

M. Sc. (Medical Physiology) : SUMMER - 2019
SUBJECT : PHYSIOLOGY PAPER – I
(General Physiology, Cell Physiology, Comparative Physiology & Biophysics)

Day : Saturday
Date : 01/06/2019

S-2019-3893

Time : 2.00 P.M. TO 5.00 P.M
Max. Marks : 100

N. B. :

- 1) **Q. No. 1 and Q. No. 2 are COMPULSORY.**
 - 2) Attempt **ANY SEVEN** questions from **Q. No. 3 to Q. No.10.**
 - 3) Figures to the right indicate **FULL** marks.
 - 4) Draw neat labeled diagrams **WHEREVER** necessary.
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|-------------|--------------------------------------------------------------------------------------------|-------------|
| Q.1 | Define resting membrane potential. How is it developed? How is it measured experimentally? | (15) |
| Q.2 | Discuss evaluation of respiratory system in vertebrates and non vertebrates. | (15) |
| Q.3 | Explain role of various retinal cells in analysis of vision. | (10) |
| Q.4 | Explain neurochemical mechanisms inducing sleep and wakefulness.. | (10) |
| Q.5 | Discuss dynamics of glomerular filtration and explain factors regulating it. | (10) |
| Q.6 | Define immunity. Discuss cell mediated immunity in detail. | (10) |
| Q.7 | Discuss mechanism of action of protein hormone. | (10) |
| Q.8 | Compare structural and functional properties of cardiac and skeletal muscle. | (10) |
| Q.9 | Discuss various transport mechanisms across cell membrane. | (10) |
| Q.10 | Discuss factors influencing total peripheral resistance. | (10) |

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