**（1）Gantt图**

**FCFS：**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **P1** | **P2** | **P3** | **P4** | **P5** |

**0 10 11 13 14 19**

**SJF:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **P2** | **P4** | **P3** | **P5** | **P1** |

**0 1 2 4 9 19**

**non-preemptive priority:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **P2** | **P5** | **P1** | **P3** | **P4** |

**0 1 6 16 18 19**

**RR:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **P1** | **P2** | **P3** | **P4** | **P5** | **P1** | **P3** | **P5** | **P1** | **P5** | **P1** | **P5** | **P1** | **P5** | **P1** |

**0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 19**

**(2) 周转时间：**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **FCFS** | **SJF** | **Priority** | **RR** |
| **P1** | **10** | **19** | **16** | **19** |
| **P2** | **11** | **1** | **1** | **2** |
| **P3** | **13** | **4** | **18** | **7** |
| **P4** | **14** | **2** | **19** | **4** |
| **P5** | **19** | **9** | **6** | **14** |

**（3）等待时间**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **FCFS** | **SJF** | **Priority** | **RR** |
| **P1** | **0** | **9** | **6** | **9** |
| **P2** | **10** | **0** | **0** | **1** |
| **P3** | **11** | **2** | **16** | **5** |
| **P4** | **13** | **1** | **18** | **3** |
| **P5** | **14** | **4** | **1** | **9** |
| **平均** | **9.6** | **3.2** | **8.2** | **5.4** |

**（4）如上图中平均时间所示，SJF的平均等待时间最短**