

CSM—50/23

PART—II/PAPER—VI

MEDICAL SCIENCE

PAPER—I

**Candidate
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this margin.**

Time : 3 Hours

Full Marks : 250

*The question paper contains **18 (Eighteen)** questions
in **GROUP—A (12)** and **GROUP—B (06)** together.*

GROUP—A

*Candidates to attempt **10 (ten)** questions within word limit of **250**.
Each question carries **15** marks.*

1. Discuss pathogenesis of myocardial ischemia. What is the difference between stable, unstable angina and myocardial infarction from pathogenesis point of view?
2. How Tyrosine Kinase Inhibitors (TKI) group of drugs have changed the scenario of management of Chronic Myeloid Leukemia (CML)? Write in brief about indications and doses of various TKI drugs.
3. How do you define MDR-TB and XDR-TB? Enumerate second line antitubercular drugs with doses.
4. What is 'first pass effect'? What do you understand by term 'drug interaction'? Give two examples of common drug interactions with their mechanism.
5. List three important infections which are known to cause cancer. Which vaccines are currently available to prevent cancerous illnesses?
6. What is broad pathophysiology of HIV disease? What is the importance of CD4 cell count in HIV infection?
7. What are Direct Oral Anticoagulant or Newer Oral Anticoagulant drugs? Enumerate them. What are their advantages and limitations?

8. Discuss pathophysiology of diabetic ketoacidosis. What are the usual precipitating causes of diabetic ketoacidosis?
9. Why is snake venom of a poisonous snake so lethal? Discuss clinical manifestations of vasculotoxic and neurotoxic snake bite.
10. Discuss etiological agent and host factors of rheumatic fever. What is pathogenesis of rheumatic fever?
11. What is gene transfer technique, how could it be done? In which diseases it has been tried, what is its future?
12. Discuss major risk factors for coronary atherosclerosis. Write in short about plaque formation and its dynamics.

**Candidate
must not
write on
this margin.**

GROUP—B

*Candidates to attempt **05 (five)** questions within word limit of **300**.
Each question carries **20** marks.*

13. How is body temperature regulated in a normal person? What is the difference in pathogenesis of Fever versus Hyperthermia?
14. Discuss in detail the production and metabolism of bilirubin.
15. Discuss *H. pylori* and its characteristics. What diseases could be caused by it? How *H. pylori* infection could be diagnosed?
16. Discuss dietary sources of Vitamin B12. How is it absorbed and metabolized in human body?
17. What are Acute Mountain Sickness (AMS) and High Altitude Cerebral Edema (HACE)? What are pathophysiologies behind these states?
18. Discuss normal physiology of sleep. Write in short about organization of normal sleep and changes with aging.

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