(5) Question 1. Digital value  
1024*1.25/5=1024/4=256

(5) Question 2. Baud rate in bits/sec  
1000 bytes/sec*10bits/byte = 10,000 bits/sec

(25) Question 3. Show subroutine

```assembly
InSt brclr SCISR1, #$20, *
  ldaa SCIDRL
  staa 1, y+
  cmpa #CR
  bne   InSt
  rts
```

(5) Question 4. Show the code

```assembly
movw #50, 2, -sp
or
ldd #50
pshd
or
ldd #50
leas -2, s
std 0, s
```

(5) Question 5. List variables A, B, C, D, E, F, G

(5) Question 6. List variables A, B, C, D, E, F, G

(5) Question 7. Give value of xxx  
0

(5) Question 8. Give value of xxx  
4

(5) Question 9. Specify A, B, C, D, E

(5) Question 10. Output sequence

S1(out=01, wait=5)
S2(out=10, wait=10)
S2(out=10, wait=10) repeats S2

(5) Question 11. Give instruction for yyy  
bclr

(5) Question 12. Give value of zzz  
2

(5) Question 13. Specify A, B, C, D, E

(5) Question 14. Give $R_f$ in ohms

$R_f = (5-1-0.5)/0.001 = 3500 \text{ ohms}$

(5) Question 15. Specify A, B, C, D, E

A. all registers but the SP