

PERIPHERAL VASCULAR SURGERY

PAPER - I

PVS/D/13/33/I

Time : 3 hours
Max. Marks : 100

Important instructions:

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

1. What is 'Doppler Effect'? What is 'Duplex' scanning? How is Duplex scanning better than CT scanning in situations and mention them. 3+3+4
2. Discuss the 'Prothrombotic' states in clinical practice? Discuss indications and timing for thrombophilia screening. 5+5
3. Describe the collateral circulation around the knee. What happens hemodynamically when the popliteal artery is transected completely, behind the knee? 5+5
4. Describe the hemodynamic changes that occur after creation of:
(i) AV fistula at the elbow
(ii) AV graft between brachial artery and axillary vein 5+5
5. What are effects of 'Foam Sclerotherapy' on the vessels locally and distantly? Which are the agents used in preparing foam (Sclerotherapy)? What are the histological changes in vessels noted after giving sclerotherapy? 4+4+2
6. What are the best synthetic vascular grafts for the below knee arterial bypass? Discuss the differences between porous and non porous grafts? Discuss the role of endothelial seeding of grafts. 4+4+2
7. Discuss the important role played by the elastin and collagen in maintaining aortic wall integrity? How are elastin degradation products (EDPs) helpful in evaluating aneurysms during early detection and follow up? 5+5
8. Discuss the pathogenesis of venous thrombosis in cancer, trauma and sepsis patients? 4+3+3
9. What are Biomarkers? Discuss the role of Biomarkers in diagnosis and treatment of vascular diseases? 4+6
10. Discuss briefly the role of Colour Doppler, CT Scan, MRI, PET-CT & PET-MRI in evaluating the peripheral vascular disease. 2+2+2+2+2