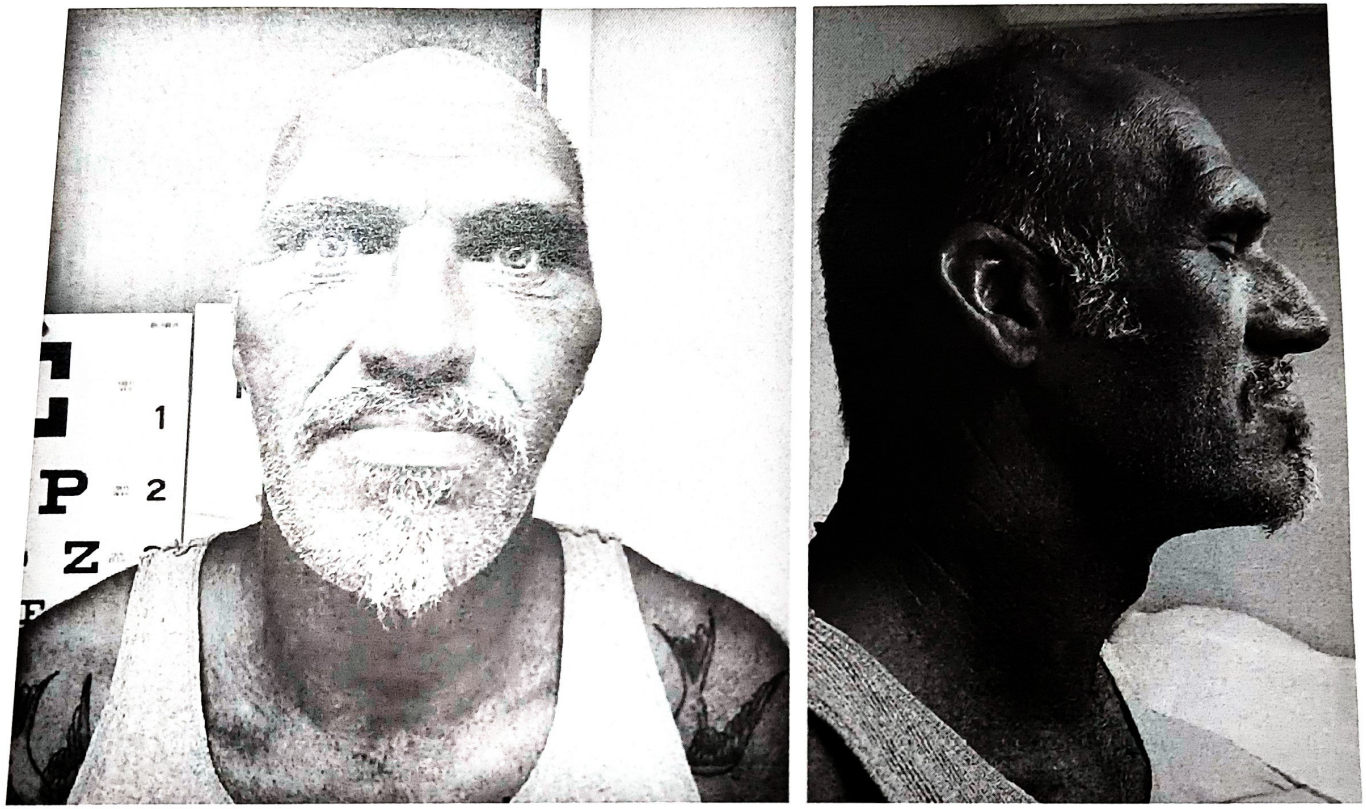
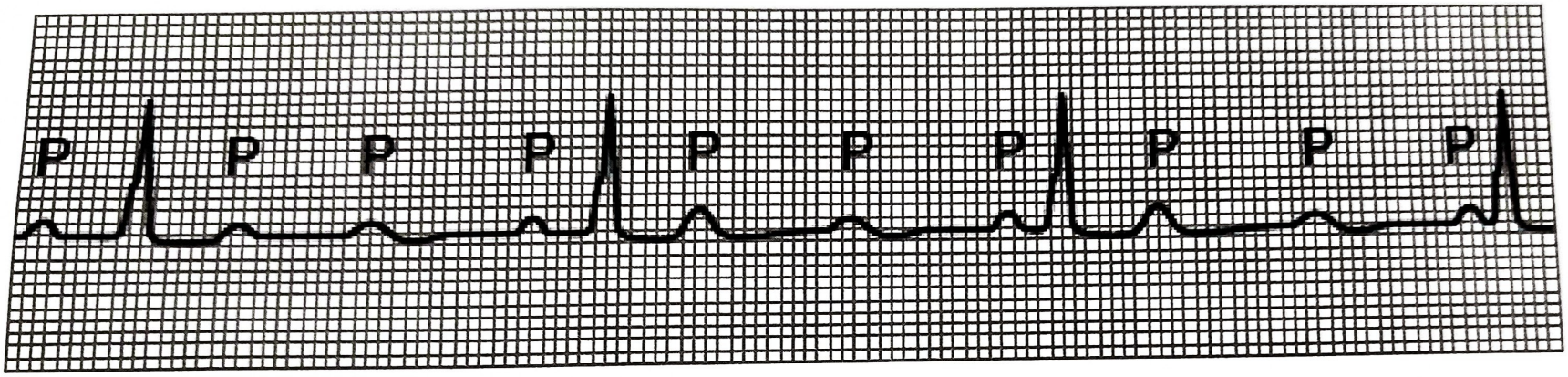



35-year-old male patient presented to the emergency department after Road Traffic Accident. On examination he is opening his

eyes on giving painful stimulus, utters incomprehensible sounds, and withdraws his limbs to pain. What is the V component of GCS?

A 70-year-old man after a large left middle cerebral artery (MCA) stroke has severe impairment in both comprehension and speech




Identify the endocrine disorder. Mention the cause.

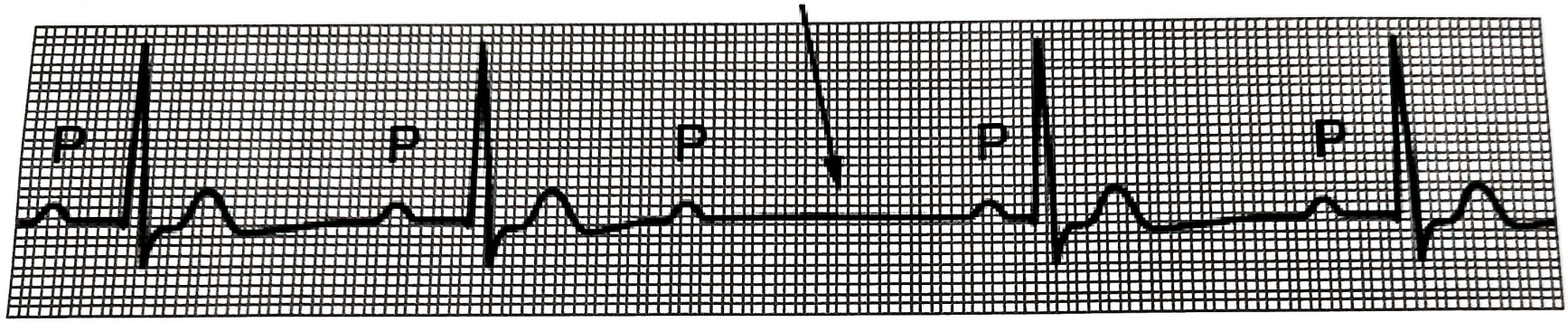
*speech* is non-fluent, labored, with intact comprehension but impaired repetition. Which type of aphasia is this?

*Identify* the ECG.

35-year-old male patient presented to the emergency department after Road Traffic Accident. On examination he is opening his

eyes on giving painful stimulus, utters incomprehensible sounds, and withdraws his limbs to pain. What is the V component of GCS?

A 58-year-old right-handed man presents with slurred speech and inability to produce words fluently. He understands spoken language and follows commands correctly. On examination,




Identify the endocrine disorder. Mention the cause.

A 70-year-old man after a large left middle cerebral artery (MCA) stroke has severe impairment in both comprehension and speech production. Repetition is also impaired. Which type of aphasia is this?

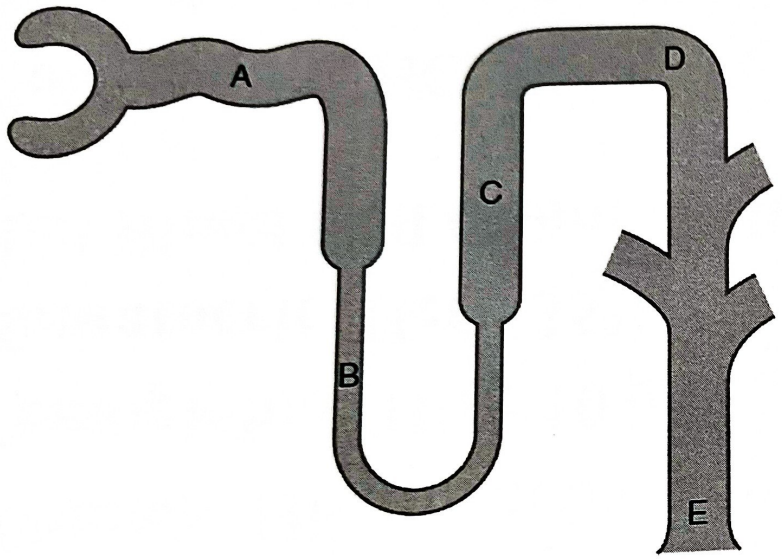
Identify the ECG.

A 65-year-old male patient presents with fatigue, pallor, and shortness of breath. His recent blood work reveals:

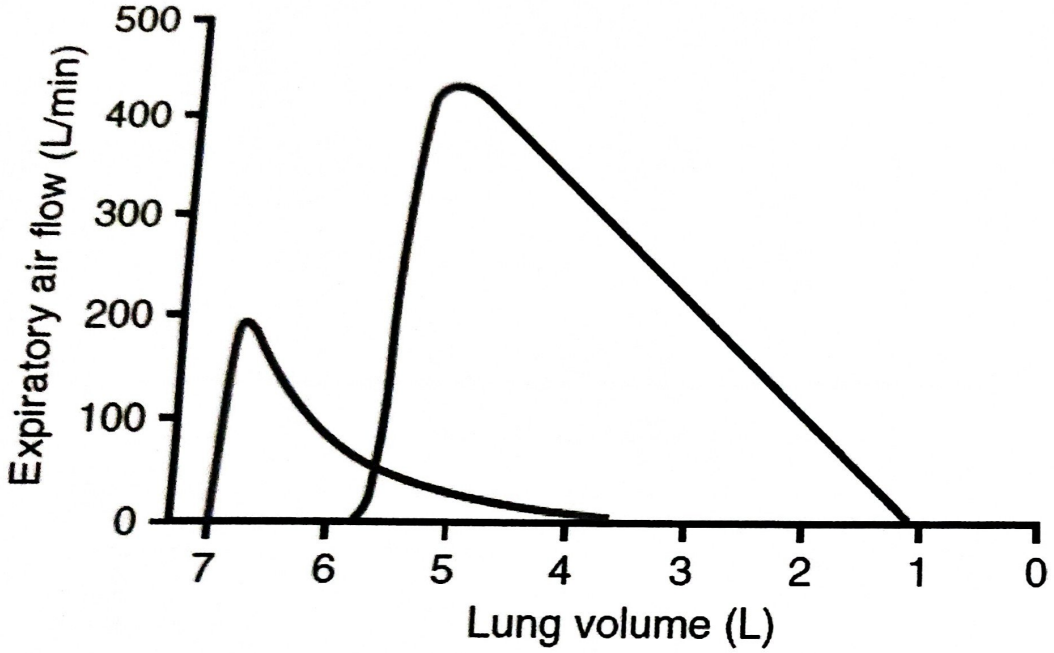
- **Hemoglobin (Hb):** 10 g/dL
- **Hematocrit (Hct):** 35%
- **Red Blood Cell Count (RBC):** 4.2 million/μL

Calculate MCHC.

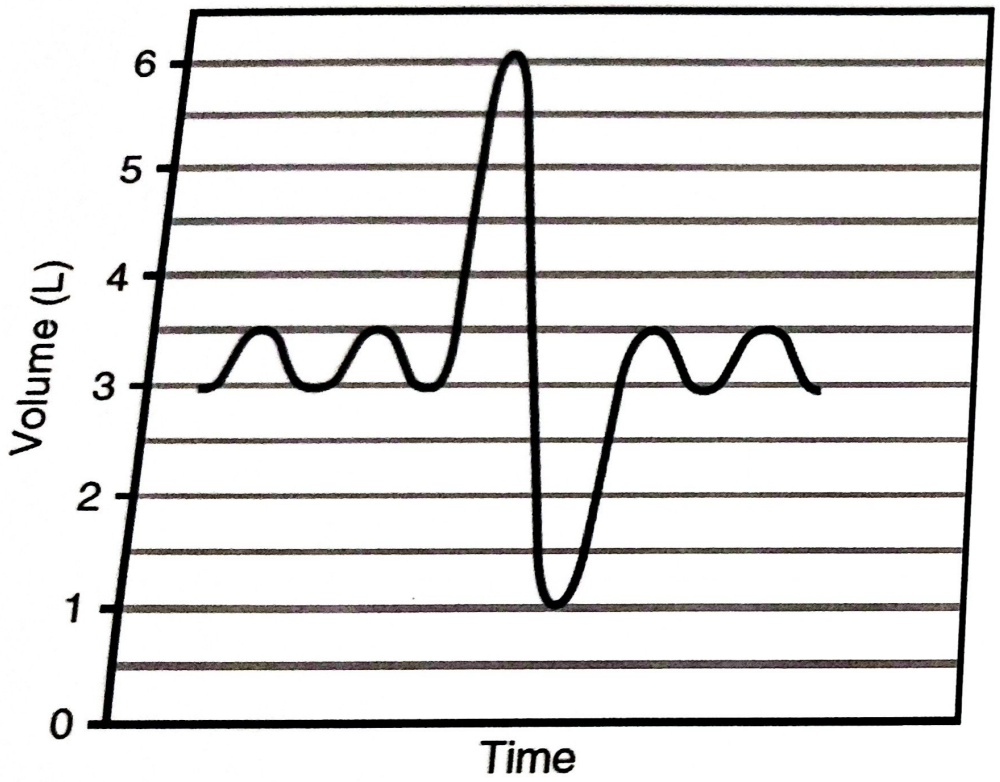
Name 2 conditions for decreased MCHC.




Identify the parts of the nephron. In a normally functioning kidney, which part of the tubule has the lowest permeability to water during antidiuresis?

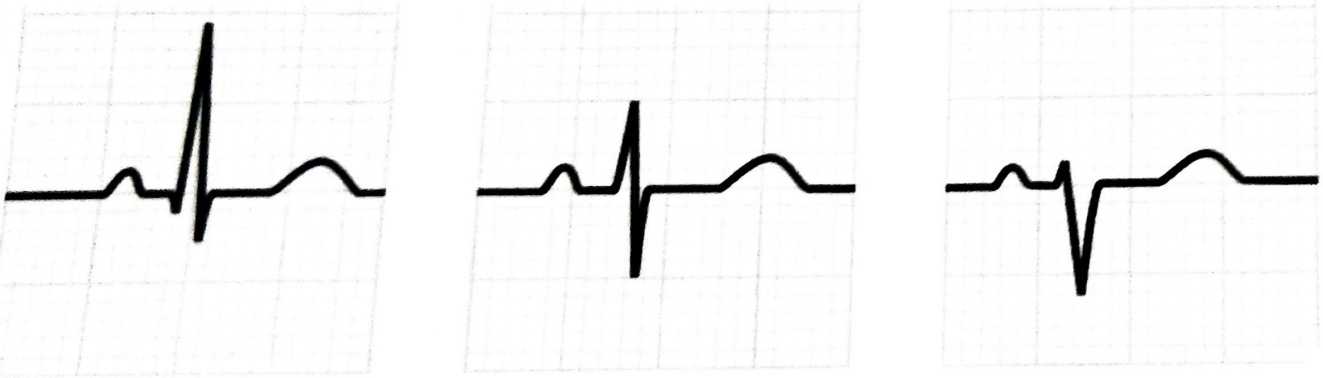


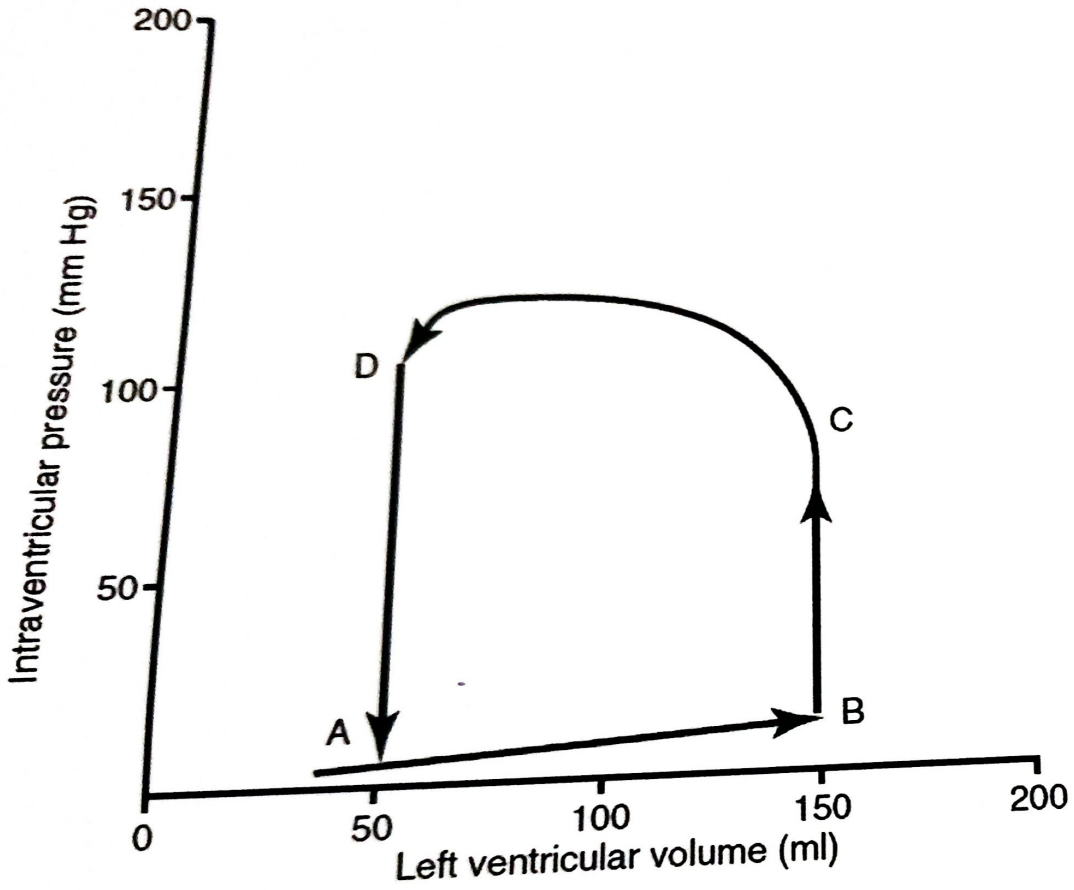

The maximum expiratory flow-volume (MEFV) curves shown in the above figure were obtained from a healthy person (red curve) and a 57-year-old man with shortness of breath (green curve). The man with shortness of breath likely has which disorder?

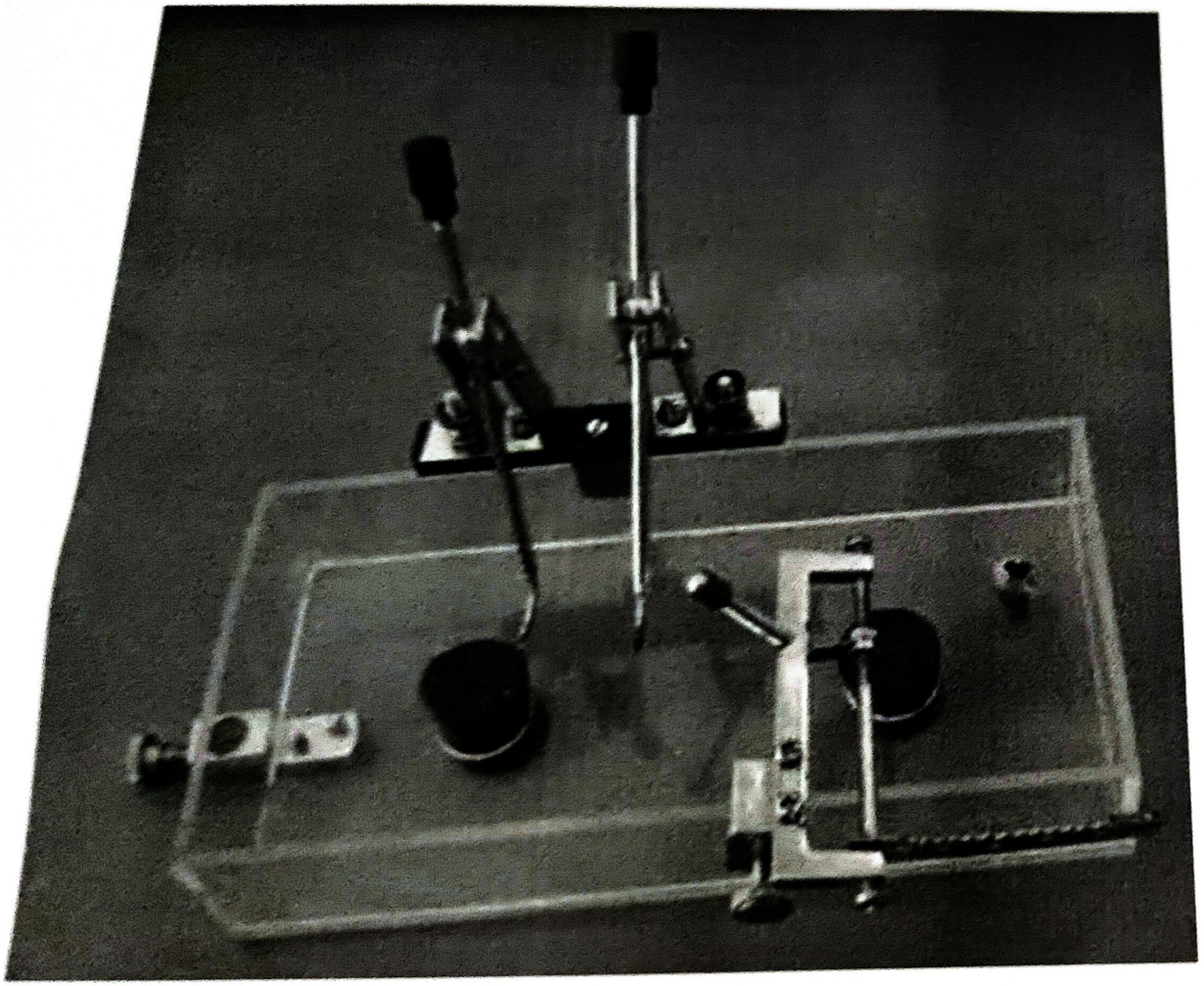



*Assuming a respiratory rate of 16 breaths/min, calculate the minute ventilation.*

A 50-year-old woman was admitted to a local emergency department after a motorcycle accident. The following ECG was obtained. Identify the cardiac axis?



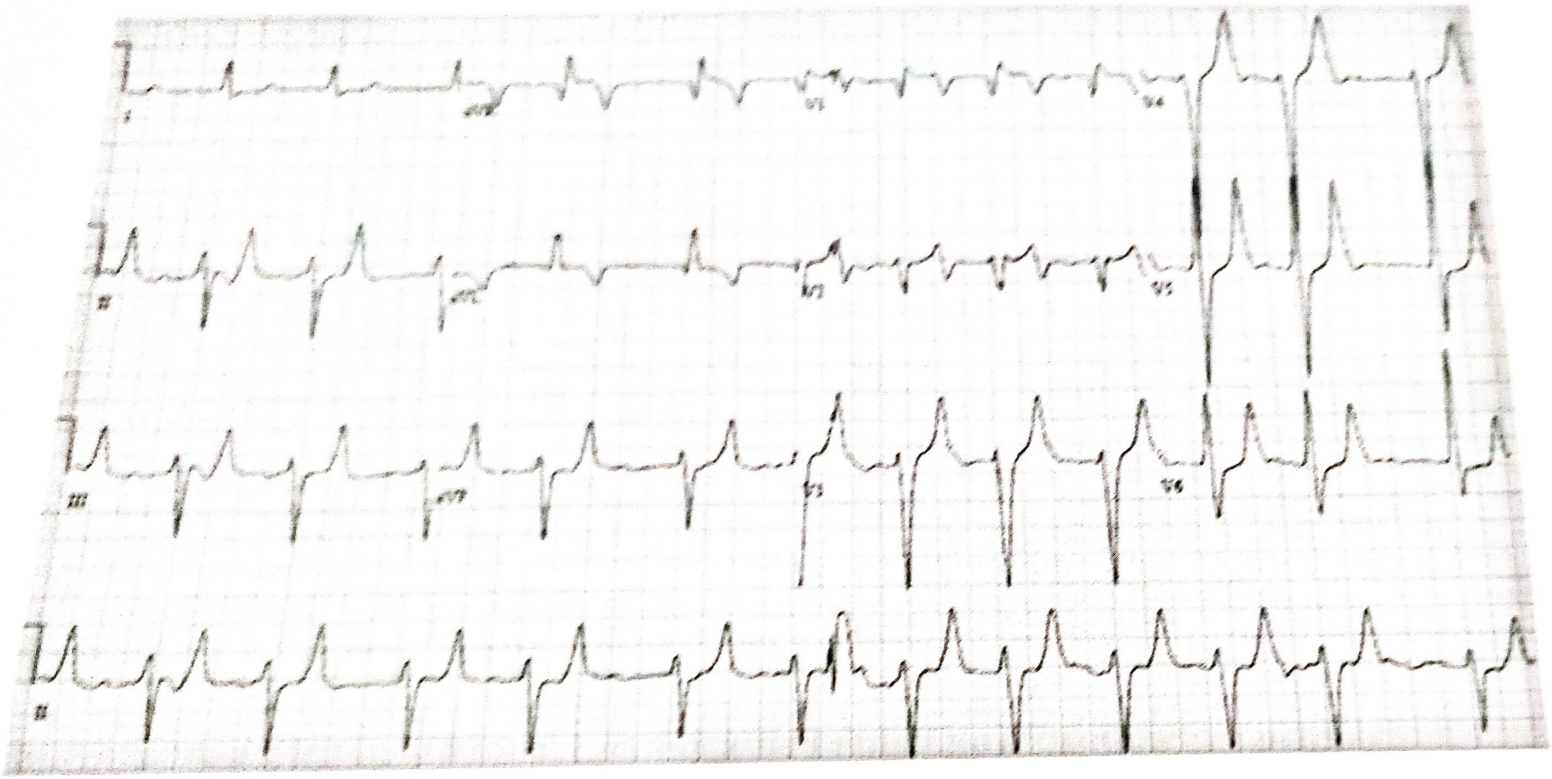

200
150
100
50
0
Intraventricular pressure (mm Hg)
D
C
A
B
50
100
150
200
Left ventricular volume (ml)



Identify the instrument.

Mention its use.

A 60-year-old woman has a resting heart rate of 70 beats per minute, arterial pressure of 130/85 mm Hg, and normal body temperature. When does the fourth heart sound occur in the ventricular pressure–volume relationship?



Identify the instrument and write the parts.

What is the rule for the width of the cuff?

Table-1(A)

1. Demonstrate the effect of posture on the vital capacity of a normal volunteer.

Table-1(B)

1. Record the effect on blood pressure during change of posture (supine to standing) in a volunteer provided.

Table-2(A)

1. Record E.C.G. of the given subject, calculate the heart rate and comment on the rhythm.

Table-2(B)

1. Demonstrate the clinical examination of higher functions of nervous system in a normal volunteer. Report your findings.

Table-3(A)

1. Chart the visual field of the right eye of your given subject. Report your findings

Table-3(B)

1. Perform superficial reflexes in a given subject and report your findings.

Table-4(A)

1. Test the eighth cranial nerves of your given subject.

Table-4(B)

1. Chart the visual field of the left eye of your given subject. Report your findings

Table-5(A)

1. Check for the tone and coordination of the subject provided.

Table-5(B)

1. Perform deep reflexes in a given subject and report your findings.

Table-6(A)

1. Test sensations carried by dorsal column tract, on the upper limb of your subject.

Table-6(B)

1. Test the ninth, tenth, eleventh and twelfth cranial nerves of your given subject.

Table-7(A)

1. Demonstrate the inspectory and palpatory findings of the respiratory system in a normal volunteer. Report your findings

Table-7(B)

1. Check the second, third, fourth and sixth cranial nerves in the given subject.

Table-8(A)

1. Check the muscle tone and power of the upper limb of your subject.

Table-8(B)

1. Check the fifth and seventh nerve in the subject provided.

Table-9(A)

1. Perform percussion and auscultation of the respiratory system and report your findings

Table-9(B)

1. Tell the inspectory findings of CVS. Auscultate the auscultatory areas of the heart.

Table-9(C)

1. Test sensations carried by Anterolateral tract on the lower limb of your subject.

Table-10(A)

1. Record E.C.G. of the given subject, calculate the heart rate and comment on the rhythm.

Table-10(B)

1. Demonstrate the effect of isotonic exercise (moderate grade) on the blood pressure of a normal volunteer

Table-10(C)

1. Test the first and second cranial nerve of the subject.

**Table 1**

1. **A 40-year-old female presents with a persistent dry cough and fatigue. Her blood test reveals a TLC of 9,500 cells/µL and a DLC with an elevated percentage of lymphocytes.**
    a. List the five main types of white blood cells found in a DLC, and give their normal range.
    b. What are the causes of an increased lymphocyte count?
    c. Perform DLC on your own blood, and write your observation & result.
2. **If a blood sample shows agglutination with Anti-sera B and Anti-sera D, then:**
    a. What is the blood group of this patient?
    b. Which blood groups can donate blood to this patient?
    c. Perform blood grouping on your own blood and write your observation and result.

**Table 2**

1. **A 30-year-old pregnant female complains of shortness of breath and pale skin. Her Red Blood Cell (RBC) count is 3.5 million cells/µL.**
    a. What is the normal range for an RBC count in adult females, and what is the clinical term for a low count?
    b. Discuss the physiological reasons why a pregnant woman might have a decreased RBC count.
    c. Perform RBC Count on your own blood, and write your observation & result.
2. **A 40-year-old lady presented with H/O easy bruisability and bleeding into mucous membrane. There is no H/O preceding viral illness. Her bleeding investigations were: BT-12minutes, CT-6minutes, Platelet count-80,000/ul.**
    a. Enumerate the series of events involved in haemostasis.
    b. What are the conditions when bleeding time gets altered?
    c. Estimate the BT & CT of your own blood and write your result and interpretation.

**Table 3**

1. **A 25-year-old male presents with a high-grade fever and a sore throat. His Total Leucocyte Count (TLC) is found to be 18,000 cells/µL.**
    a. What is the normal range for TLC, and what is the clinical term for a high count?
    b. Based on the patient's symptoms and lab report, what are the possible causes of his condition?
    c. Perform TLC on your own blood, and write your observation & result.
2. **A young 20-years-old female presented with complains of fatigue. Hemoglobin was 8.6gm/dl.**
    a. Enlist the methods used to estimate hemoglobin.
    b. In what conditions hemoglobin levels are decreased.
    c. Perform hemoglobin estimation on your own blood, and write your observation & result.

**Table 4**

1. **A 45-year-old male presents to his physician with a persistent, low-grade fever, unexplained fatigue, and gastrointestinal discomfort. He recently returned from a trip to a rural area in a tropical country where he consumed local street food. He is suspected of having a parasitic infection.**
   a. What specific type of white blood cell would you expect to be elevated in the DLC?
   b. List the five main types of white blood cells found in a DLC, and give their normal range.
   c. Perform DLC on your own blood, and write your observation & result.
2. **If a blood sample shows agglutination with Anti-sera D, then:**
   a. What is the blood group of this patient?
   b. Which blood groups can donate blood to this patient?
   c. Perform blood grouping on your own blood and write your observation and result.

**Table 5**

1. **A 45-year-old vegetarian male presents with numbness and tingling in his hands and feet.His RBC count is low, and his blood smear shows large, oval-shaped red blood cells.**
   a. What nutritional deficiency is the most likely cause, and how does this deficiency lead to the specific characteristics of his red blood cells?
   b. What is the normal range for an RBC count in adult males?
   c. Perform RBC Count on your own blood, and write your observation & result.
2. **A 6-year-old child after 2 to3 weeks of viral illness develops small pinhead size bleeding spots in front of both legs. There is a large ecchymotic patch in front of left leg. He is diagnosed with Acute Idiopathic Thrombocytopenic purpura.**
   a. What will happen to his BT and CT?
   b. What is the physiological basis of altered BT in Thrombocytopenic purpura?
   c. Estimate the BT and CT of your own blood and write your result and interpretation.

**Table 6**

1. **A 35-year-old female undergoing chemotherapy for cancer has a TLC of 2,800 cells/μL.**
   a. What is the clinical term for this condition, and what is the normal range of TLC?
   b. Why is she at a high risk of infection?
   c. Perform TLC on your own blood, and write your observation & result.
2. **During hemoglobin estimation test, you notice a student has taken out the stirrer completely out of the tube and trying to match the colour:**
   a. During colour matching, why is it important to lift completely out of the tube.
   b. Why is it necessary to allow the solution to stand for10 minutes before dilution?
   c. Perform hemoglobin estimation on your own blood. Write your observation and result.

**Table 7**

1. **A 70-year-old patient with a severe bacterial pneumonia has a DLC showing a high percentage of neutrophils and the presence of "band" forms.**
    a. What is the clinical term for the increased neutrophils?
    b. List the five main types of white blood cells found in a DLC, and give their normal range.
    c. Perform DLC on your own blood, and write your observation & result.
2. **If a blood sample shows agglutination with Anti-sera A, Anti-sera B and Anti-sera D, then:**
    a. What is the blood group of this patient?
    b. Which blood groups can he donate bloodto?
    c. Perform blood grouping on your own blood and write your observation and result.

**Table 8**

1. **A 22-year-old female complains of heavy menstrual bleeding and dizziness.Her RBC count is 3.1 million cells/µL.**
    a. What is the likely diagnosis, and why are her symptoms directly related to this lab value?
    b. What is the normal range for an RBC count in adult females?
    c. Perform RBC Count on your own blood, and write your observation & result.
2. **A 15-year-old male presented with severe bleeding into right knee joint with soft tissue swelling following a minor trauma. He has a history of similar episode in right wrist a month back. He is diagnosed with Hemophilia-A. His BT is normal but CT is prolonged.**
    a. What is the physiological basis for increased CT in Hemophilia?
    b. Write down the factors deficient in various types of Hemophilia.
    c. Estimate the BT and CT of your own blood and write your result and interpretation.

**Table 9**

1. **During a routine check-up, a patient's TLC is found to be 15,000 cells/µL with no apparent symptoms.**
    a. What is the normal range for TLC, and what is the clinical term for a high count?
    b. What are some physiological factors that could cause a mild increase in TLC?
    c. Perform TLC on your own blood, and write your observation & result.
2. **In a hematology laboratory, you notice a student performing hemoglobin estimation. While performing the student squeezed the finger to obtain blood after pricking:**
    a. Explain the correct procedure of blood collection.
    b. Explain the rationale behind not squeezing the finger to obtain the types of hemoglobin.
    c. Estimate hemoglobin on your own blood and write your observation and result.

**Table 10**

1. **A 50-year-old patient with chronic allergies is seen for follow-up.Her DLC shows an elevated percentage of basophils.**
    a. What is the primary role of these cells, and how do they contribute to her allergic reactions?
    b. List the five main types of white blood cells found in a DLC, and give their normal range.
    c. Perform DLC on your own blood, and write your observation & result.
2. **If a blood sample shows agglutination with none of the Anti-sera and the control was normal, then:**
    a. What is the blood group of this patient?
    b. Which blood groups can he donate blood to?
    c. Perform blood grouping on your own blood and write your observation and result.

**Table 11**

1. **A 68-year-old male with a long history of Chronic Kidney Disease (CKD) presents for a routine check-up.He complains of persistent fatigue and shortness of breath upon exertion. His blood test results show a low Red Blood Cell (RBC) count and low hemoglobin.**
    a. Explain the primary reason for his low RBC count, specifically linking it to his chronic kidney disease.
    b. What is the normal range for an RBC count in adult males?
    c. Perform RBC Count on your own blood, and write your observation & result.
2. **A 28-year-old lady who was on warfarin therapy for Deep Vein Thrombosis presented with bleeding from a minor cut which stopped after 20 minutes.**
    a. What is the physiological basis for increased CT in Anticoagulant treatment?
    b. What are the conditions in which CT can get altered?
    c. Estimate the BT and CT of your own blood and write your result and interpretation.

**Table 12**

1. **A 5-year-old child is brought to the clinic with a fever and chills. His TLC is 22,000 cells/µL.**
    a. What is the normal range for TLC?
    b. How does the normal range for TLC in children differ from adults?
    c. Perform TLC on your own blood, and write your observation & result.
2. **While performing the hemoglobin test, a student got up from his seat and went to the window for the natural source of sunlight for matching the hemoglobin level of his blood sample with the standard comparator.**
    a. What is the importance of going near the natural source of light for matching with the standard comparator?
    b. What is the normal range of hemoglobin in males & females?
    c. Perform hemoglobin estimation on your own blood and write your observation & result.

**Table 13**

1. **A 22-year-old healthy male student reports to a clinic for a routine blood test immediately after a vigorous 30-minute workout.His blood work reveals a Total Leucocyte Count (TLC) of 15,000 cells/µL.**
    a. What is the normal range for TLC?
    b. Explain the physiological mechanism behind this temporary increase in white blood cells following strenuous exercise.
    c. Perform TLC on your own blood, and write your observation & result.
2. **If a blood sample shows agglutination with none of the Anti-sera and the control was normal, then:**
    a. What is the blood group of this patient?
    b. Which blood groups can he donate blood to this patient?
    c. Perform blood grouping on your own blood and write your observation and result.

**Table 14**

1. **A 10-year-old child presents with swollen glands, fatigue, and fever.A blood smear reveals a high number of atypical lymphocytes.**
    a. What is the clinical term for increased lymphocytes?
    b. List the five main types of white blood cells found in a DLC, and give their normal range.
    c. Perform DLC on your own blood, and write your observation & result.
2. **A child presents with a family history of clotting disorder. You conduct a focused assessment for relevant bleeding and clotting time.**
    a. What is the normal range of bleeding and clotting time?
    b. How is the coagulation of blood brought about?
    c. Estimatethe BT and CT of your own blood and write your result and interpretation.

**Table 15**

1. **A 22-year-old healthy male student reports to a clinic for a routine blood test immediately after a vigorous 30-minute workout.His blood work reveals a Total Leucocyte Count (TLC) of 15,000 cells/µL.**
    a. What is the normal range for TLC?
    b. Explain the physiological mechanism behind this temporary increase in white blood cells following strenuous exercise.
    c. Perform TLC on your own blood, and write your observation & result.
2. **In a haematology Laboratory, you notice a student performing hemoglobin estimation.**
    a. Which meniscus will be used to take reading and why?
    b. To compare the colours, why is it necessary to convert hemoglobin into "acid haematin"?
    c. Perform hemoglobin estimation on your own blood and write your observation & result.

**Table 16**

1. **A 20-year-old female patient with a suspected autoimmune disorder like lupus has a routine blood test.Her DLC shows a lower-than-normal percentage of lymphocytes.**
    a. What is the clinical term for this finding, and how might it relate to the patient's autoimmune condition?
    b. List the five main types of white blood cells found in a DLC, and give their normal range.
    c. Perform DLC on your own blood, and write your observation & result.
2. **A patient has blood group AB POSITIVE.**
    a. What Agglutinins are present in this patient?
    b. Which blood groups can he donate blood to?
    c. Perform blood grouping on your own blood and write your observation and result.

**Table 17**

1. **A 40-year-old male who has recently relocated from Kedarnath to Haridwar presents with symptoms of fatigue, dizziness, and a feeling of "being out of breath" during light activities. A blood test reveals an elevated Red Blood Cell (RBC) count, high hemoglobin, and a high hematocrit.**
    a. What is the physiological reason for the increase in his RBC count?
    b. What is the normal range for an RBC count in adult males?
    c. Perform RBC Count on your own blood, and write your observation & result.
2. **A child presents with a family history of clotting disorder. You conduct a focused assessment for relevant bleeding and clotting time.**
    a. What is the normal range of bleeding and clotting time?
    b. How is the coagulation of blood brought about?
    c. Estimate the BT and CT of your own blood and write your result and interpretation.

# External /Internal Examiner Information

## 1. BIO DATA:

| | |
|---|---|
| FULL NAME | Dr. Poonam Kumari |
| Father Name | Late H.N Prasad |
| Date of birth | 5th April 1980 |
| Gender /age | Female/ 46 years |
| Designation | Professor & HOD |
| Institute | Dept.of Physiology. G.M.C ,Haridwar |
| Residential address | Type IV,K-8,G.M.C Campus,Haldwani |

## 2. Educational Qualifications:

| S.NO | Qualifications | Institute | University |
|---|---|---|---|
| 1 | MBBS | S.K.M.C.H Muzaffarpur (Bihar), India | B. R. A. Bihar University, Muzaffarpur (Bihar),India |
| 2 | MD (Physiology) | RIMS | Ranchi University, Ranchi (Jharkhand), India |
| 3 | Fellowship in 2D-Echocardiography | Apollo, Delhi | Martin Luther Christian University |

## 3. Teaching Experience:

| S.No | Designation | Institute | From | To | Duration |
|---|---|---|---|---|---|
| 1 | Junior Resident | RIMS,Ranchi | 31 May 2007 | 30 May 2010 | 3 Years |
| 2 | Senior Resident (Dept. of | VCSG Govt Medical Sciences & Research | June 2010 | December 2010 | 6 months |

| | | | | | |
|---|---|---|---|---|---|
| | Physiology) | Institute, Srinagar, Pauri Garhwal (Uttarakhand), India | | | |
| 3 | Assistant Professor (Dept. of Physiology) | Govt.Medical College,Haldwani,Nainital (Uttarakhand),India. | 11 Decb. 2010 | 7 October 2021 | 10 years |
| 4 | Associate Professor (Dept. of Physiology) | Govt.Medical College,Haldwani,Nainital (Uttarakhand),India | 8 October 2021 | Till date | 2 years and 10 months |

**4. Research publications /Thesis:**

| S.No | Type and no(National/international) | No . of thesis supervised as supervisior of MD/MS | No . of thesis supervised as supervisior of Ph.D. |
|---|---|---|---|
| 1 | 10 | NO | NO |

**5. Any other academic achievement and extra –curricular activities:**

| S.No | Activities: |
|---|---|
| 1 | Co-coordinator of paramedical courses . |
| 2 | Chair-person of college women sexual harassment cell. |
| 3 | Flying squad of all the universities exams of college |
| 4 | Member of admission committee of UG/PG/Paramedical courses |
| 5 | BCBR done |
| 6 | CISP done |
| 7 | Award of excellence given by H.N.B.U Medical Education University,Dehradun. |

Signature

Curriculum Vitae

Dr Sunita Mittal, Professor
Dept of Physiology, AIIMS, Rishikesh-249203
Mobile: 9411314475, email-sunitasanjeev21@gmail.com

Professional Qualification

| Degree | Subject | University/ Institute | Year of passing |
|---|---|---|---|
| MBBS | All medical graduate subjects | Kanpur University, GSVMMC | 1988 |
| MD | Physiology | Kanpur University, GSVMMC | 1993 |

| From | To | Name of Organization and Designation |
|---|---|---|
| | | |
| 01.07.2022 | Till date | AIIMS, Rishikesh – Professor |
| 01.07.2019 | 30.06.2022 | AIIMS, Rishikesh – Additional Professor |
| 16.01.2016 | 30.06.2019 | AIIMS, Rishikesh – Associate Professor |
| 27.12.05 | 15.01.16 | SGRRIM&HS, Dehradun – Professor & Head (10 yrs) |
| 01.04.05 | 26.12.05 | HIMS, Jolly Grant, Dehradun – Professor |
| 01.02.01 | 31.03.05 | HIMS, Jolly Grant, Dehradun – Associate Professor |
| 30.01.96 | 31.01.01 | HIMS, Jolly Grant, Dehradun – Assistant Professor |

Awards and Achievements

- APPI Award of Excellence in Clinical Physiology-2025.
- APPI Award of Appreciation in Clinical Physiology-2024.
- Subject Expert Interview Board for the selection of 'Assistant Professors in Physiology' for Government Medical Colleges of Uttarakhand- 18 March 2025 and June 2023.
- Subject Expert in the Standing Selection Committee meeting for faculty Selection Interviews in the subject of Physiology at AIIMS, Deoghar in October, 2024 and Oct 2025.
- Subject expert for faculty Interview for the post of Associate and assistant professor in the subject of Physiology at GMC, Bhopal on 07.02.25 from 1:30 pm.
- Vice President APPI UP.UK chapter since 2012 to 2023
- Certificate of Appreciation'2022 for being the coordinator during 'Preparedness Training to Combat COVID-19 at AIIMS Rishikesh amidst Pandemic situation from Dean Academics, AIIMS, Rishikesh.
- 'Best Teacher Award' by HIMS, Jolly Grant, Dehradun, Nov 1999.

| | |
|---|---|
| | •Elected Fellow of the International College of Nutrition (FICN). International College of Nutrition (FICN) registered under societies Act XXI, 1860 AD, year 2019<br>•Associate Dean, Academics wef. 21.11.23 to till date<br>▪Chairperson - 'Research Monitoring Committee' to supervise the progress of ongoing research projects -Jan 8, 2021 till Aug 2022.<br>▪Associate/Deputy Dean, Research jan 2021- 2022.<br>•Member of 'Residents Observership Committee' constituted on 06.02.24<br>•Committee member for conducting 'Spot Counselling' of DM/MCh & MD/MS/MDS/MCh (06 Years) courses January, 2024 session from 27-28.02.24.<br>•External Subject Expert for the 'Board of Studies' to update curriculum for MBBS of Physiology at AIIMS, Deogarh during June.23.<br>•External expert by SGRR University for the Ph.D. Viva Voce examination in Medical Physiology, title "Association of Inflammatory Markers in COVID-19 patients with or without comorbidity" on 04th May, 2024.<br>•Member secretary - A fact finding committee via Letter No: AIIMS/RKSH/Dean(A)/23/ 4642/ 28 dated 12.2023<br>▪Member of American Physiological Society-Since 2019<br>▪Member - National Academy of Medical Sciences (NAMS) since 2018.<br>▪2014 - Indian Academy of Neurosciences Membership<br>▪National Advisory Member-International Journal of Physiology<br>•Reviewer-Textbook- Lippincott Illustrated Reviews Physiology by Wolters Kluwer Publishers.<br>•Associate Editor-Uttaranchal Journal of Ophthalmology, The Himalayan Ophthalmological Society, UKh –since 27.05.2019<br>• Reviewer/Editor:<br>Indian Journal of Physiology and Pharmacology - APPI<br>Journal of Neurology and Experimental Neurosciences<br>Journal of Medical Evidence<br>Journal of Cardio-Diabetes and Metabolic Disorders<br>▪Life Member – NAMS, IAN, APPI, ASSOPI, ISC, ISH<br>•Expert Interview Board for the selection of medical officers for PHCs during years 2002,2009,2014, 2022.<br>•Inspection Board Member at VCSGGMC, Srinagar, Garhwal By Uttarakhand Technical University, Dehradun during 2011, 2013.<br>•Expert, DPC AMU, Aligarh in 2009.<br>•Coordinator, Staff CPC at AIIMS, Rishikesh since March 2025.<br>•Scrutiny Member of Ph.D. & MSc prospectus, July 2024 |
| Experience in the field of Research | Field: Neurophysiology; Cognition, Memory and Dementia<br>Publication<br>▪ Papers – 78 (Citation 424)<br>▪ Book – Chapter publication – 03<br>▪ Abstracts as author/ coauthor - various conferences/CMEs: 48<br><br><u>Research Projects:</u><br>•<u>Ongoing -</u>Extramural (2) & Intramural (03) – 04, PhD thesis -2, MD Thesis-5<br>•Completed – Research Projects- 07, MD Thesis -14 |

| | |
|---|---|
| Clinical Services | ▪ Conducted workshops on Memory enhancing and Creative thinking for medical students.<br>▪ Public talks on Obesity, Aging, Anemia & Nutrition.<br>▪ Emergency duties |
| Medical Education Unit -Experience | Member & Resource Person of MEU –<br>HIMS, Jolly Grant, Dehradun 2002 to 2004<br>Attended MEU Workshops : 20 |
| Innovative Field | ▪01 patent published<br>▪ 12 o'clock maneuver to mitigate Vertigo<br>▪You tube video-how to draw (DIY) diagrams of Nervous sys. (20000 viewers) |
| Resource person/ Panelist in workshops | ▪Topic- 'Learning Skills–From Student to Being a Medical Student' during 'Foundation Course' for MBBS first year– 2016-2018, AIIMS, Rishikesh.▪ Reforming Physiology Curriculum for UG Teaching' on 28th July 2018 at AIIMS, Rishikesh from 2–4 pm. |
| Guest Faculty | 11 (International and National) |
| Organization of Conference/ CME/Workshops | 08 (International and National) |

# Curriculum Vitrae

Name: Dr Manisha Gupta

Designation: Professor & Head

Department: Physiology

College: Santosh Medical College & Hospital, Ghaziabad

D.O.B.: 07/06/1970

Address: III- C, 20 Nehru nagar , Ghaziabad

Contact no.: 7982731332

E.mail: dr.manishasinghal8@gmail.com

## Education Qualification:

| Qualification: | College | University | Year of Passing | Reg.no.of UG & PG | Name of state Medical Council |
|---|---|---|---|---|---|
| MBBS | S.N.MEDICAL COLLEGE, AGRA | B R Ambedkar University, Agra | 1998 | 043289 | U P Medical Council |
| M.D. (Physiology) | L.L.LR.M.MEDICAL COLLEGE, MEERUT | CCS University Meerut | 2005 | 4370 | MCI, New Delhi |

## Teaching Experience:

| Designation | Department | Name of Institution | From | To | Total Exp.Years& Month |
|---|---|---|---|---|---|
| Demonstrator | Physiology | L.L.LR.M.MEDICAL COLLEGE, MEERUT | 14/08/2002 | 13/08/2005 | 3 Years |
| Assistant Professor | do | MMC, Muzaffarnagar | 02/01/2006 | 06/10/2010 | 4 yrs 9 months |
| Associate Professor | do | RMCH & RC, Kanpur | 08/10/2010 | 01/08/2011 | Approx 9 months |
| Professor | do | SIMS, Hapur | 02/08/2011 | 09/10/2013 | 2 yrs 3 months |
| Professor & Head | do | SIMS, Hapur RMCH & RC, Hapur Santosh Medical College, Ghaziabad | 10/10/2013 | TILL DATE | 10 years 10 months |

No.of Publication : 17

**Dr. Omna Chawla**
MBBS, MD (Physiology), Fellow FAIMER

+91 9417072918 | omnachawla@gmail.com

## Education

1. Bachelor of Medicine and Bachelor of Surgery (MBBS) 1997-2003
Kasturba Medical College, Mangalore; Manipal Academy of Higher Education, Manipal, India

2. Doctor of Medicine (MD) Physiology 2004-2007
Christian Medical College, Ludhiana; Baba Farid University of Health Sciences, Faridkot, India

3. Fellow – FAIMER (CMCL) 2009-2011
Foundation for Advancement of International Medical Education and Research Regional Centre – Christian Medical College, Ludhiana, India

## Professional Experience

**Total Experience:** 11 years teaching as faculty in Physiology.

Present position

Associate professor

Government Medical College ,Haridwar

14 may 2025 -present

Professor and Head Physiology

Government Medical College, Haridwar
6 September 2024 – 13 may 2025

**Associate Professor, Physiology**
Government Doon Medical College, Dehradun
1 September 2023 – 5th September 2024

**Associate Professor**, Gian Sagar Medical College, Banur, Patiala
June 1, 2012 – June 15, 2014 (Duration: 2 years and 15 days)
**Assistant Professor**, Government Doon Medical College, Dehradun
September 18, 2021 – August 30, 2023 (Duration: 1 year and 11 months)
**Assistant Professor**, Gian Sagar Medical College, Banur, Patiala
February 5, 2007 – May 31, 2012 (Duration: 5 years and 4 months)

## Medical Council Registration

Registration No.: 14198 (Uttarakhand Medical Council)

## Professional Development and Certifications

- Sleep Medicine Training, AIIMS Rishikesh, December 2019 – March 2020
- Intensive Sleep Technology Workshop, Dr. Baldev Singh Sleep Laboratory, April 2019
- Basic Course in Sleep Medicine, Government Medical College, Bhavnagar, February 2015
- Facilitator Certification for MCI Basic Course Workshop, April 2014
- Short-Term Clinical Attachment, Neurophysiology Lab, Department of Neurology, PGIMER Chandigarh, 2013
- Summer Course in Medical Education, PGIMER, Chandigarh, May 2008

## Research Projects

1. CO-Principal Investigator
UCOST-funded research on sleep schedules, obesity, and daytime sleepiness among adolescents. Completed 2023
2. Parental Perspective in Accessing Strabismus Treatment. Completed 2022
3. E-Learning as a Tool for Medical Education in India: Investigating Student Perspectives completed 2017
4. Students' Perspective of the MBBS Physiology Curriculum FAIMER Fellowship Project completed 2009 – 2010
5. Asymptomatic Exercise-Induced ECG Changes in First-Degree Relatives of Coronary Artery Disease Patients | MD Thesis | 2004 – 2006

**Publications No ; 30**

Time: 03:00 Hours | MBT-103 | Max Marks: 100

Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐

**M.B.B.S. First Professional University Main Examination – 2025**

**Physiology (Paper- I)** **Paper ID: 1003**

**Note:** 1. Answer all questions in serial order. Draw well labelled diagrams to supplement your answer.
2. Answers to Section A should be written in OMR sheet, the OMR sheet to be returned within 20 minutes of start of examination.
3. Section B & C should be written in separate answer books.
4. Mention question no. properly before attempting any question.

## Section - A MCQ's (20 Marks)

1. 3rd heart sound is due to:
(a) Closure of semilunar valves.
(b) Rapid filling of ventricles.
(c) Atrio-ventricular valves closure.
(d) Atrial systole.

2. The following antibody is found in lungs:
(a) IgD.
(b) IgA.
(c) IgM.
(d) IgG.

3. Vagal stimulation causes increase in:
(a) Heart rate.
(b) R-R interval in ECG.
(c) Cardiac output.
(d) Force of contraction.

4. The most potent stimulus for central chemoreceptors in regulating respiration is:
(a) Increased $CO_2$ Concentration.
(b) Decreased $O_2$ Concentration.
(c) Decreased Na+ and K+ Concentration.
(d) Increased $HCO_3$ Concentration.

5. The respiratory centre which acts as a off switch point is:
(a) Apneustic Center.
(b) Pneumotaxic Center.
(c) Dorsal group of Nervous.
(d) Ventral group of Nervous.

6. Spirometry measures all except:
(a) Vital capacity.
(b) Inspiratory Reserve Volume.
(c) Functional Residual Capacity.
(d) Expiratory Reserve Volume.

7. Shifting of $O_2$– Hemoglobin curve to right means:
(a) Decreased $O_2$ delivery to tissues.
(b) Increased $O_2$ delivery to tissues.
(c) Loading of $CO_2$ to blood.
(d) Loading of $O_2$ to blood.

8. The major regulator of immune system in humans:
(a) Natural killer cells.
(b) Cytotoxic T cells.
(c) Helper T cells.
(d) Suppresser T cells.

9. Duration of A-V nodal delay, during conduction of impulse from atria to ventricle:
(a) 0.3 sec.
(b) 0.5 sec.
(c) 0.1 sec.
(d) 0.4 sec.

10. The condition where the platelet count is less than normal is called:
(a) Thrombocytosis.
(b) Leukocytosis.
(c) Anaemia.
(d) Thrombocytopenia.

11. Intrinsic factor of Castle is produced by which type of cells:
(a) Chief cells.
(b) Mucous cells.
(c) Parietal cells.
(d) G cells.

12. Tall T waves on an ECG are most indicative of which of the following conditions:
(a) Hypocalcemia.
(b) Hypokalemia.
(c) Hyperkalemia.
(d) Myocardial ischemia.

13. A laboratory report showing normal clotting time with an increased bleeding time is associated with:
(a) Thrombocytopenia purpura.
(b) Hemophilia A.
(c) Christmas disease.
(d) Vitamin K deficiency.

14. Cholagogues are substances that cause.....:
(a) Contraction of gallbladder.
(b) Increase bile secretion.
(c) Concentrate bile.
(d) Acidify bile.

15. The ECG changes in First degree Heart Block shows:
(a) Prolonged QT interval.
(b) Prolonged PR interval.
(c) ST-segment elevation.
(d) ST segment depression.

16. Chloride ions are exchanged with one of the following ions during the chloride shift:
(a) Hydrogen.
(b) Calcium.
(c) Sodium.
(d) Bicarbonate.

17. The prime driving force for a counter current multiplier system is:
(a) Urea recycling.
(b) Medullary hyperosmolarity.
(c) Action of ADH in collecting duct.
(d) Sodium reabsorption in thick ascending loop of Henle.

18. Surfactant lining the alveoli:
(a) Helps prevent alveolar collapse.
(b) Is produced in alveolar type I cells and secreted into the alveolus.
(c) Is increased in the lungs of heavy smokers.
(d) Is a glycolipid complex.

19. What is the main mechanism by which the kidney concentrates urine:
(a) Filtration.
(b) Reabsorption.
(c) Secretion.
(d) Countercurrent mechanism.

20. Which of the following substance is typically secreted in the distal convoluted tubule (DCT):
(a) Glucose.
(b) Sodium.
(c) Pottasium.
(d) Urea.

## Section - B (40 Marks)

Q1. A 55-year-old chronic smoker presents to the ER with a one-week history of worsening dyspnea, wheezing, and a productive cough. For the last five years, he has experienced similar episodes during the winter. Physical examination reveals mild cyanosis, a barrel-shaped chest, wheezing, and crepitations. Lab work shows an elevated RBC count, and pulmonary function tests show a decreased FVC and an FEV1 of 60%. **1+3+3+3=10**

(a) Name the most probable clinical condition.
(b) Draw and label a spirogram showing the lung volumes and capacities.
(c) Describe the physiological basis for the changes in RBC count and FVC.
(d) Describe timed vital capacity and its clinical significance.

Q2. Write short notes on the following: **4X5=20**
(a) Mechanism of clotting via intrinsic pathway.
(b) Draw and explain Oxygen – Hemoglobin dissociation curve.
(c) Conduction system of heart.
(d) Write about importance of Empathy and Attitude in patient care.

Q3. Give physiological basis of following: **5X2=10**
(a) Defecation reflex.
(b) Digestion and absorption of fat.
(c) Non-respiratory functions of lung.
(d) Movements of small intestine.
(e) Factors regulating acid secretion.

## Section - C (40 Marks)

Q1. What is Erythropoiesis? Describe the stages and factors regulating Erythropoiesis. Add a note on Anaemias. **10**

Q2. Write short notes on the following: **4X5=20**
(a) Describe the mechanisms regulating glomerular filtration rate.
(b) Describe water reabsorption in the different parts of nephron. Explain the role of hormones in water reabsorption.
(c) Neural regulation of respiration.
(d) Role of Baroreceptors in regulation of Blood pressure.

Q3. Give physiological basis of following: **5X2=10**
(a) Micturition reflex.
(b) Gastro colic reflex.
(c) Cardiopulmonary resuscitation.
(d) Cystometrogram.
(e) Fibrinolytic system.

*****

Time: 03:00 Hours | MBT-104 | Max Marks: 100

Roll No. □□□□□□□□□□□□□□□

M.B.B.S. First Professional University Main Examination – 2025

Physiology (Paper- II) | Paper ID: 1004

Note: 1. Answer all questions in serial order. Draw well labelled diagrams to supplement your answer.
2. Answers to Section A should be written in OMR sheet, the OMR sheet to be returned within 20 minutes of start of examination.
3. Section B & C should be written in separate answer books.
4. Mention question no. properly before attempting any question.

## Section - A MCQ's (20 Marks)

1. Tetanic contraction of a skeletal muscle fiber results from a cumulative increase in the intracellular contraction of which of the following:
(a) Na+.
(b) K+.
(c) Ca++.
(d) Troponin.

2. Full development and function of seminiferous tubules require:
(a) Somatostatin.
(b) Oxytocin.
(c) Androgen and FSH.
(d) FSH.

3. Secretions from the prostate gland are rich in:
(a) Fructose.
(b) Fibrinolysins.
(c) Hyaluronidase.
(d) Prostaglandins.

4. The property of specificity of nerve fibers for transmitting only one modality of sensation is called:
(a) Law of Projection.
(b) Spatial Summation.
(c) Labeled Line Principle.
(d) Weber Fechner Law.

5. The hypothalamic nucleus that controls food intake called as feeding center is:
(a) Lateral Hypothalamus.
(b) Posterior Hypothalamus.
(c) Anterior Hypothalamus.
(d) Ventro Medial Nucleus.

6. The intrafusal fibers of muscle spindle is supplied by:
(a) Alpha Motor Neuron.
(b) Gamma Motor Neuron.
(c) Dorsal Root Neuron.
(d) Renshaw Cell.

7. The neurotransmitter that is excitatory is:
(a) Glycine.
(b) Glutamate.
(c) Serotonin.
(d) Dopamine.

8. In which stage of sleep, sleep spindles and K+ complexes are seen in EEG:
(a) REM Sleep.
(b) Stage – 2 NREM Sleep.
(c) Stage – 4 NREM Sleep.
(d) Stage – 3 NREM Sleep.

9. The auditory pathway passes via all except:
(a) Cochlear nuclei.
(b) Superior olivary nucleus.
(c) Trapezoid body.
(d) Superior colliculus.

10. Athetosis is characterized by:
(a) Continuous, slow writing movements.
(b) Rapid voluntary dancing movement.
(c) Involuntary flailing movements.
(d) Slowness of movements.

11. The language comprehension area in posterior part of the superior gyrus of temporal lobe is:
(a) Wernicke's Area.
(b) Broca's Area.
(c) Gnostic Area.
(d) Angular Gyrus.

12. The nucleus responsible for maintaining circadian rhythm is:
(a) Subthalamic Nucleus.
(b) Suprachiasmatic Nucleus.
(c) Raphe Nucleus.
(d) Lateral reticular Nucleus.

13. Taste buds are absent in:
(a) Filiform Papillae.
(b) Fungiform Papillae.
(c) Foliate Papillae.
(d) Circumvallate Papillae.

14. A 27 year old married woman having regular menstrual cycles does not have her periods for past 10 weeks. The gynaecologist suggests her to go for a urine pregnancy test. The following hormone in urine of a pregnant woman forms the basis of pregnancy test:
(a) Human chorionic gonadotropin.
(b) Estrogen.
(c) Inhibin.
(d) Human chorionic somatomammotropin.

15. Carpopedal spasm is a clinical feature of:
(a) Acromegaly.
(b) Tetany.
(c) Cretinism.
(d) Dwarfism.

16. Contractile unit of the skeletal muscle is:
(a) Sarcolemma.
(b) Sarcoplasm.
(c) Sarcoplasmic reticulum.
(d) Sarcomere.

17: Place the events of the Action Potential in their correct sequence:
(A) Sodium Gates Close Potassium Gates Open.
(B) Depolarisation.
(C) Resting Potential Restored.
(D) Repolarisation.
(E) Active Transport of Na+ & K+.
(F) All Sodium Gates open.

(a) A-B-C-D-E-F
(b) D-F-C-B-E-A
(c) F-B-A-D-E-C
(d) F-E-D-C-A-B

18. Vasopressin is secreted by:
(a) Paraventricular nucleus.
(b) Supra optic nucleus.
(c) Anterior nucleus.
(d) Posterior nucleus.

19. Hormones produced by anterior pituitary gland are all except:
(a) Follicle stimulating hormone.
(b) Growth hormone.
(c) Thyroid stimulating hormone.
(d) Aldosterone.

20. Highest integration centre for autonomic nervous system is:
(a) Basal Ganglia.
(b) Cerebellum.
(c) Spinal cord.
(d) Hypothalamus.

## Section - B (40 Marks)

Q1. Discuss about the nuclei, connections and functions of Basal ganglia. Add a note on Parkinson's disease. **10**

Q2. Write short notes on the following: **4X5=20**
(a) Brown-Sequard syndrome and its clinical features.
(b) Excitation contraction coupling.
(c) Differences between REM and NREM sleep.
(d) Role of Medical Graduate as a Communicator.

Q3. Write very short notes on the following: **5X2=10**
(a) Olfactory pathway.
(b) Mention the tests of hearing.
(c) CNS ischemic Response.
(d) Posterior pituitary hormones and their principal action.
(e) Milk ejection reflex.

## Section - C (40 Marks)

Q1. Trace the visual pathway with neat diagram. Describe disorders of visual fields in relation to visual pathway. **10**

Q2. Write short notes on the following: **4X5=20**
(a) Endometrial changes in menstrual cycle.
(b) Insulin and its functions.
(c) Physiologic effect of thyroid hormone.
(d) Feto-placental unit.

Q3. Write very short notes on the following: **5X2=10**
(a) Cushing's syndrome.
(b) Mechanism of action and functions of testosterone.
(c) Sodium potassium ATPase pump.
(d) Papez circuit.
(e) Color blindness.

*****

# NATIONALMEDICALCOMMISSION

## STANDARDASSESSMENTFORM FORM – C

File No: / Assessment No.:

Name of Course : MBBS

Name of Subject : Physiology

Name of College : Government Medical College, Haridwar

Name of University : HNBME University, Dehradun

Place of examination : Department of Physiology, Government Medical College, Haridwar

Date/s of examination : 11 to 13 September, 2025

### 1. ASSESSORS

| Sl. | Name | Official address | Mobile No. | Email address |
|---|---|---|---|---|
| 1. | Dr. Sunita Mittal | Department of Physiology, AIIMS Rishikesh | 9411314475 | sunitasanjeev21@gmail.com |
| 2. | Dr. Manisha Gupta | Department of Physiology, Santosh Medical College, Ghaziabad | 7982731332 | drmanishasinghal8@gmail.com |
| 3. | Dr Poonam Kumari | Department of Physiology, GMC Haridwar | 9410126219 | drpoonam99p@gmail.com |
| 4. | Dr. Omna Chawla | Department of Physiology, GMC Haridwar | 9417072918 | omnachawla@gmail.com |

Assessment order/ letter number:

| | |
|---|---|
| | |
| | |
| | |

Dr. POONAM KUMARI
Professor & HOD
Dept. of Physiology
G.M.C Haridwar
Uttarakhand.

## 2. REPORTOFPREVIOUS ASSESSMENT

| Deficiencies pointed out in thelast Assessment/ if any | Remarks |
|---|---|
| Not Applicable | First MBBS Batch of GMC, Haridwar |

## A. Schemeof Examination

| 1. Theory: | Marks Allotted | Minimum Passing Marks |
|---|---|---|
| Final Examination: | 200 | Minimum 40% marks separately in theory |
| Internal Assesment: | 100 | |
| Total for theory: | 300 | Aggregate marks should be 50% |
| 2. Clinical/practical: | | |
| Final Examination: | 70 | Minimum 40% marks separately in practical |
| Internal Assessment: | 70 | |
| Total for practical: | 140 | Aggregate marks should be 50% |
| 3. Viva-voce: | | |
| Final Examination: | 30 | Note: Aggregate marks theory + practical should be 50% |
| Internal Assessment: | 30 | |
| Total for viva-voce: | 60 | |
| **Grand Total:** | **500** | |

## B. Theory (Attach 1 copy of each of the papers)

| 1. Theory paper | Subject: | Time: 03 Hrs. | Date of exam: |
|---|---|---|---|
| No. 1: | Physiology | 10am to 01pm | 04-09-2025 |
| No. 2: | Physiology | 10am to 01pm | 06-09-2025 |

2. Place of conduct of exam : Lecture Theatre, GMC, Haridwar

3. Invigilation arrangements : Yes

4. No. of candidates appeared : 97

## C. Remarks by the Assessor/s regarding:

a) Nature of the questions–MCQs/SAQs/Structured Essay type /Long answers: Yes

b) Type of Questions –Recall based/Clinical application based/Problem based: Yes

c) Standard of questions –level of difficulty : Easy/Moderate/ Difficult: Moderate

d) Do they broadly cove the prescribed curriculum?---------- Yes

e) Standard of the answers:(On a scale of10 where 0 =Very poor and 10=Outstanding) 08

f) Internal assessment marks (to be reviewed by the assessors) that have contributed to final examination: Reviewed and found satisfactory

g) Method/pattern of examination of internal examinations conducted during the course of training/study (to be clearly stated): Regular formative assessment taken and continuous internal assessment also carried out

h) Have the Internal assessment marks influenced the final examination? Internal assessment marks are criteria to be eligible for University examination

## II.PRACTICAL/CLINICAL EXAMINATION:

## PRACTICAL

a) Conduct of the practical examination (provide details includingOSCE). (Annexure-1,2,3 attached )
   1. Spotters (including amphibian graphs) with application based questions
   2. Hematology Practical – clinical scenario based structured questions
   3. Clinical /Human Practical with OSCE
   4. Observed stations with structured questions

b) Does the practical examination broadly cover the discipline? Yes

c) Time allotted for different sections of the examination (Provide details). Annexure-
   1. Spotters: 30-45 minutes
   2. Hematology Practical: 90 x2 =180 minutes
   3. Clinical Practical: 90x2=180 minutes
   4. Observed stations with structured questions; 20 min

d) Details of examiners :(please attach brief CV of the examiners). Annexure

**Note: Provide this information in a seale denvelopemarked confidential).**

| Names Qualification | Designation | Years of Experienceas UG Teacher / Examiner |
|---|---|---|
| | | |

| | | |
|---|---|---|
| Internal examiners<br>1. Dr Poonam Kumari<br>2. Dr Omna Chawla<br><br>External examiners | Professor<br>Associate Professor | 17 years<br>14 years |
| 1. Dr Sunita Mittal | Professor | 23 |
| 2. Dr Manisha Gupta | Professor | 20 years |

e) Mode of practical examination : In batches or otherwise and number of students per day (Provide details)
Batch A: Roll No. 1 to 33
Batch B: Roll No. 34 to 66
Batch C: Roll No. 67 to 100

f) Are there other examination centers in the same University: Yes/No

1. If yes ,provide details.

   GMC, Haldwani

   GMC, Dehradun

   GMC, Srinagar

   GMC, Almora

g) Do the same examiners conduct the examination in other centers too? Yes

1. If not. what steps are taken to ensure uniformity of standards? Are meetings of the examiners being conducted and guidelines are given by the University)

h) Date of Examination in different centers

GMC, Haldwani: 11th to 13th September, 2025

GMC, Dehradun: 11 to 13 th sept ,2025

GMC, Srinagar: 14th to 16th September, 2025

GMC, Almora ; 15 t0 17th September

i) Date and time when the examination was inspected by the assessors: 11th to 13th September, 2025; Time: 9am to 2pm

j) Are the invigilation arrangements satisfactory? Yes

k) No .of candidates appeared: 97

l) Number and type of practical exercises allotted to candidates (enclose copy of

questions/tasks) Annexure-

1. Spotters: 10
2. Hematology Practical: 1 Major Experiment, 1 Minor Experiment
3. Clinical Practical: 2
4. Observed station :2

m) The standard displayed (On a scale of 10 where0=Very poor and10 =Outstanding): 08

n) Minimum marks required for passing: 50% in aggeregate

**PRACTICAL** – N/A

1. No of Long cases
2. No of Short cases
3. How many cases were given to each candidate– long and short cases?
4. Type of cases given(attach list of long and short cases)
5. Average time for(long cases and short cases) for each Candidate.
   a. Time for examining the patient
   b. Time for discussion fixed time or changed as per the answers of the candidate.
6. How was the assessment done?
7. Standard displayed by candidates in general in the clinical part of the examination (On a scale of 10 where 0 = Very poor and 10 = Outstanding)
8. Nature of Discussion of case by the candidate – level of difficulty of questions (On a scale of 10 where 0 = Very easy and 10 = very difficult)
   a. Number & type of questions (a copy of the question asked by the examiners may be attached)
   b. Have all the candidates been uniformly examined and grades or marks awarded as per merit of the question?
   c. Was the discussion fair, searching and sufficient for the assessment of practical knowledge and skills?
   d. Was the atmosphere friendly and allowed the candidates to express themselves freely?

e. Were supplementary questions asked by the examiners to gauze the depth of knowledge of the candidates?

9. Was the assessment done jointly by more than one Examiner?

10. How may marks are allotted for clinical examination?

11. What is the minimum percentage for passing the clinical part?

12. Are marks obtained in regular internal examinations added on to the marks obtained in the final clinical examination?

13. Were any other marks from their course of training , or clinical works done in the wards added to the marks obtained in the final clinical examination?

14. If so, to what extent (in percentage of marks)?

15. Has it influenced the result at the final examination?

(Method of assessment of clinical work in the wards may be clearly stated).

**VIVA-VOCE**

**Conducted with the concerned stations not separately**

The content of the interaction (Give extent of coverage of subject): Full course of Physiology covered

1. How was it conducted (provide details)?

Structured questions attached as annexure 1, 2, 3

2. What was the standard? ( On a scale of 10 where0=Very poor and10 =Outstanding): 08

3. What was the nature of assessment? Objective and structured

4. Was it done jointly by more than one examiner? All 4 examiners assessed each student independently

5. How are the marks obtained in different parts of the examination grouped ? Addition of marks obtained in each exercise

6. What is the minimum for passing in each section and in the grand total? For Grand Total – minimum 50% marks required as per passing criteria

7. Results for the last three years. Not applicable (First MBBS Batch)

8. No. of students appeared? 97

9. No. of students passed ? Result will be declared by University

10. Other remarks if any.

## Conclusions:

Was the standard sufficient for the M.B.B.S. examination as required by Regulations of the Medical Council of India/National Medical Commission?

Yes, it is as per Standards laid down by NMC

Was the examination conducted satisfactorily to the assessor ? Yes

If not, the reasons to be mentioned:

Observations of the assessors are to be made in assessment report only.
Conduction of the annual practical university examination was smooth & satisfactory. The examination was conducted as per the NMC guidelines and CBME curriculum.

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