

Statutes governing Diploma in Diabetes Education

1. Short title and Commencement

- 1.1 These statutes shall be called statutes for the award of Diploma in Diabetes Education.
- 1.2 These statutes shall come into force from the date of their notification.

2. Definitions

2.1 Unless the context otherwise requires:

- a. "Act" means the Kashmir and Jammu Universities Act, 1969;
- b. "Academic year" means a period of time commencing from the date of admission till the commencement of examination;
- c. "Diploma" for the purposes of these Statutes means one year Diploma in Diabetes Education awarded to a student who satisfies statutory requirements and obtains required percentage of marks;
- d. "Entrance Test" means a test for effecting admission to Diploma Course for the time being in force;
- e. "Statutes" mean statutes as defined under Section 2(h) of the Act;
- f. "University" means the University of Kashmir as defined under Section 2(K) of the Act;
- g. "Course curriculum" means the syllabus / Course structure to be taught over a period of One academic Year
- h. "Competent Authority" for the purposes of these Statutes means an authority designated by the University competent to take decision with respect to any matter referred to it.

3. Nature & Duration

- 3.1 A holistic course which enables science graduates to adequately train and provide basic understanding, principles and methods of diabetes, its management, handle basic laboratory tests, and to develop the capacity to conduct outreach programmes in relation to diabetes.
- 3.2 The course of instruction for the Diploma in Diabetic Education shall extend over a period of one academic year.
- 3.3 There will be total 420 Hours of module of study; 255 Hours of theory and 135 hours of Practical/ Clinical rotation training.
- 3.4 A candidate shall have to complete the Diploma course within a maximum period of two years from the date of admission.
- 3.5 A candidate who has been enrolled for Diploma in Diabetes Education shall not be eligible to be admitted to any other course or examination of this University in the same academic year.

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4. Eligibility

- 4.1 The admission to the course shall be open to a candidate who has passed graduation in Pharmacy, Dietetics and Nutrition, Nursing, Physiotherapy, Clinical Biochemistry, Biochemistry, Biotechnology and other allied subjects.
- 4.2 The mode, procedure and other preferences for selection of students to the said Diploma course, fees and other charges payable, reservations for special categories, if any and other conditions to be fulfilled by persons seeking admission as regular students in the respective course shall be such as may be prescribed from time to time.

5. Course Curriculum

The detailed syllabus and courses of study for the Diploma course in Diabetes Education shall be prescribed by the Academic Council or the Committee for curriculum/syllabus comprising of the practitioners/experts/ endocrinologists, academicians, skill education experts constituted by the competent authority of the University from time to time. All changes in course of study shall be notified at least one year before the date of examination in which they shall take effect.

6. Examination: Eligibility for appearing in the Examination

- 6.1 The examination shall be open to a candidate who: -
- i. has been on the rolls of a respective course of the University for one academic year preceding the examination;
 - ii. is eligible under statutes relating to the admission of private candidates in the capacity of a failure or a late college student.
 - iii. has submitted his/her name to the Controller of Examinations through the Directorate of Lifelong Learning and also produces the following certificates duly signed by the Director:-
 - a) of good character;
 - b) of having satisfactorily performed the work of the class;
 - c) of having attended no less than 75% of the full course of lectures delivered to his/her class;
 - iv. The examination shall be held for the Diploma in Diabetes Education on such dates and at such place as may be fixed from time to time.
 - v. Candidates shall submit their application for appearing in the examination to the Controller of Examinations on the prescribed form accompanied by the prescribed fee and the necessary certificates.

7. Condonation of shortage in attendance

- 7.1 The Director of the Directorate may condone shortage in attendance upto 5% of the lecture delivered in a course(s) for special reasons to be reduced in writing and the Vice-Chancellor may in addition on grounds of illness condone a maximum of 5% in each course separately. Any candidate who participated in Inter-College/Inter University sports tournaments with the prior permission of the Director may, for the purpose of condoning deficiency in attendance incurred by him/her on account of such participation, be treated as present on all working days of his/her absence on such account for a period not exceeding 15 working days.

8 Re-appear

8.1 A candidate who has failed in the examination or has failed to present himself/herself or complete the examination on account of illness etc. shall be eligible to appear at a subsequent session on payment of prescribed fee.

9. Conduct of Examination

9.1 Subject to the changes to be made from time to time as per the set procedure the examination for the course(s) shall consist of 4 theory papers (Paper-I, Paper-II, Paper-III and Paper-IV) and Clinical/ Practical and viva-voce test. Each theory paper shall carry 100 marks and shall be of 3 hours duration. The clinical/ practical and viva-voce shall carry 300 marks.

S.NO.	PAPER(Theory)	MODULES	MAX. MARKS
1.	PAPER-I	1,2,3,4	100
2.	PAPER-II	5,6,7,8	100
3.	PAPER-III	9,10,11,12	100
4.	PAPER-IV	13,14,15	100
TOTAL MARKS			400
S.N O	PAPER (Practicals)	MODULES	MAX. MARKS
1.	CASES	All Modules	100
2.	LAB		100
3.	VIVA		100
TOTAL MARKS			300
Aggregate Max. Marks			700

- i. Practical component consisting of cases, Lab and viva-voce shall carry 100 marks each i.e. total of 300 marks.
- ii. Each Theory paper shall comprise of Internal assessment component of 20 marks and an external component of 80 marks.
- iii. The Clinical/Practical and Viva-voce examination shall be conducted by a Board of Examiners comprising of one Internal and one External examiner. The Internal examinations shall be held exclusively by SKIMS.
- iv. The Director, Directorate of Lifelong Learning shall submit a panel of at least 8 to 10 Examiners in consultation with Dean Research, SKIMS for the approval of the authorities.
- v. There shall be periodical meetings of the Board of Studies of the programme.

10. Declaration of result and Grades

1. The minimum number of marks required to pass the examination shall be 40% in the aggregate of theory papers and 40% in the practical, clinical and viva voce examination. Candidates having passed the examination within the minimum time prescribed and securing not less than 75% of the marks prescribed for the theory and practical/ clinical and viva voce test shall be declared to have passed the examination with distinction.

11. Classification of Division:

The successful candidates shall be classified in three divisions as under: -

- | | |
|---|------------------------|
| <i>i. Those who obtain 75% marks or more of the aggregate number of marks</i> | <i>Distinction</i> |
| <i>ii. Those who obtain 60% or more but less than 75% of the aggregate number of marks</i> | <i>First Division</i> |
| <i>iii. Those who obtain 50% or more but less than 60% of the aggregate number of marks</i> | <i>Second Division</i> |
| <i>iv All below</i> | <i>Third Division</i> |

Note: Deficiency upto 1% marks required to get a division shall be condoned for the purpose of placing a candidate in the first and second division.

- 2. Each successful candidate shall be granted a certificate showing the division in which he/she has passed the examination.*

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INTRODUCTION

SCOPE

MODULE 1: BASIC CONCEPT OF HEALTH AND DISEASE

- Definitions of health, wellness, sickness and disease
- Etiology, Pathogenesis, Morphology, Clinical Manifestations, Diagnosis and Clinical Course of Disease
- Epidemiology and Patterns of Disease, Prevalence and Incidence, Morbidity and Mortality of Disease
- Determination of Risk Factors, Natural History, Levels of Prevention (primary, secondary and tertiary prevention) and Evidence-Based Practice
- Describe different types of Health Care Delivery models (National/international)
- Different systems of medicine being practiced in India
- Describe the role and function of the hospital in patient care and services

MODULE 2: THE ROLE AND RESPONSIBILITY OF THE DIABETES EDUCATOR

- Describe responsibilities of Diabetes Educator.
- Describe knowledge, competencies and skills required for a diabetes educator
- Ethics in healthcare-Privacy, confidentiality, consent, medico legal aspects
- Describe the ethical considerations of his/her job as a diabetes educator

MODULE 3: INTRODUCTION TO DIABETES, CLASSIFICATION AND RISK FACTORS

- Describe the history and classification of Diabetes
- Describe the Epidemiology of Diabetes
- Describe risk factors of diabetes (genetic, environment, obesity, sedentary life style etc)
- Describe difference between prediabetes, Type 1 and Type 2 diabetes in relation to the clinical presentation, patient characteristics and pathogenesis.
- Describe other specific types (such as maturity onset diabetes of the young [MODY], latent autoimmune diabetes in adults [LADA] and gestational diabetes, impaired glucose tolerance and impaired fasting glucose.

MODULE 4: PATHOPHYSIOLOGY AND COMPLICATIONS OF DIABETES

- Describe structure and function of key organs, such as the pancreas, liver, muscle, adipose tissue etc.
- Endocrine functions of pancreas with special reference to glycemia.
- Relationship between blood glucose and insulin in healthy people (gluconeogenesis, glycogenolysis, lipolysis and ketogenesis)
- Describe hormones and their mechanism of production and secretion
- Insulin-synthesis, action, effects, deficiency of insulin and its effect on lipid, carbohydrate and protein metabolism
- Describe Insulin resistance in terms of genes, adiposity, gender, diet, exercise, hyperglycemia, drugs, and infection
- Discuss strategies to prevent medical complications that arise from diabetes

MODULE 5: DIAGNOSIS OF DIABETES

- Describe the signs and symptoms of Type 1, Type 2 diabetes and gestational diabetes.
- Describe the laboratory investigations used to diagnose diabetes and their appropriate use (fasting blood glucose, post-prandial blood glucose, oral glucose tolerance test)
- Monitoring of blood glucose and self-monitoring of blood glucose (SMBG).
- Discuss the appropriate use of the following tests: C-peptide, insulin antibodies and urine ketones.
- Discuss the appropriate use of HbA1c estimation and factors that can affect the accuracy of HbA1c estimation.

MODULE 6: TREATMENT AND MEDICATION

- Treatment plan for type-1, type-2 diabetes and gestational diabetes.
- Describe types of blood glucose- lowering agents and their effect in diabetes.
- Describe the mechanism of action, dosage, precautions and contradictions to the use of blood glucose-lowering agents.
- Describe the potential side effects of using oral medication.
- Describe the role and importance of these oral medications in treating diabetes

MODULE 7: INSULIN THERAPY

- History of insulin and development over the years
- Describe various types of insulin; Dosage, onset of action, peak effect and duration of action of different types of insulin.
- Describe strategies that could assist the person to overcome fears associated with commencing insulin therapy.
- Describe in detail insulin injection technique (storage; injection sites; care of injection site., change of needle; method of injection and rotation of injection sites).

MODULE 8: HYPOGLYCAEMIA & HYPERGLYCAEMIA

- Define hypoglycemia and its manifestations.
- Describe possible preventive management of the Hypoglycemia and first line of action or most appropriate initial management of Hypoglycemia
- Discuss the increased risk of hyperglycemia after an episode of severe hypoglycemia
- Discuss the cause, risk, signs and symptoms and management of nocturnal hypoglycemia
- Results of hyperglycemia- Diabetic ketoacidosis, Hyperosmolar hyperglycemic state
- illustrate the causes, symptoms and preventive strategies for Hyperosmolar hyperglycemic state (HHS)
- Explain management protocols for hypoglycemia and hyperglycemia based on blood sugar levels

MODULE 9: DIABETES SELF MANAGEMENT AND EDUCATION

- Describes importance of balanced diet along with the coordination of meals with the medications
- Describes types of fruits and vegetables required to maintain blood glucose level of the patient
- Describe the importance of exercise for the diabetic patient
- Describe the importance of taking medicines or insulin on time and keeping the record of reading of blood sugar
- Describe physical activity (exercise) as an important component of diabetes management with physiological and psychological benefits
- Describe barriers to exercise among diabetes patients.
- Diabetes management in special situations (school, camps, travel, pregnancy etc)

MODULE 10: THE PSYCHOSOCIAL ASPECTS OF DIABETES:

- Stress and endocrine disorders
- Psychological disorders among persons with diabetes (e.g. Depression, anxiety disorders, eating disorders, and alcohol abuse)
- Detailed description of the psychosocial affect of diabetes and its treatment on the person with diabetes and their family members
- Describe behavioral approaches, motivational techniques, goal setting and emotional support
- Importance of awareness in guiding individuals and groups for effective management of diabetes
- discuss cognitive and social barriers to self-care and strategies to address these barriers

MODULE 11: COUNSELLING OF DIABETIC AND PREDIABETIC PATIENTS

- Describe importance of treatment and related complications for the diabetics.
- Importance of medical check-ups and keeping records of blood glucose levels
- Role of care takers in management and prevention of diabetes.
- Counseling for dietary exercise, glucose monitoring, devices, and injection technique in diabetic patients
- Explain rights of a patient and role of diabetes educator in maintaining and preserving the patient's rights
- Describe feedback mechanism and Coordination with the medical team

MODULE 12: CONSENT, OBSERVING, RECORDING & DOCUMENTATION

- Explain importance of observing and reporting the conditions of patient as well as taking consent while assisting the patient
- Explain the importance of verbal information to the doctor in charge
- Explain the importance and guidelines for documentation of observations and informed consent of the patient.
- Explain the feedback mechanism from appropriate people like concerned medical team, carers and relatives.
- Understand uses and importance of various records in healthcare set up & how to obtain information from them at the time of follow up
- Explain various types of records to be maintained by Diabetes Educator
- Demonstrate essential components of various records and method of documentation
- Describe follow up plan

MODULE 13: BIOMEDICAL WASTE MANAGEMENT

- Explain biomedical waste management and categories of medical waste.
- Importance of proper waste disposal, barriers to safe disposal of sharps, and association of unsafe sharp disposal practices with blood borne infections
- Segregation of Biomedical waste at source
- Describe color coding and type of containers for disposal of Bio Medical Waste
- Label for transport of Bio Medical Waste containers/bags

MODULE 14: ACUTE COMPLICATIONS

- Describe acute complications associated with diabetes
- DKA, Hyperosmolar state
- Infections (acute/chronic)

MODULE 15: CHRONIC COMPLICATIONS

- Describe chronic complications associated with diabetes
- Renal complications, Dialysis and renal transplant
- Cardio vascular complication
- Ophthalmic complications
- Neurological complications
- Diabetic foot
- Musculo-skeletal complications.