in interns,
	nurses and resident doctors.
49.	Comparative study of lipid profile among pre and post-menopausal
	women and risk of heart disease.
50.	Comparative study of lung functions among farmers, and urban non-
	farming residents.
51.	Comparative study of nerve condition of lower limb hypothyroid and
	diabetic patients.