

- SYLLABUS -

DM/MCh Level Common Entrance Examination

2021

Government of Nepal
Medical Education Commission
Sanothimi, Bhaktapur

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Medical Education Commission

Syllabus for DM/MCh Level Entrance Examination (2021)**Introduction:**

Health professional education was started in Nepal formerly after establishment of Institute of Medicine under Tribhuvan University in 1972 beginning with training of middle level human resources for health. Bachelor level courses in Institute of Medicine were started in 1978 and postgraduate studies since 1982. Similarly BP Koirala Institute of Health Sciences was established in eastern Nepal in 1993, Manipal Academy of Health Sciences was established under Kathmandu University as a Kathmandu University affiliated private institutions in 1993. Kathmandu University School of Medical Sciences as constituent campus started MBBS program in 2001. Then National Academy of Medical Sciences was established in 2002 and Patan Academy of Health Sciences in 2008.

Since late 90's, over a period of decade, numerous private medical institutions were also established to support teaching learning of various bachelor and postgraduate level medical programs throughout the country.

Along with the global trends and development in the field of medical education, the institutions in Nepal also felt the need for starting the higher level specialty courses. DM/ MCh program in Nepal was started by Kathmandu University in 1999 in Bir Hospital. After establishment of National Academy of Medical Sciences, DM/MCh program was taken over by NAMS in 2004 starting with MCh programs. Similarly, Institute of Medicine started DM/ MCh program 2008 (Starting with MCh Programs) and BP Koirala Institute of Health Sciences in 2013.

As per National Medical Education Act 2075, Medical Education Commission bears the responsibility to conduct Common Entrance Examination for Bachelor level, Postgraduate level and above. For conducting the DM/MCh common entrance examination, the commission has felt the need to prepare a common syllabus in consultation with experts from various institutions with experiences in DM/MCh entrance examinations.

Objectives:

1. To develop a common syllabus of specific academic programs for DM/MCh common entrance examination
2. To generate consensus and match logically between the existing DM/MCh entrance syllabus effective at various medical institutions
3. To find the scope of improvements/innovations in the currently existing DM/MCh entrance examination

Process:

1. Institutions conducting DM/MCh entrance examinations were officially corresponded to send the ongoing DM/MCh programs they are conducting and the syllabus for entrance examinations.
2. The syllabus for related disciplines from various institutions was compiled.
3. A team of experts in the related disciplines representing various institutions worked up for the common syllabus with the help of available compiled documents.
4. Meetings involving heads of concerned institutions and regulatory authorities were conducted.
5. A consensus was generated to have an entrance test paper of 3 hours duration with 200 multiple choice questions to improve content coverage as well as to match with the recent practice. This will also help differentiation of the candidates by minimizing the tie in the marks among the candidates.

- ✓ Multiple choice questions (MCQs) will be of Single Best Response Type (Type A) with four options with instruction to paper setter that the stem or vignette of the MCQs should not exceed 60 words.
- ✓ Adopt Criterion-Referenced Test with 50% pass mark with no negative marking.

1. DM (Medical Specialties) / NBMS (Medical Subspecialties)

A. Eligibility

- a. MD internal medicine or equivalent - Candidate with MD in Specialty subject (For example: MD Cardiology, MD Nephrology etc.) shall be eligible only in DM program in the respective subject.
- b. Specialty Registration in Nepal Medical Council (or Medical Council of the respective country)

B. Examination Format

- a. Question type: Single best response type of multiple-choice questions
- b. Option: Four options (A, B, C, D)
- c. Number of questions: 200 (no negative marking)
- d. Full marks: 200
- e. Pass Marks: 100
- f. Duration: 3 hours

C. Weightage:

S. No.	Area	Content/Domain	No. of Questions
1	Applied Basic Medical Science	Anatomy, Physiology, Pharmacology and Toxicology, Pathology, Biochemistry, Microbiology.	20
2	General Medicine	Emergency and critical care, Infectious diseases, Rheumatology and connective tissue disorders, Fluid, electrolyte and acid-base balance, Allergy and clinical immunology, Nutrition, Preventive medicine, Mental health, Molecular and genetic diseases, Palliative care.	60
3	Subspecialty subjects	Cardiology, Endocrinology and metabolism, Gastroenterology, Haematology, Hepatology, Nephrology, Neurology, Oncology,	90

		Pulmonology	
4	Miscellaneous	Research and Biostatistics, Medical Ethics and Good medical practice, Medical Education, Communication skills, Medicolegal issues.	30
Total			200

2. DM Critical Care Medicine/ NBMS Subspecialty

A. Eligibility

- a. MD Anesthesiology or equivalent
OR
MD Internal Medicine or equivalent
OR
MD Critical Care Medicine.
- b. Specialty Registration in Nepal Medical Council (or Medical Council of the respective country)

B. Examination Format

- a. Question type: Single best response type of multiple-choice questions
- b. Option: Four options (A, B, C, D)
- c. Number of questions: 200 (no negative marking)
- d. Full marks: 200
- e. Pass Marks: 100
- f. Duration: 3 hours

C. Weightage

S. No.	Area	Content/Domain	No. of Questions
1	Applied Basic Medical Science	Anatomy, Biochemistry, Microbiology Pathology, Pharmacology and Toxicology, Physiology.	20
2	General subject	Emergency Medicine, Infectious diseases, Rheumatology and connective tissue disorders, Fluid, electrolyte and acid-base balance, Allergy and clinical immunology, Nutrition, Preventive medicine, Mental health, Molecular and genetic diseases, Palliative care.	60

3	Subspecialty subjects	<p>1. General principles of Critical Care:</p> <ul style="list-style-type: none"> ○ Airway, Ventilation and oxygen therapy ○ Sepsis, Shock, ARDS, Ventilator associated pneumonia ○ Hospital Acquired Infections, ○ Transfusion, ○ Drugs, ○ Sedation and analgesia, ○ Peri-operative management, ○ Trauma - polytrauma, spine injury, head injury <p>2. Critical care under subspecialties of internal medicine:</p> <ul style="list-style-type: none"> ○ Cardiology, ○ Endocrinology, ○ Gastroenterology, ○ Haematology ○ Hepatology, ○ Nephrology, ○ Neurology, ○ Oncology, ○ Pulmonology. 	90
4	Miscellaneous	Research and Biostatistics, Medical Ethics and Good medical practice, Medical Education, Communication skills, Medicolegal issues.	30
Total			200

3. DM Emergency Medicine

A. Eligibility

- a. MD General Practice & Emergency Medicine or equivalent
OR
MD Emergency Medicine
- b. Specialty Registration in Nepal Medical Council (or Medical Council of the respective country)

B. Examination Format

- a. Question type: Single best response type of multiple-choice questions
- b. Option: Four options (A, B, C, D)
- c. Number of questions: 200 (no negative marking)
- d. Full marks: 200
- e. Pass Marks: 100
- f. Duration: 3 hours

C. Weightage

S. No.	Area	Content/Domain	No. of Questions
1	Applied Basic Medical Science	Anatomy, Biochemistry, Microbiology, Pathology, Pharmacology and toxicology, Physiology.	20
2	General Subjects	Anaesthesia, Dermatology, General Surgery, Internal Medicine, Obstetrics and Gynaecology, Ophthalmology, Orthopaedics and trauma, Otorhinolaryngology, Paediatrics, Psychiatry.	60
3	Subspecialty subjects	Pre-hospital care, Transport of emergency patient, Triage system, Evaluation of emergency patient, Acute medical emergencies: (For example - <ul style="list-style-type: none"> • Shock, • Acute chest pain, • Acute shortness of breath, • Seizure, • Altered sensorium, • Neurological deficits, • Acute febrile illnesses, • Bites and stings, • Poisoning, drug overdose, alcohol intoxication, Acute surgical emergencies: (For example - <ul style="list-style-type: none"> • Acute abdomen, • Polytrauma, • Burns Environmental emergencies (For example- hypothermia, hyperthermia) Basic life support, ATLS, ACLS, Disaster situations and management, Management of epidemics and pandemics	90

4	Miscellaneous	Research and Biostatistics, Medical Ethics and Good medical practice, Medical Education, Communication skills, Medicolegal issues.	30
Total			200

4. DM Neonatology

A. Eligibility

- a. MD Pediatrics or equivalent
OR
MD Neonatology
- b. Specialty Registration in Nepal Medical Council (or Medical Council of the respective country)

B. Examination Format

- a. Question type: Single best response type of multiple-choice questions
- b. Option: Four options (A, B, C, D)
- c. Number of questions: 200 (no negative marking)
- d. Full marks: 200
- e. Pass Marks: 100
- f. Duration: 3 hours

C. Weightage

S. No.	Area	Content/Domain	No. of Questions
1	Applied Basic Medical Science	Anatomy, Physiology, Pharmacology and toxicology, Pathology, Biochemistry, Microbiology	20
2	General Paediatrics	Community paediatrics, Nutrition, Growth and development, National programs, Infectious diseases, Immunization, Emergency paediatrics, Paediatric critical care,	60
3	Subspecialty subjects	1. Systemic disorders: Respiratory, Cardiovascular, GI & liver, renal, CNS, endocrine, genetics, eye, ENT, haematology, oncology, skin, orthopedics, Paediatric psychiatric and behavioral disorder	90

		2. Neonatology: <ul style="list-style-type: none"> • Fetal growth and development and related disorder, • Neonatal critical care, • Neonatal interventions, procedures and equipment, • Neonatal surgery, • Neonatal respiratory, cardiovascular, GI and liver, neurology, nephrology, genetics and inborn errors, metabolic, immunological, infectious & haematology disorders, • Birth defects, • Feeding & nutrition, 	
4	Miscellaneous	1. Research and Biostatistics, 2. Medical Ethics and Good medical practice, 3. Medical Education, 4. Communication skills, 5. Medicolegal issues.	30
Total			200

5. MCh (Surgical Specialties)/NBMS (Surgical Subspecialties)

A. Eligibility

- a. MS General Surgery or equivalent - Candidate with MS (For example: MS Urology, MS Neurosurgery etc.) shall be eligible only in MCh program in the respective subject.
- b. Specialty Registration in Nepal Medical Council (or Medical Council of the respective country)

B. Examination Format

- a. Question type: Single best response type of multiple-choice questions
- b. Option: Four options (A, B, C, D)
- c. Number of questions: 200 (no negative marking)
- d. Full marks: 200
- e. Pass Marks: 100
- f. Duration: 3 hours

C. Weightage

S. No.	Area	Content/Domain	No. of Questions
1	Applied Basic Medical Science	Anatomy, Biochemistry, Microbiology, Pathology, Pharmacology and toxicology, Physiology.	20
2	General Surgery	General Surgical Principles:	60

		<ul style="list-style-type: none"> • Fluid, electrolyte and acid-base balance • Wound, sepsis, • Shock, Systemic response to injuries, • Trauma, • Surgical emergencies, • Pre and post operative management, • Pain management • Transfusion <p>Applied Surgical Anatomy, Genetics and Embryology, Nutrition, Palliative care.</p>	
3	Subspecialty subjects	Urology, Neurosurgery, Cardiothoracic and Vascular Surgery, Plastic Surgery, GI Surgery, Paediatric surgery.	90
4	Miscellaneous	Research and Biostatistics, Medical Ethics and Good medical practice, Medical Education, Communication skills, Medicolegal issues.	30
Total			200

Annexes

DM (Medical Specialties) / NBMS (Subspecialty) Programs:

- DM (Cardiology)
- DM (Endocrinology)
- DM (Hepatology)
- DM (Medical Gastroenterology)
- DM (Nephrology)
- DM (Neurology)
- DM (Pulmonology)
- DM (Medical Oncology)

DM (Critical Care Medicine)

DM (Emergency Medicine)

DM (Neonatology)

MCh Programs / NBMS (Subspecialty) Programs:

- MCh (CTVS)
- MCh (GI Surgery)
- MCh (Neuro surgery)
- MCh (Pediatric Surgery)
- MCh (Plastic Surgery)
- MCh (Urology)

*The List is not exclusive. The number of programs is subjected to change as per demand and accreditation.

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