

**PARUL UNIVERSITY**  
**FACULTY OF MEDICAL SCIENCE & RESEARCH**  
**M.B.B.S, Examination September - 2017**

**Year: 1****Subject Code: 19100103****Subject Name: Physiology Paper- I****Date: 25/09/2017****Time: 10:00 am to 12:30 pm****Total Marks: 50****Instructions:**

1. Attempt all questions from each section.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Write section-A, section-B on separate answer sheets.

**SECTION – A**

**Q.1 Structured Essay Question:** Define Cardiac output. Explain the factors affecting cardiac output and one method of measurement. **(10)**

**Q.2 Discuss on: (any three)** **(15)**

- (a) Negative feedback mechanism
- (b) Bohr's effect
- (c) Write a brief secretion of HCl in stomach. Add a note on peptic ulcer
- (d) Hypovolumic shock

**SECTION – B**

**Q.1 Write short notes on: (any two)** **(08)**

- (a) Functions of bile
- (b) Erythroblastosis foetalis
- (c) Baroreceptor mechanism

**Q.2 Write briefly on: (any four)** **(12)**

- (a) Surfactant
- (b) Glomerular filtration rate
- (c) Humoral immunity
- (d) Peripheral chemoreceptor's
- (e) Vital capacity

**Q.3 Answer in one word / MCQ** **(05)**

1. Hypercapnoea is most likely to occur in
 

(a) Pulmonary oedema	(b) Myaesthesia gravis
(c) Depression of respiratory neurons	(d) Paralysis of diaphragm
2. Vitamin B12 is absorbed in
 

(a) Ileum	(b) Upper part of Duodenum
(c) Jejunum	(d) Colon
3. Net filtration pressure in kidney (Glomerulus)
 

(a) 20mm of Hg	(b) 25mm of Hg
(c) 10mm of Hg	(d) 30mm of Hg
4. The P wave of ECG denotes electrical activity of
 

(a) AV node	(b) SA node
(c) Purkinje fibers	(d) Ventricles
5. The PO<sub>2</sub> of the arterial blood is
 

(a) 104mm of Hg	(b) 159mm of Hg
(c) 40mm of Hg	(d) 95mm of Hg

