IT Passport
Sample Exam Practice and Explanations

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Scope of IP Questions

Question Fields	Areas	Topics
Strategy 35%	Corporate and Legal Affairs	Corporate Activities
		Legal Affairs
	Management Strategy	Management Strategy
		Technology Strategy Management
		Business Industry
	System Strategy	System Strategy
		System Planning
Management 25%	Development Techniques	Software Development Techniques
		Software Development Management Techniques
	Project Management	Project management
	Service Management	Service Management
		System Audit

Scope of IP Questions

Question Fields	Areas	Topics
Technology 40%	Basic Theory	Basic Theory
		Algorithms and Programming
	Computer System	Computer Components
		System Components
		Software
		Hardware
	Technical Elements	Human Interfaces
		Multimedia
		Databases
		Networks
		Security

Strategy Field Sample

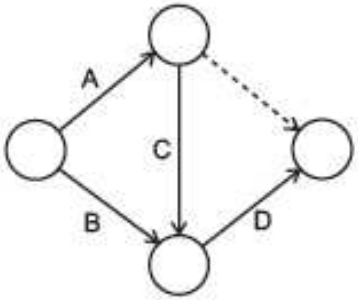
Q1.

A list of activities for a project plan is shown below. Which of the following represents it as an arrow diagram?

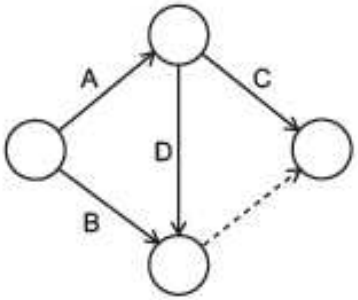
[List of activities]

Activity	Preceding activities
A	None
B	None
C	A
D	A, B

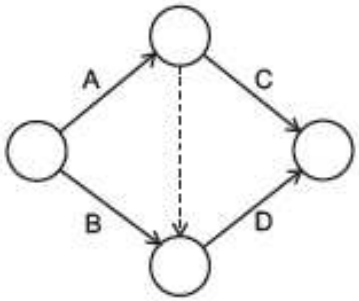
a)



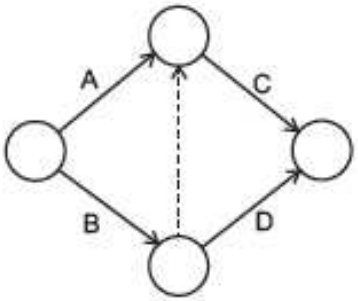
b)



c)



d)



Strategy Field Sample

Q1. Answer

A list of activities for a project plan is shown below. Which of the following represents it as an arrow diagram?

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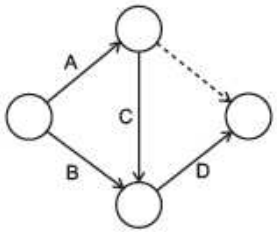
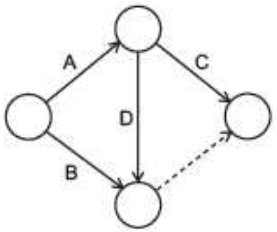
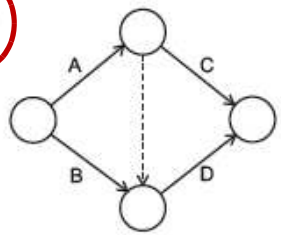


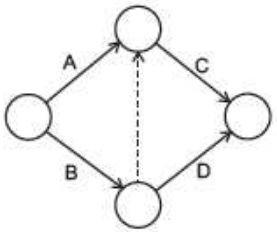
b)



c)



d)



Answer C

Explanation

There are no preceding activities for activity A and activity B. Since activity A and activity B are the preceding activities for activity D, the correct Answer is c).

Strategy Field Sample

Q2.

Which of the following describes the characteristics of the QR code in the figure shown below?

a) It compresses and symbolizes an image and is used for communication of information.
b) It contains only about 10 bytes of information and is used for encryption of commercial product codes.
c) It is a kind of two-dimensional bar code and can record much information, including alphanumeric characters, Kanji characters, etc.
d) It is the code developed for use in IC tags and can be used for noncontact-based merchandise management.

Strategy Field Sample

Q2. Answer

Answer **C**

Explanation

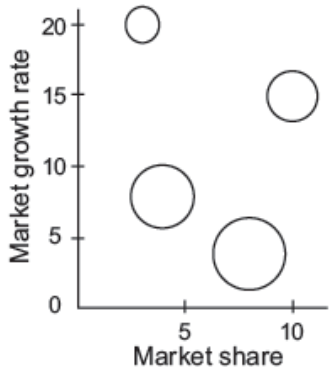
A two-dimensional code is a JIS standard code that contains information in both the horizontal and vertical direction, enabling the code to hold more information. A QR code is a type of two-dimensional code that contains a cutout symbol on three corners to enable quick and accurate reading in any 360 degree direction.

Management Strategy Field Sample

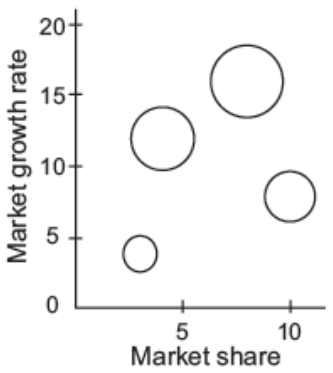
Q3. A company has product lines including four items. The table shown below summarizes the survey results of the sales, market share, and market growth rate for each item that year. Which of the following represents the corresponding product portfolio matrix (PPM)? Here, the size (area) of each circle represents sales.

Product	A	B	C	D
Sales (in million dollars)	8	12	4	16
Market share (%)	10	4	3	8
Market growth rate (%)	15	8	20	4

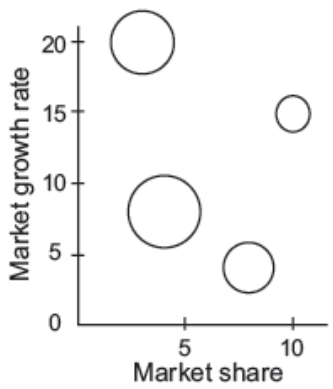
a)



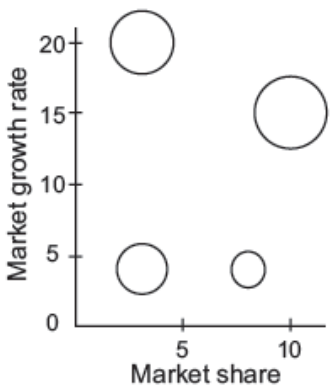
b)



c)



d)



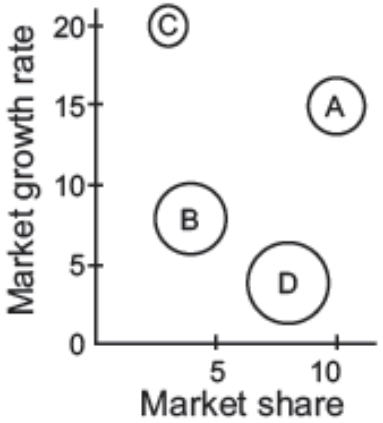
Strategy Field Sample

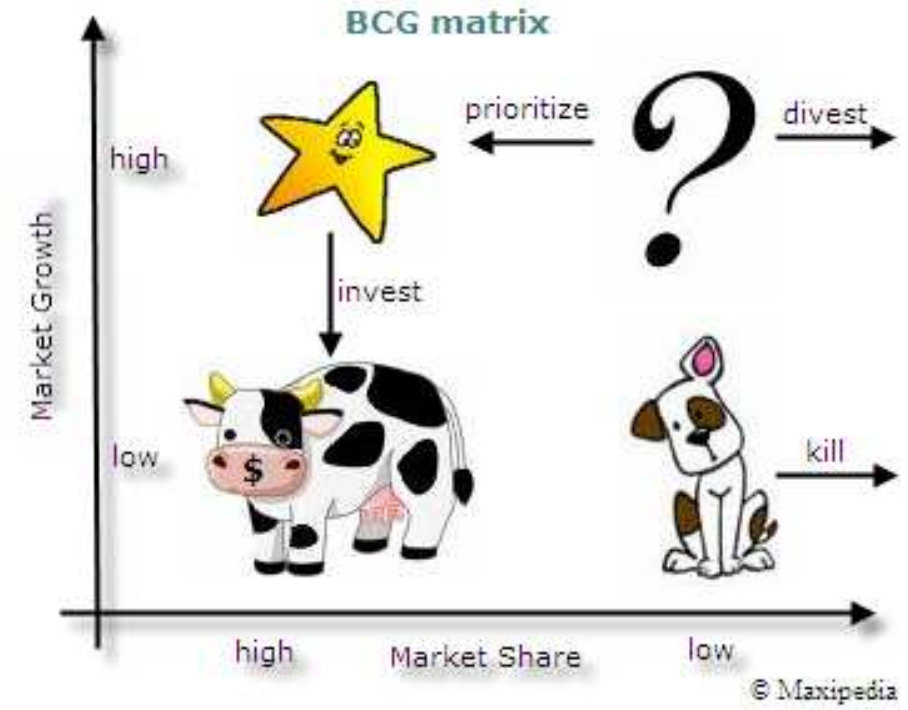
Q3. Answer

Answer a

Explanation

Comparing the size of the circle and the coordinates, the correct answer is a).

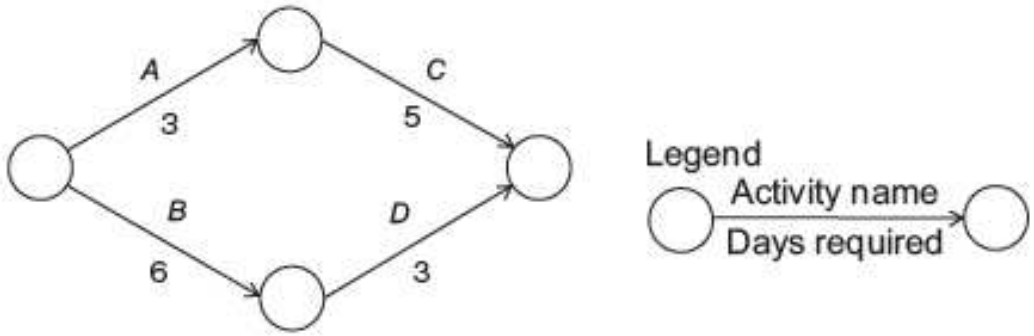




Management Field Sample

Q1.

When one day is reduced for Activity *C* and three days are reduced for Activity *B* in the arrow diagram shown below, how many days can be reduced in total?



a) 1
b) 2
c) 3
d) 4

Management Field Sample

Q1. Answer

Answer **b**

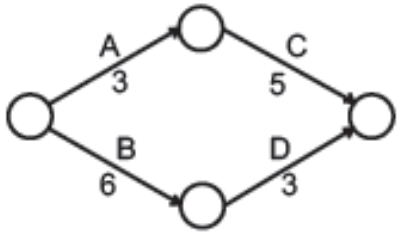
Explanation

The number of days required before reduction is as follows:

Work A (3 days) + Work C (5 days) = 8 days

Work B (6 days) + Work D (3 days) = 9 days

Therefore, the number of days required before reduction is nine (9) days.



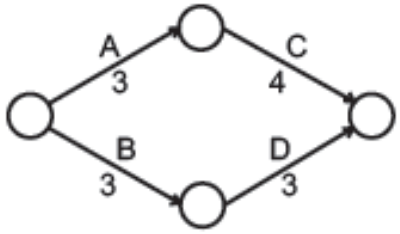
The number of days required after reduction is as follows:

Work A (3 days) + Work C (4 days) = 7 days

Work B (3 days) + Work D (3 days) = 6 days

Therefore, the number of days required after reduction is seven (7) days.

The number of days that can be reduced is two (2) days (= 9 − 7 days).



Management Field Sample

Q2.

Which of the following is described in a project plan?

a) Screen layout
b) Workflow
c) Schedule
d) Program structure

Management Field Sample

Q2. Answer

Answer **C**

Explanation

The project plan is a document that describes various aspects such as important project matters and the project framework, method of advancing the work, schedule method, and method of management.

Technology Field Sample

Q1.

Which of the following is the binary number obtained by adding binary number 1111 and number 101?

a) 1111
b) 1212
c) 10000
d) 10100

Technology Field Sample

Q1. Answer

Answer **d**

Explanation

Binary numbers are calculated in the same way as decimal numbers by lining up the digits and calculating them from the last digit. It is important to remember that 1+1=10 in binary calculation.

```
          Carry a 1
   Carry a 1   Carry a 1
        ⌒ ⌒ ⌒
     1 1 1 1
+      1 0 1
-------------
   1 0 1 0 0
```

Technology Field Sample

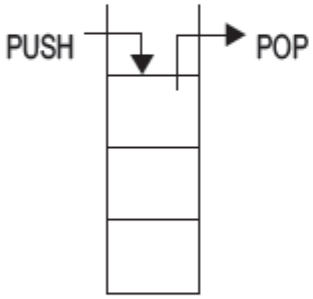
Q2.

There is a device where articles are accumulated upwards from the bottom and taken out from upwards in sequential order. There are two kinds of operations for this device.

PUSH n: Accumulate an article (number n)

POP: Extract one article from the top

If no articles are accumulated at the beginning, which of the following is the result of the operations?



PUSH 1 → PUSH 5 → POP → PUSH 7 →
PUSH 6 → PUSH 4 → POP → POP → PUSH 3

a)

1
7
3

b)

3
4
6

c)

3
7
1

d)

6
4
3

Technology Field Sample

Q2. Answer

Answer **C**

Explanation

A stack is an approach that can be used for inserting or deleting data. In a stack, data is inserted at the end of the list, and the last inserted data is deleted.

If the stack is operated in sequence, the order is:

3

~~4~~

~~6~~

7

~~5~~

1

The result of the operations is 3, 7, 1 from the top.

Technology Field Sample

Q3.

Which of the following is the configuration where the computers connected to the network use resources of each other, such as data, on equal terms?

a) Client/server
b) Streaming
c) Peer-to-peer
d) Mailing list

Technology Field Sample

Q3. Answer

Which of the following is the configuration where the computers connected to the network use resources of each other, such as data, on equal terms?

a) Client/server
b) Streaming
c) Peer-to-peer
d) Mailing list

Answer C

Explanation

Peer-to-peer is a network system in which the computers connected to a network share a mutually equal relationship, rather than dividing the roles of the computers.

Technology Field Sample

❖ **Q4.** Which of the following is the membership number of the woman whose present address and work location are both Tokyo in the member list table?

Member list

Membership number	Name	Sex	Present address	Work location
0001	Akio Tanizawa	Male	Saitama Prefecture	Tokyo
0002	Masato Toyonaga	Male	Tokyo	Tokyo
0003	Mayumi Akiyama	Female	Chiba Prefecture	Saitama Prefecture
0004	Yuka Kasai	Female	Tokyo	Tokyo
0005	Kenta Yamauchi	Male	Saitama Prefecture	Saitama Prefecture
0006	Nobuko Yamamoto	Female	Chiba Prefecture	Tokyo

a) 0001
b) 0003
c) 0004
d) 0006

Technology Field Sample

Q4. Answer

Answer **C**

Explanation

The member number of the female whose current address and work location are both in Tokyo is "0004."

Thank you for your attention.