

Jaypee Institute of Information Technology, Noida
End Term Examination, 2023 Odd Semester

B.Tech VII Semester

Course Title: Stress: Biology, Behaviour & Management
Course Code: 17B1NBT33

Maximum Time :2 hrs
Maximum Marks: 35

COs	Description
CO1	Explain the biological basis of stress
CO2	Relate cognitive processes and stress management
CO3	Apply acquired knowledge in understanding and adjusting to different people and situations.
CO4	Improve of quality of life by reducing chronic stress

Note: Attempt all questions in order

Q1. Answer the following in words only

[Understand; 1X5=5M; CO1]

- The duration of a Circadian cycle is _____
- The hormone that is secreted to help with sleep is called _____
- The sleep-wake cycle is ultimately controlled by the part of the brain called _____
- Heart rate and urinations are examples of _____ rhythm.
- From which stage of sleep would it be easiest to wake someone up?

Q2. Illustrate with help of examples from your own life –

[Understand; 3X3=9M; CO2]

- How classical conditioning demonstrate learning by association
- How our behaviour is impacted by the presence of others?
- Relatable example of social loafing you have experienced.

Q3. Mallika is sharing her office space with Tanya, a young employee who has joined recently. Tanya has the habit of listening to music and constantly talking on phone. Identify with justification, one workplace factor that might be causing stress to Mallika.

[Apply; 2M; CO3]

Q4. Try to figure out which of the following situations would be example of positive reinforcement and which would be negative reinforcement. Justify your answer.

[Apply; 2X2=4M; CO3]

- Taking pain reliever to reduce pain
- A restaurant waiter smiling and being pleasant since it leads to bigger tips

Q5. Differentiate between the following with the help of relevant examples

- Approach-approach & avoidance-avoidance form of conflict
- Proactive and retroactive interference
- Short-term and long-term memory
- Anterograde and retrograde amnesia

[Understand; 8M; CO2]

Q6. In an Article by Mahajan I & Bawdekar M in the year 2019 on "Mental health issues of young females living in Mumbai: Case studies", you read 4 case studies of young females living in Mumbai, pursuing professional course and facing mental health issues.

- What is the common factor in all 4 cases as discussed in the article?
- Suggest ways to improve mental health-related problems like depression, deliberate self-harm and addiction in today's young adults.

[Analyze; 2+3=5M; CO4]

Q7. For most of us approaching examination brings anxiety. Time management can reduce this anxiety and improve performance and well being. Share some tips on time-management during exams.

[Analyze; 2M; CO4]

Course Title: Stress: Biology, Behaviour & Management
Course Code: 17B1NBT733

Maximum Time: 1 Hr.
Maximum Marks: 20

At the completion of the course students will be able to

CO1	Explain the biological basis of stress
CO2	Relate cognitive processes and stress management
CO3	Apply acquired knowledge in understanding and adjusting to different people and situations
CO4	Improve quality of life by reducing chronic stress

Note: Attempt all the questions.

Q1. Choose the correct hormone from the given list for its role stated below –
Insulin; Cortisol; Serotonin; Testosterone; Thyroid

- Mainly responsible for controlling speed of body's metabolism and critical for brain development
- Stimulates development of male sexual characteristics
- Maintains normal blood glucose levels by facilitating glucose uptake, regulating carbohydrate, lipid and protein metabolism
- Referred to as "stress hormone" and is needed for the fight or flight response

[CO1 (remembering), 2 Marks]

Q2. Answer the following questions precisely in word(s) only.

- Give an example of external social stressor.
- True or False – Hiding examination results from parents is an example of problem-focused coping behaviour.
- Give an example of major life event that can cause severe trauma.
- General Adaptation Syndrome involves 3 stages – Alarm reaction, _____ and _____.
- List 2 physical symptoms that can be a sign that you are overstressed.

[CO3 (understanding), 5 Marks]

Q3. Compare and contrast between sympathetic and parasympathetic nervous system. Give relevant examples of each.

[CO1 (understanding), 4 Marks]

Q4. Enumerate the different ways of managing stress at the individual level with everyday DIY strategies. List stepwise procedure for one relaxation technique.

[CO4 (understanding), 2+2=4 Marks]

Q5. Rai has been studying for his final exams that are starting in a week's time. He is very tense as images of not securing marks needed to opt for subjects of his choice keep flashing his mind. He is unable to concentrate and blames himself for fooling around with his friends when he should have been preparing for his exams. Now he is engulfed with feelings of inadequacy, helplessness and hopelessness.

- Apply acquired knowledge in the course to identify and justify the problem Rai is suffering from.

[CO3 (Applying), 2 Marks]

- Given what you know about coping strategies, what suggestions would you like to give to Rai to improve his examination preparation.

[CO4 (Creating), 3 Marks]