

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

September / October 2023 Semester End Main Examinations

Programme: B.E.

Branch: Common to all Branches

Course Code: 22MA1AESFH / 22MA2AESFH

Course: Scientific Foundation for Health

Semester: I / II

Duration: 1 hr.

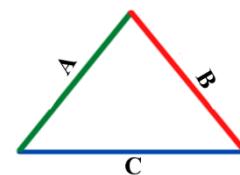
Max Marks: 50

Instructions: 1. Part C answer any three.

PART-A

Multiple choice questions

25 X 1= 25 Marks



1. Identify A, B, C of balanced health triangle

- a. A- Psychology, B- Mental, C- Social determinants
- b. A- Physical, B- Behaviour, C- Social status.
- c. A- Anxiety, B- Exercise, C- Emotion
- d. A- Physical, B- Mental, C- Social

2.is the characteristic patterns of thoughts, feelings, and behaviors that make a person unique.

- a. Personality
- b. Society
- c. Attitude
- d. Psychology

3. Four stages of developing/changing a habit are

- a. Preparation, action, maintenance, contemplation
- b. Contemplation, action, Maintenance, execution
- c. Contemplation, Preparation, Action, Maintenance
- d. Preparation, contemplation, action, maintenance

4. Anxiety disorders include

- a. Global Developmental Delay
- b. Communication Disorders
- c. Panic disorder
- d. Insomnia Disorder

5. Resilient personality people are

- a. people who experience anxiety, depression
- b. self-centered people
- c. adapting well to adversity, trauma, tragedy
- d. people who are social and outgoing

6. Cardiovascular endurance is

- a. Body's ability to efficiently and effectively intake oxygen and deliver it to body's tissues.
- b. Body's ability to efficiently and effectively be flexible.
- c. Body's ability to efficiently and effectively lift weights.
- d. All of these

7. Dual-energy X-ray absorptiometry scans are done to measure

- a. Muscular strength
- b. Body composition
- c. Muscular endurance
- d. Cardiovascular endurance

8.....is a condition in which a person regurgitates food they have previously chewed and swallowed, re-chews it, and then either re-swallows it or spits it out.

- a. Binge eating disorder
- b. Bulimia nervosa
- c. Anorexia nervosa
- d. Rumination disorder

9. Regulation of blood sugar levels, bowel function and bowel health are the functions of

- a. Carbohydrates
- b. Vitamins & minerals
- c. Proteins
- d. Fibre

10. Baked and fried foods, and industrially produced pre-packaged snacks and foods contain

- a. trans-fats
- b. saturated fats
- c. poly unsaturated fats
- d. unsaturated fats

11. High friendship health include

- a. Envy
- b. Fake
- c. Trust
- d. Disdain

12. Akil is 1.66 mts height with 82kgs. Based on the calculated BMI, assign him to right category.

- a. Overweight
- b. Obese
- c. Underweight
- d. None of the above

13. Daksh has been vaccinated against the major childhood disorders of measles, influenza, hepatitis, diphtheria, and tetanus. This is a major example of

- a. Social determinant
- b. Social Engineering
- c. Social process
- d. None of these

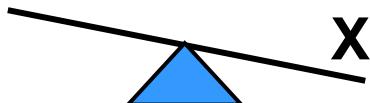
14. Hema was detected with hemoglobin content of 8.5 in the blood. To overcome this situation he need to be provided with what medication?

- a. Vitamin K, Calcium and Iron.
- b. Folic acid, Calcium and Vitamin C-rich foods.
- c. Vitamin B6, B12 rich food
- d. Iron capsules, folic acid, and Vitamin B12-rich foods

15. Identify 'X' of the Energy balance from the figure?

- a. Energy out: diet
- b. Energy out: sleep
- c. Energy out: activity
- d. Energy out: breathing

Energy in:
food and
drinks



16. Tina is showing unpredictable mood, outbursts of emotions, quarrelsome behaviour and conflict. This indicates she is suffering from

- a. addictive disorders
- b. schizophrenia
- c. borderline personality disorder
- d. mood disorders

17. The part of brain affected when a person consumes alcohol leading to loss of balance

a. cerebral cortex b. thalamus c. cerebellum d. medulla

18. Which of them is hallucinogenic drug?

a. Morphine b. Cocaine c. LSD d. Heroin

19. Parkinsonism is due to which defective transmitter in brain?

a. Noradrenaline b. eucalpia c. dopamine d. serotonin

20. High sodium intake and insufficient potassium intake

a. contribute to low blood pressure, which in turn increases the risk of heart disease and stroke.
b. contribute to high blood pressure, which in turn decreases the risk of heart disease and stroke.
c. contribute to high blood pressure, which in turn increases the risk of heart disease and stroke
d. All of these

21. Identify A, B, C, D, E of the addiction cycle

a. A-Emotional trigger, B- carving, C-ritual, D-using, E- guilt
b. A-Physical trigger, B- carving, C-use, D-overuse, E- guilt
c. A-Psychological, B- addiction, C-use, D-misuse, E- guilt
d. A-addiction, B- using, C-ritual, D- carving, E- guilt



22. Which is the Vector for Malaria

a. Drosophila b. House fly
c. Culex mosquito d. Female Anopheles mosquito

23. Virulent factors of any pathogen are:

a. Pilli & Adhesins b. Toxins & Invasins
c. Enzymes & antibiotics d. All of these

24. The infection transmitted through contact may cause STD.

a. Direct b. non-direct
c. Animals d. None

25. This is not a communicable disease

a. Chickenpox b. AIDS c. Typhoid d. Diabetes

PART- B

Match the following

5X 2= 10 Marks

1. Match the following with sources of transmission

i. Cholera	A. Animal bite
ii. Tuberculosis	B. Soil borne disease
iii. Tetanus	C. Water borne disease
iv. Rabies	D. Airborne disease

2. Match the stages of addiction

i. Stage 1	A. High risk use
ii. Stage 2	B. Experimentation
iii. Stage 3	C. Addiction
iv. Stage 4	D. Regular Use

3. Match the Personality

i. Optimistic	A. Adaptive
ii. Neurotic	B. High-achieving
iii. Conscientious	C. Positiveness
iv. Resilient	D. Self-doubt

4. Match the composition in balanced diet

i. Carbohydrates	A. 15%
ii. Proteins	B. 60%
iii. Fat	C. vital
iv. Micronutrients	D. 25%

5. Match the eating disorders

i. Anorexia nervosa	A. eating non-food substance
ii. Bulimia nervosa	B. Regurgitate
iii. Pica	C. Restrict calories
iv. Rumination disorder	D. Purging

Part-C**Answer in detail any 3 questions****3X5 =15 Marks**

1. Bablu has BMI above 40 indicating obesity. Doctor advised him to reduce weight. Suggest him on balanced diet, eating disorders and fitness components of health.
2. Arun has poor communication skills. How can he improve his communication skills and detail on impact of communication on friendship/relationship.
3. Jazz fell into alcohol/drug addiction. Detail on how addictions develop, types and deaddiction.
4. What are modes of infections and how can it be prevented? How can chronic illness affect quality of life?
5. Define health. Write a note on factors influencing health and behavior.
