

**Give an account on (25 marks for each)****Case 1:****History**

A 66-year-old woman, a retired nurse, consults her general practitioner (GP) with a 4-month history of tiredness, slight breathlessness on exertion and loss of weight from 71 to 65 kg. Her appetite is unchanged and normal; she has no nausea or vomiting, but over the last 2 months she has had an altered bowel habit with constipation alternating with her usual and normal pattern. She has not seen any blood in her faeces and has had no abdominal pain. She has had no post-menopausal bleeding. There is no relevant past or family history, and she is on no medication. She has smoked 20 cigarettes daily for 48 years and drinks 20–28 units of alcohol a week.

Examination

She has slight pallor but otherwise looks well. No lymphadenopathy is detected, and her breasts, thyroid, heart, chest and abdomen, including rectal examination, are all normal. The blood pressure is 148/90 mmHg.

| INVESTIGATIONS | | Normal |
|-------------------------------|---------------------|--------------------------|
| Haemoglobin | 10.1 g/dL | 11.7–15.7 g/dL |
| Mean corpuscular volume (MCV) | 76 fL | 80–99 fL |
| White cell count | $4.9 \times 10^9/L$ | $3.5–11.0 \times 10^9/L$ |
| Platelets | $277 \times 10^9/L$ | $150–440 \times 10^9/L$ |
| Sodium | 142 mmol/L | 135–145 mmol/L |
| Potassium | 4.4 mmol/L | 3.5–5.0 mmol/L |
| Urea | 5.2 mmol/L | 2.5–6.7 mmol/L |
| Creatinine | 106 µmol/L | 70–120 µmol/L |

Urinalysis: no protein, no blood
Blood film shows a microcytic hypochromic picture.

Questions

- What is the likeliest diagnosis?
- How would you investigate the patient?