



Figure 1: graph

### Arguing (15 marks)

Consider the following graph:

(a) (5 marks) What is the argumentation framework (AF) for the argumentation graph above (you must follow the notation from our slides)?

(b) (10 marks) What is the grounded extension of the argumentation framework above (you must follow the notation from our slides)?

Solution:

a. The Argumentation Framework of the given graph is :

$(\{a, b, c, d, e, f, g, h, i, j\}, \{(a, b), (a, c), (a, d), (b, e), (b, g), (c, b), (c, f), (d, e), (d, h), (g, h), (h, i), (h, c), (i, f), (j, i)\})$

b. The grounded extension of the argumentation framework :

$\{a, e, g, j\}$ .