

**SYLLABUS FOR THE BATCH FROM YEAR 2025 TO
2026
For
Certificate Course in Basics of Health and
Fitness**

(Credit Based Evaluation and Grading System)

Semester: I

EXAMINATIONS: 2025-2026

The Certificate Programme Offered:

- **Certificate Course in Basics of Health and Fitness (6 Months duration)**



Program Outcomes:

1. Students will learn about the concept of Health.
2. Students will understand the concept of Physical fitness.
3. Students will get awareness about the nutrition and weight management.

**Name of the Department: Physical Education
In Collaboration with
Directorate of Open & Distance Learning and Online Studies**

**GURU NANAK DEV UNIVERSITY
AMRITSAR**

**Certificate/Diploma in Basics of Health and Fitness (SEMESTER SYSTEM) Offered by
Department of Physical Education in Collaboration with Directorate of Open & Distance
Learning and Online Studies, Guru Nanak Dev University Amritsar**

Eligibility:

- +2 or equivalent examination.
- Any student pursuing Bachelor Degree, Master Degree, M.Phil., Ph.D. from GNDU campus, affiliated or constituted colleges.

SEMESTER-I

SEMESTER-1					
Paper Code	Subjects	Internal Assessment	End Term	Total	Credit
ODBHF101T	Introduction to Health	30	70	100	04
ODBHF102T	Introduction to Fitness	30	70	100	04
ODBHF103T	Nutrition and Weight Management	30	70	100	04
ODBHF104T	Lifestyle Diseases and Exercise	30	70	100	04
	Total marks and credits	120	280	400	16

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Subject Name: INTRODUCTION TO HEALTH

Subject Code: ODBHF101T

Semester-I

Time: 03 Hours

Max. Marks: 100 Marks

Internal Assessment: 30 Marks

End Term: 70 Marks

Instructions for the Paper-Setter/examiner:

1. Question paper shall consist of **Four sections**.
2. Paper setter shall set **Eight questions** in all by selecting **Two questions** of equal marks from each section. However, a question may have sub-parts (not exceeding four sub-parts) and appropriate allocation of marks should be done for each sub-part.
3. Candidates shall attempt **Five questions** in all, by at least selecting **One question** from each section and the **5th question** may be attempted from any of the **Four sections**.
4. The question paper should be strictly according to the instructions mentioned above. In no case a question should be asked outside the syllabus.

Section-A

- Health meaning, concept and its scope.
- Determinants of health, Key Health Indicators,
- Public health; Principles and Strategies
- Women & Child Health Care

Section-B

- Environment and Health hazards: Air, Water, Soil and Noise Pollution.
- Communicable diseases and their preventive measures (Measles, Malaria, Hepatitis, Cholera, HIV /AIDS).
- Non-Communicable diseases and their preventive measures (Hypertension, Cardio Vascular Diseases, Chronic Respiratory Disease, Diabetes).

Section-C

- Hygiene-Definition and importance.
- Hygiene Practices: Personal and Community hygiene, Environmental Sanitation and Sanitation of Public places.
- Schemes of Government of India for health and hygiene.

Section-D

- Disease: Meaning of a disease, diseases cycle, epidemiological trials, modes of disease transmission and immunity.
- Role of Government and Non-Government Organizations for health promotion
- Public Awareness for health and hygiene through Digital Media

References

- Park, K (1995) Textbook of Preventive and Social Medicine, Jodhpur: Banarsidas Bhanot Publ.
- Singh, H.S. and Rastogi, P. (2009) Parasitology, India: Rastogi Publication.

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- Dubey, R.C and Maheswari, D.K. (2007) Text Book of Microbiology- S. Chand & Co. Publ. New Delhi – India
- Bamji, M.S., K. Krishnaswamy & G.N.V. Brahman (2009) Textbook of Human: Oxford & IBH publishing co. Pvt. Ltd.
- ICMR (2011) Dietary Guidelines for Indians – A Manual. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- Swaminathan (1995) Food & Nutrition (Vol I, Second Edition) The Bangalore Printing Publishing Co Ltd. Bangalore
- Vijaya, K. (2000) Food, nutrition & health, Kalyan Publishers, New Delhi.
- Srilakshmi, B., (2010) Food Science, (5th Edition) New Age International Ltd., New Delhi

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Subject Name: INTRODUCTION TO FITNESS

Subject Code: ODBHF102T

Semester-I

Time: 03 Hours

Max. Marks: 100 Marks

Internal Assessment: 30 Marks

End Term: 70 Marks

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Section-A

- Introduction to Fitness
- Benefits of Physical Fitness
- Free Hand Exercises
- Basic Fitness Training Methods

Section-B

- Fitness Testing: Understanding the purpose of testing prior to physical activity.
- Resting Heart Rate, Maximum Heart Rate and Target Heart Rate Zone.
- Health Related Fitness: meaning and its components.
- Cardio-Respiratory Training, FITT Principles, Aerobic and Anaerobic exercises.

Section-C

- Conditioning: meaning, importance and methods.
- Training Load: components of load, Principles of load.
- Overload: Symptoms, causes and measures to overcome overload.
- Resistance training variables (Set, Repetition, Intensity, Tempo, Rest Interval)

Section-D

- Warm up & cool down procedures
- Physical fitness program for children, adolescents, old age, and differently abled athletes.
- Effects of physical fitness on sports performance and body composition.

References

- Edward T.; Howley B. and Dov F. (1986). Health Fitness instructor's Handbook, Philadelphia: Human Kinetics Books.

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- Howley. E.T and Franks, B.D. (1997) Health Fitness Instructor's handbook. Third Edition. Champaign Illinois: Human kinetics,
- Lindle J. (1997) Aquatic Fitness Professional Manual. Florida: Aquatic Exercise Association.
- Pyke F.S. (1991) Better Coaching – Advanced Coach's Manual. Australian Coaching Council.
- Steven R. and Richard I., (1983) Sports medicine prevention, evaluation management and rehabilitation; New Jersey. Prentice Hall inc.
- Thomas D. F, Gayle, H., (1992). Weight training for women. California: Mayfield publishing company.
- Cart, E. K.& Daniel, D. A. (1999). Modern Principles of Athletic Training, St. Louis: C.V. Mosby Company
- Daniel, D. A. (1991) Principles of Athletic Training, St. Luis, Mosby Year Book

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Subject Name: NUTRITION AND WEIGHT MANAGEMENT

Subject Code: ODBHF103T

Semester-I

Time: 03 Hours

Max. Marks: 100 Marks

Internal Assessment: 30 Marks

End Term: 70 Marks

Instructions for the Paper-Setter/examiner:

1. Question paper shall consist of **Four sections**.
2. Paper setter shall set **Eight questions** in all by selecting **Two questions** of equal marks from each section. However, a question may have sub-parts (not exceeding four sub-parts) and appropriate allocation of marks should be done for each sub-part.
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Section-A

- Nutrition: meaning and concept.
- Need and Importance of nutrition.
- Balanced diet: Meaning and concept
- Understanding the relationship between food, nutrition and health

Section-B

- Introduction, sources, role and deficiency of nutritional elements: carbohydrates, lipids, and proteins
- Introduction, sources, role and deficiency of Vitamins: fat-soluble and water-soluble
- Introduction, sources, role and deficiency of Minerals: major and trace minerals

Section-C

- Body Mass Index (BMI), Waist Hip Ratio, Resting Pulse Rate, Blood Pressure, Vital Capacity.
- Role of nutrition for the management of obesity and overweight.
- Eating disorder- anorexia nervosa, binge eating and bulimia nervosa

Section-D

- Appropriate diet before, during, and after sports competition
- Concepts of modern food pyramid, food calories and junk food
- Concept of Malnutrition – under and over nutrition
- Planning and development of a personal fitness program

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References

- Röbert E.C.Wildman, Barry S. Miller, (2004), "Sports and fitness Nutrition", Thomson.
- Heather Hedrick fink, Lisa A.Burgoon, Alan E.Mikesky, (2006), "Practical application in sports nutrition', Jones and Bartlett.
- McArdle D. William (2005),"Exercise Physiology Energy Nutrition and Human Performance", (2ND ED) Philadelphia : Lea and Febiger.
- Janice Thompson, Melinda Manore, (2005), " Nutrition: An applied approach", Pearson.
- William D.Mcardle, Frank I.Katch, Victor L.Katch, (2000), "Essentials of exercise physiology", Lippincott Williams and wilkins.
- William E.Garrett J.R. , Donald T.Kirendall, (2000), "Exercise and sports science", Lippincott Williams and wilkins.
- Greg Mclatchie, Mark harries, Clyde Williams, John king, (2003), "ABC of sports medicines", BMJ Books.

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Subject Name: LIFESTYLE DISEASES AND EXERCISE
Subject Code: ODBHF104T
Semester-I

Time: 03 Hours

Max. Marks: 100 Marks
Internal Assessment: 30 Marks
End Term: 70 Marks

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1. Question paper shall consist of **Four sections**.
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3. Candidates shall attempt **Five questions** in all, by at least selecting **One question** from each section and the **5th question** may be attempted from any of the **Four sections**.
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Section-A

- Exercises: Meaning, importance and types
- Exercise guidelines for the improvement of health
- Health-related fitness: meaning and components.

Section-B

- Meaning and concept of healthy lifestyle
- Concept of lifestyle diseases
- Exercises and management of lifestyle diseases: heart disease, diabetes, osteoporosis, low back pain, high cholesterol and blood pressure.

Section-C

- Meaning and concept of mental health
- Exercises and management of mental health problems: depression, anxiety, stress and aggression.
- Social benefits of exercise

Section-D

- Postural deformities and corrective measures.
- Skill resilience, assertiveness & support network for healthy lifestyle management.
- Exercises and weight management.

References

1. ACSM's Guidelines for Exercise Testing and Prescription, 8th ed., Lippincott Williams & Wilkins, Philadelphia, 2009.
2. McArdle, W, Katch, F., and Katch, V. Exercise Physiology: Energy, Nutrition, and Human Performance, Lippincott Williams & Wilkins.
3. David C. Nieman. 1998. The Exercise-Health Connection. Human Kinetics.

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4. AAPHERD. "Health Related Physical Fitness Test Manual". 1980 Published by Association drive Reston Virginia ·
5. ACSM Fitness Book, Leisure Press Campaign, Illions, 1996, Leisure Press, Canada <http://www.pitt.edu/~gsphhome> ·
6. ACSM "Health Related Physical Fitness Assessment Manual Lippincott Williams and Walkins USA, 2005. ·
7. Puri. K.Chandra.S.S. (2005). Health and Physical Education. New Delhi: Surjeet Publications·
8. Bucher.C.A. (1979). Foundation of Physical Education (5th edition Missouri C.V.Mosby co.