28. Computer Science (428)

Specification grid 2077

Grade: 12 **Subject: Computer Science Theory (Com. 428)**

SN	Content Area	Working hour	Remembering MCQ No. of Questions	Remembering MCQ Marks	Remembering SAQ No. of Questions	Remembering SAQ Marks	Understanding MCQ No. of Questions	Understanding MCQ Marks	Understanding SAQ No. of Questions	Understanding SAQ Marks	Understanding LAQ No. of Questions	Understanding LAQ Marks	Applying MCQ No. of Questions	Applying MCQ Marks	Applying SAQ No. of Questions	Applying SAQ Marks	Applying LAQ No. of Questions	Applying LAQ Marks	Higher Ability MCQ No. of Questions	Higher Ability MCQ Marks	Higher Ability SAQ No. of Questions	Higher Ability SAQ Marks	Higher Ability LAQ No. of Questions	Higher Ability LAQ Marks	Content Area /Unit wise Marks
1	Database Management System (DBMS)	12																							8
2	Data communication and Networking	15																							9
3	Web Technology II	12																							8
4	Programming in C	12	3	3	1	5	2	2	2	10	-	-	2	2	1	5	1	8	2	2	1	5	1	8	8
5	Object-oriented Programming (OOP)	10																							6
6	Software Process Model (SPM)	10																							6
7	Recent Trends in Technology	9																							5
Total Marks		**80**	**8**				**12**						**15**						**15**						**50**

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	Item format plan				
S.N.	Type of item	Score per item	Total item	Total score	Time
1	Multiple Choice Questions	1	9	9	25 minutes
2	Short Question Answer	5	5	25	95 minutes
3	Long Question Answer	8	2	18	
	Grand Total		**16**	**50**	**2 hours**

Remarks:
- Item format in composite should be met as per the specification grid.
- Designated weightage in the combined cell should be met, but ±3 marks variation will be allowed within a unit/content area. But no unit can be nil.
- In the case of SAQ and LAQ, these should ensure that 1 mark will be assigned per element expected as correct response.
- The distribution of cognitive domain of questions should be nearly 15% knowledge/remembering, 25% understanding, 30% applying and 30% higher ability level, but ±5 percent variation will be allowed in overall question set.
- SAQ and LAQ can be structured (have two or more sub-items). SAQ and LAQ can be distributed to two or more cognitive behaviors.
- In such case these will be added to their respective cognitive behavior. In sum the distribution of cognitive behavior should be approximately to the required distribution. In case of SAQ there will be 2 "OR" questions and in case of LAQ there will be 2 "OR" question.

Model Question
School Leaving Certificate Examination
2078

Grade: Grade XII   Subject: Computer Science (Th)   Subject code: 428

Full Marks: 50 (9 marks Obj + 41 Marks Sub)   Time: 2 Hours

Group A: Multiple Choice questions (9 x 1=9)   Time: 20 minutes

Tick the correct answer.

1. Which of the statements are used in DDL?

    A) Create, alter and drop   B) Create, insert and select

    C) Insert, update and delete   D) Delete, alter and drop

2. With SQL, how do you select all the records from a table named "Persons" where the value of the column "FirstName" ends with an "a"?

    A) SELECT * FROM Persons WHERE FirstName='a'

    B) SELECT * FROM Persons WHERE FirstName LIKE 'a%'

    C) SELECT * FROM Persons WHERE FirstName LIKE '%a'

    D) SELECT * FROM Persons WHERE FirstName='%a%'

3. Which of the following statements is true about a star network topology?

    A) Each device is connected to a switch or hub

    B) Each device is connected to each other

    C) Each device is connected in a trunk

    D) Each device is connected to a terminal

4. Which of the following is the correct syntax to display "Stay Safe" in an alert box using JavaScript?

    A) alert-box("Stay Safe");   B) confirm("Stay Safe");

    C) msgbox("Stay safe");   D) alert("Stay Safe");

5. What is the use of <A> tag?

    A) To insert an image   B) To create a link

    C) To create a hyperlink   D) To create a list

6. What is the output of given C program?

```
void main(){
  char str1[] = "FIRST"; char str2[20]; strcpy(str2,str1);
  printf("%s %s ",str1,str2); printf("%d", (str1!=str2));
  printf("%d", strcmp(str1,str2)); }
```

A) FIRST FIRST 0 0   B) FIRST FIRST 1 1

C) FIRST FIRST 1 0   D) FIRST FIRST 0 1

7. Where is a class derived in inheritance?

A) Superclass   B) Subclass   C) Subsetclass   D) Relativeclass

8. Which of these is the correct order of the SDLC?

A) Analysis, Design, Coding, Testing, Implementation

B) Analysis, Design, Testing, Implementation, Coding

C) Implementation, Coding, Analysis, Design, Testing

D) Design, Testing, Implementation, Coding, Analysis

9. Why is cloud computing popular nowadays?

A) Cost-sharing and easily accessible

B) As modern technology and costly

C) Accessible and freely available

D) Affordable to all

Model Question
School Leaving Certificate Examination
2078

Grade: Grade XII   Subject: Computer Science (Th)   Subject code: 232

Full Marks: 50 (9 marks Obj + 41 Marks Sub)   Time: 2 Hours

Group B: Short Answer Questions (5 x 5=25)

1. Explain 2NF and 3NF with examples.

OR

Demonstrate the basic DML statement with an example.

2. Write a function to add any two numbers in Javascript.

OR

Demonstrate the external CSS implemented in the web page.

3. Describe any five features of OOPs.

4. What are the different stages of software planning? Describe.

5. Define the concept of AI and IoT. (2+3)

Group C: Long Answer Questions (2 x 8=16)

6. How do you implement the Class C IP address in the local area network? Describe.

7. Write a program to enter ten integer numbers into an array, sort and display them in ascending order.

OR

Write a program to read the marks of any 5 students in a subject and count how many students are pass and fail.

Appendix

Test Matrix

SN	Content Area	Working hour	Rem MCQ No.Q	Rem MCQ Marks	Rem SAQ No.Q	Rem SAQ Marks	Und MCQ No.Q	Und MCQ Marks	Und SAQ No.Q	Und SAQ Marks	Und LAQ No.Q	Und LAQ Marks	App MCQ No.Q	App MCQ Marks	App SAQ No.Q	App SAQ Marks	App LAQ No.Q	App LAQ Marks	HA MCQ No.Q	HA MCQ Marks	HA SAQ No.Q	HA SAQ Marks	HA LAQ No.Q	HA LAQ Marks	Content Area /Unit wise Marks
			Remembering				Understanding						Applying						Higher Ability						
1	Database Management System (DBMS)	12	1	1			1	1											1	1	1	5			8
2	Data communication and Networking	15					1	1									1	8							9
3	Web Technology II	12	1	1									1	1			1	5							8
4	Programming in C	12																	1	1			1	8	8
5	Object-oriented Programming (OOP)	10			1	5							1	1											6
6	Software Process Model (SPM)	10	1	1					1	5															6
7	Recent Trends in Technology	9							1	5															5
Total Marks		**80**	**8**				**12**						**15**						**15**						**50**

Note: This is the test matrix prepared for this set only but for other sets of questions test matrix may be varied.

Puspa Shrestha

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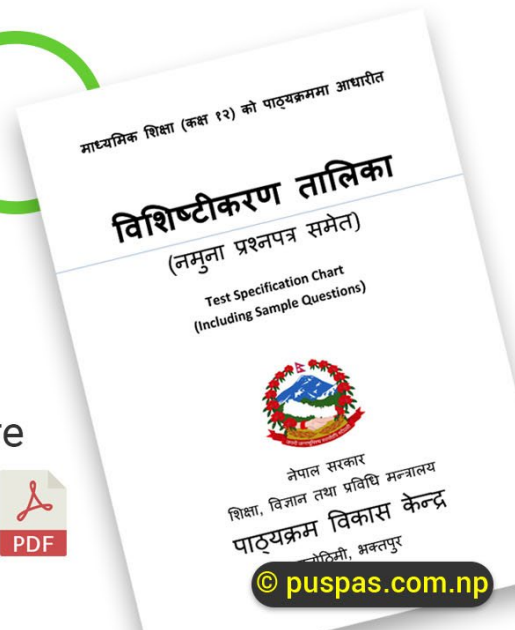## Class 12 Model Question 2078 PDF (All Subjects) With Specification Grid

Dinesh Shrestha

Please email us at **pdf-feedback@puspas.com.np** if you have any suggestions or feedback.