

2020**PHYSIOLOGY****Course : 106.2****(Ergonomics and Occupational Safety)**

Full Marks : 40

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*Answer any **two** questions of the following: 20×2=40

1. a) What do you mean by core body temperature?
Explain the concept of thermal comfort.
 - b) Describe the routes of heat exchange process that operate in between human body and environment.
 - c) Describe the mechanisms of the regulation of human body temperature when environmental temperature is above the basal temperature.
(2+3)+7+8=20
2. a) What do you mean by cost of accident?
Describe briefly about Swiss-Cheese model of accident.

[Turn over]

- b) Describe the importance of risk assessment process in Industry.
- c) Discuss briefly about the procedure for prevention of risk in the Industry.

(3+6)+4+7=20

3. a) What is cognitive ergonomics? Discuss briefly about the decision making process in human.
 - b) Evaluate the merits and demerits, from ergonomic point of view, of different types of display used in Industry.
 - c) What do you mean by user interface? State its importance in control display compatibility.
(2+5)+6+2+5=20
4. a) Explain the multidisciplinary nature of Ergonomics.
 - b) Discuss the ergonomic problems occurring due to work from home (WFH).
 - c) Suggest the preventive measures to reduce the problems due to WFH. 4+8+8=20

Submit your answer in PDF format to:**sgphys@caluniv.ac.in****cc: physiologyfirstsemexam2021@gmail.com**