## Strictly Confidential: (For Internal and Restricted use only) Senior School Certificate Examination - September 2020 Marking Scheme - Informatics Practices (OLD) (SUBJECT CODE: 265) (SET: $4 \mid SERIES$ : HMJ/C | CODE NO - 490/C)

## **General Instructions:**

- 1. You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and the teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully. Evaluation is a 10 -12 days mission for all of us. Hence, it is necessary that you put in your best efforts in this process. 2. Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one's own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. However, while evaluating, answers which are based on the latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and marks be awarded to them. 3. The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators. 4. If a question has parts, please award marks on the right-hand side for each part. Marks awarded for different parts of the question should then be totaled up and written in the left-hand margin and encircled.
- 5. If a question does not have any parts, marks must be awarded in the left hand margin and encircled.
- 6. If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out.
- 7. No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
- 8. A full scale of marks 70 (example: 1-70) has to be used. Please do not hesitate to award full marks if

the answer deserves it.

- 9. Every examiner has to necessarily do evaluation work for full working hours i.e. 8 hours every day and evaluate 25 answer books per day.
- 10. Ensure that you do not make the following common types of errors committed by some Examiners in the past:
  - a. Leaving the answer or part thereof unassessed in an answer book.
  - Giving more marks for an answer than assigned to it. b.
  - Wrong transfer of marks from the inside pages of the answer book to the title page.
  - Wrong question wise totaling on the title page. d.
  - e. Wrong totaling of marks of the two columns on the title page.
  - Wrong grand total.
  - Marks in words and figures not tallying. g.
  - Wrong transfer of marks from the answer book to online award list. h.
  - Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.)
  - j. Half or a part of answer marked correct and the rest as wrong, but no marks awarded.
- 11. While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as (X) and awarded zero (0) Marks.
- 12. Any unassessed portion, non-carrying over of marks to the title page, or totaling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also of the Board. Hence, in order to uphold the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.
- 13. The Examiners should acquaint themselves with the guidelines given in the Guidelines for spot Evaluation before starting the actual evaluation.
- 14. Every Examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totaled and written in figures and words.
- 15. The Board permits candidates to obtain a photocopy of the Answer Book on request in an RTI application and also separately as a part of the re-evaluation process on payment of the processing charges.

[Informatics Practices (Old) Sub Code: 265 Set: 4 Series: HMJ/C | Cos No - 490/C] [Page 1 of 18]



## Specific Instructions:

- All programming questions have to be answered with respect to C++ Language / Python only
- In C++ / Python, ignore case sensitivity for identifiers (Variable / Functions / Structures / Class Names)
- In Python indentation is mandatory, however, the number of spaces used for indenting may vary
- In SQL related questions both ways of text/character entries should be acceptable for Example: "AMAR" and 'amar' both are acceptable.
- In SQL related questions all date entries should be acceptable for Example: 'YYYY-MM-DD', 'YY-MM-DD', 'DD-Mon-YY', "DD/MM/YY", 'DD/MM/YY', "MM/DD/YY", 'MM/DD/YY' and {MM/DD/YY} are correct.
  In SQL related questions - semicolon should be ignored for terminating the SQL statements
  In SQL related questions, ignore case sensitivity.

1	(a)	Write two advantages of networking computers over having stand-alone computers.	2				
	Ans	<ul> <li>Some of the advantages of networking computers over having stand-alone computers are:</li> <li>Sharing of devices like printers</li> <li>Files can easily be shared between users working as a team.</li> <li>Users can communicate by email and instant messenger.</li> <li>Software licences are generally cheaper than buying several standalone license.</li> </ul>					
		(1 mark each for mentioning any two advantages of networking computers)					
	(b)	Write the purpose of using Repeater in a computer network.	2				
	Ans	Repeater is an electronic device used in a computer network to receive a signal and retransmits it with or without amplification. Repeaters are used to extend transmissions so that the signal can cover longer distances.					
		(Full 2 marks for mentioning any one correct use of Repeater)					
		Suchitra works for a company. She often says "I can't access social networking website because my company does not let me use it." How does her company examine content entering or leaving their network? Explain in brief the hardware/software used by the company.					
		Firewall is one of the methods that can be used by the company. It is a combination or hardware and software for network security systems that monitors and controls incoming and outgoing network access. A firewall typically establishes a restriction for unauthorized users, programs, websites, etc.					
		(1 mark for answering Firewall or any other valid system) (1 mark for brief explanation of Firewall or any other valid system)					
	(d)	"Open Source Software is not the same as free of cost software." Is this statement true? Give reason(s).	2				

[Informatics Practices (Old) Sub Code: 265 Set: 4 Series: HMJ/C | Cost No - 490/C] [Page 2 of 18]



Ans	No they are not the same.	
	Most of the Open-source are conditionally free but free softwares are not necessarily open source software. Open-source licenses being free to the users also make available the source code and the permit to modify and re-share it.	
	(1 mark for answering 'Not Same') (1 mark for brief explanation any one correct difference)	
(e)	Explain in brief any two threats to data travelling over a computer.	
Ans	<ul> <li>Two major threats to data travelling over a computer are:</li> <li>Viruses: A computer virus is a type of malicious code or program written to alter the way a computer operates and is designed to spread from one computer to another. Most of the time it harms/hijacks the data stored on the computer.</li> <li>Unauthorized Access to Data (unethical Hacking): Hacking is breaking into a computer system with the intention of access and maliciously altering, damaging, or disrupting the data stored in the computer system or networks.</li> </ul>	
	Other valid threats, which should be considered: • Eavesdropping and Data Theft. • Spyware.	

		• Keyloggers.	
		• Trojans.	
		<ul> <li>Data Tampering.</li> <li>Spam.</li> </ul>	
		Lack of Accountability.	
		(1/2 mark each for mentioning any two threats correctly)	
		(1/2 mark each for briefly explaining any two threats correctly)	
2	(a)	What value will be stored in m ?	1
		m = 6 + 19 % 3 - 6/2	
	Ans	Ans:	
		4	
		(1 mark each for the correct answer)	

(b)	Identify i	dentify invalid variable names. State reason(s) if invalid.	
	(i)	(i) Product_1	
	(ii) 1Sales		
	(iii) Sales January		
	(iv)	Amount11	
Ans	Invalid variable names are:		
	(ii) 1Sales, as first character can't be a digit		
	(iii)	Sales January, as a variable name can't contain space	
	(½ mark	each for mentioning each variable name with briefly mentioning reason)	

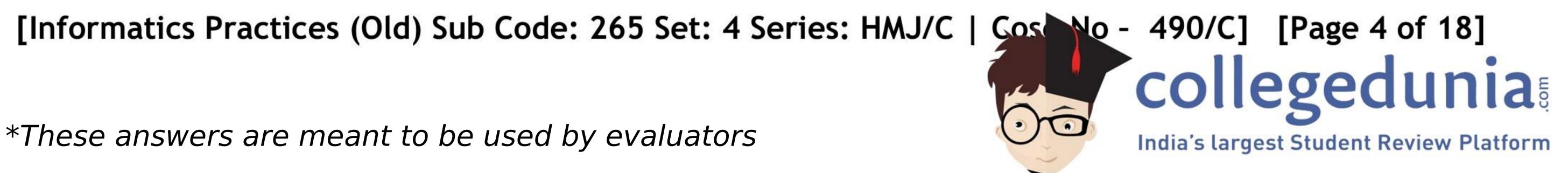
[Informatics Practices (Old) Sub Code: 265 Set: 4 Series: HMJ/C | Cost No - 490/C] [Page 3 of 18] Collegedunia



(c)	Name the loop of Java that always executes at least one time.	1
Ans	do-while	
	(1 mark for mentioning the correct loop, with or without any valid explanation)	
10 50	The following code has error(s). Rewrite the correct code underlining corrections done.	1

<pre>int i=1; do while (i&lt;5) { x = i+4; i+1= i; }</pre>
<pre>int x; int i=1; do { x = i+4; <u>i= i+1;</u> }while (i&lt;5); OR int x; int i=1; while (i&lt;5) { x = i+4; <u>i= i+1;</u> }</pre>
(½ mark each for identifying and correcting any 2 errors in the program) Note: No marks should be deducted if corrections are not underlined

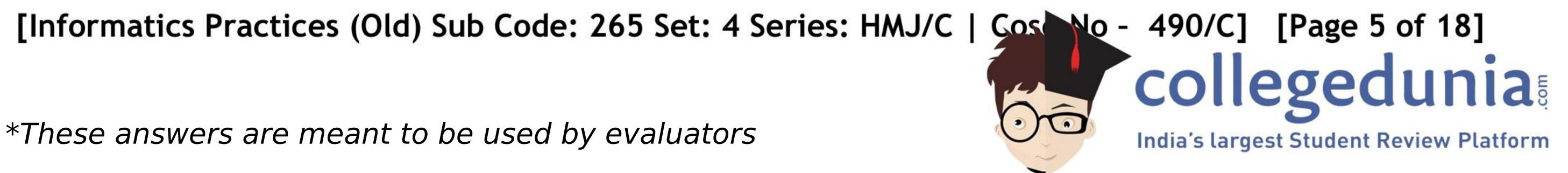
```
int sum=1,i;
for (i=1;i<=3;i++)
    sum = sum *i;
jTextField1.setText(""+sum);
jTextField2.setText(""+i);
```



Ans	The content of jTextField1 is 6	
	The content of jTextField2 is 4	
	(½ mark for each correct values/output) Note: No marks should be deducted if output are not formatted	
(e)	Distinguish between Java and Netbeans.	2
Ans	Java is an object-oriented programming language whereas NetBeans is an IDE, a tool that enables programmers to easily develop	

	software in many programming languages (Java, C, PHP, etc)	
	(2 mars for any one valid difference)	
	OR	
	(1 mark each for conveying correct meaning of Java and Netbeans)	
(f)	Distinguish between HTML and XML. Write two points.	2
Ans	1. HTML is used for the information presentation whereas the main purpose of XML is to store and transfer the data.	
	<ol><li>HTML is a simple, predefined markup language while XML is the standard markup language to define other languages.</li></ol>	
	3. XML document parsing is easy and fast.	
	(1 mark each for any two differences)	
	ORJest	
	Identify Root element and Child elements in the following code:	2
	<pre><book category="COOKING"></book></pre>	
	<author>Sabreena</author>	
	<year>2005</year>	
	<pre><book category="CHILDREN"></book></pre>	
	<pre><author>J K. Rowling</author></pre>	
	<year>2005</year>	
Ans	Root element: bookstore	
	Child elements, book AND/OR author AND/OR year	

	Child elements: book AND/OR author AND/OR year	
	(1 mark for mentioning each element)	
(g)	Write the following code using 'switch' instead of 'if else if' :	2
	if (marks==10)	
	{	
	grade = 'A';	
	3	
	, else if (score==9)	
	ETSE TT (SCOTE)	



```
grade = 'B';
else if (score==8)
 grade = 'C';
else
 grade = 'F';
```

```
Ans if (marks==10)
          grade = 'A'
        else
          switch (score) // score instead of marks should be accepted
            case 9: grade = 'B'
                   break;
OR
switch (marks) // score instead of
case 10.
            case 8: grade = 'C'
```

		<pre>switch (marks) // score instead of marks should be accepted {     case 10; grade = 'A'         break;     case 9: grade = 'B'         break;     case 8: grade = 'C'         break;     default: grade = 'F'; } (2 marks for writing correct equivalent code )</pre>	
3		Ms. Saloni wants to assign the value 700 as value in Fee Column for all the students in table named "STUDENT". She has entered the following SQL statement: UPDATE STUDENT; ASSIGN Fee= 700; Rewrite the correct statement if there is any error.	2
	Ans	UPDATE STUDENT	

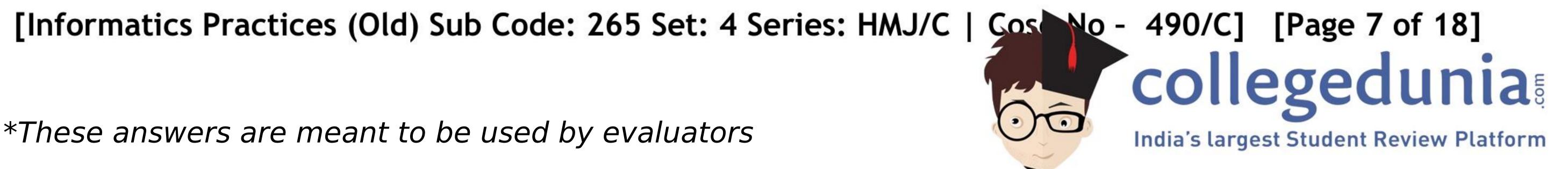
[Informatics Practices (Old) Sub Code: 265 Set: 4 Series: HMJ/C | Cos No - 490/C] [Page 6 of 18] Collegedunia

\*These answers are meant to be used by evaluators



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	SET Fee=700;				
	( 1 mark for re ( 1 mark for re	emoving ';' after UPD Polacing ASSIGN with	ATE STUDENT) SET)		
(b)		o add a column "Hobbi ving SQL statement:	es" in an already created table "Person". She		
	ALTER TABLE	Person ADD Hobbie	es columnsize 50;		
	Rewrite the corr	rect statement if there	e is any error.		
Ans	ALTER TABLE	Person ADD Hobbie	es VARCHAR(50);		
	(1 mark for de	claring the datatype	correctly as VARCHAR(50))		
	10 / M	of VARCHAR(50), CH Id be accepted.	HAR(50) or any other datatype with valid		
(c)	Given below is a	Table named 'Compa	ny':		
	CODE	FIRSTNAME	GENDER		
	101	Advaita	E de la platform		
	102	Feroze	M S Jent Review		
	103	Samay	Mest Stud		
	104	Sasha ndia's	F		
	Write output of SQL statement given below:				
	SELECT FIRST	NAME, CODE			
	FROM Company WHERE GENDER	= 'F' and FIRST	NAME LIKE 'S%';		
Ans		<u>CODE</u> 104			
		riting 'Sasha')			
	(1 mark for wi	nung 104)			
	( 1 mark for wi Note: (Deduct ½ mar (Deduct ½ mar	'k if 'Advaita' and/or 'k if 'Samay' and/or '	'Feroze' is mentioned in output) 103' is mentioned in output)		
(d)	( 1 mark for wi Note: (Deduct ½ mar (Deduct ½ mar	'k if 'Advaita' and/or 'k if 'Samay' and/or '			
(d)	( 1 mark for wi Note: (Deduct ½ mar (Deduct ½ mar Name any two Si in MySQL.	'k if 'Advaita' and/or 'k if 'Samay' and/or '	103' is mentioned in output)		



	UPPER, LOWER, CONCAT, LENGTH, SUBSTR, ROUND, TRUNC, etc.	MAX, MIN, SUM, COUNT, AVG, etc.		
	(1/2 mark each for any 2 Single Row functions ) (1/2 mark each for any 2 Group (Aggregate) functions)			
(e)	Note : Examiners should accept all valid and correct function names.         The 'Book' table has the following columns and presently has no Rows.			

```
BCODE
                                            POINTS
                      BNAME
The following SQL statements are entered.
SET AUTOCOMMIT = 0;
INSERT INTO Book VALUES ('B101', 'Spirituality', 7);
INSERT INTO Book VALUES ('B102', 'Meditation', 6);
SAVEPOINT abc;
                                                 'Spirituality';
UPDATE Book SET POINTS=POINTS +2 WHERE BName =
UPDATE Book SET POINTS = POINTS+3 WHERE BName = 'Meditation';
                                            Review Plat.
SELECT sum (POINTS) FROM Book;
ROLLBACK To SAVEPOINT abc;
                                     Studen
SELECT sum (POINTS) FROM Book;
```

```
      What will be the output of the above given SELECT statements?

      Ans sum (POINTS)

      18

      sum (POINTS)

      13

      (1 mark for the first output as '18')

      (1 mark for the second output as '13')

      4 (a) Write the value of p after execution of the following code:

      1

      Suppose p = 7 initially

      q=2;

      if (norm)
```

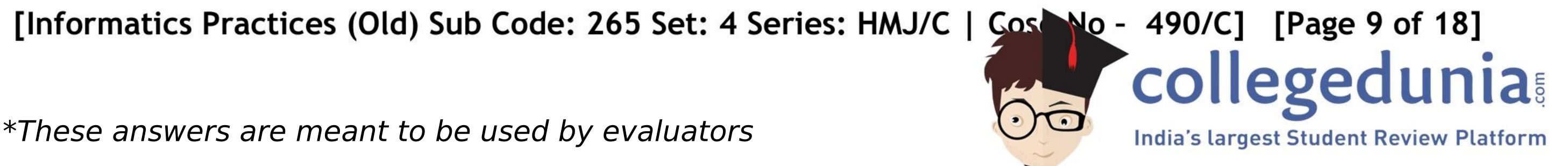
	p=p+2; p=p+1;	
Ans	10	
	(1 mark for correct answer) Note: Full 1 mark to be awarded if error is mentioned in the code.	
	OR	

[Informatics Practices (Old) Sub Code: 265 Set: 4 Series: HMJ/C | Cost No - 490/C] [Page 8 of 18]



	Mention one advantage of jTextArea over jTextField control.	1
Ans	JTextArea allows entering multiple lines of text while JTextField allows entering a single line of text	
	(1 mark for writing correct advantage)	
	OR (½ mark for writing correct use of JTextArea) (½ mark for writing correct use of JTextField)	

(b)	What values will be displayed in jTextField1 and jTextField2 ?	
	<pre>int i = 3; int j = 7; while(i<j) pre="" {<=""></j)></pre>	
	<pre>i= i*2; j; } jTextFieldl.setText(""+i); jTextField2.setText(""+j);</pre>	
Ans	The content of jTextField1 is 6 The content of jTextField2 is 6	
	(1 mark for each correct value of jTextField1 and jTextField2 )	
	<pre>What will be the value of p after the following code is executed ? int p = 5, q = 1; do {     p = p+q;     q = q+5; } while {p &lt;20};</pre>	
Ans	23	
	( 2 marks for writing correct answer, assuming () in place of {} with 'while') OR ( Full 2 marks for writing error in the code)	
	OR	
	Write the difference between while and 'do while' loops of Java.	
Ans	'while' is an entry controlled loop in Java where condition is checked before the body of the loop gets executed whereas 'dowhile' is an exit controlled loop	

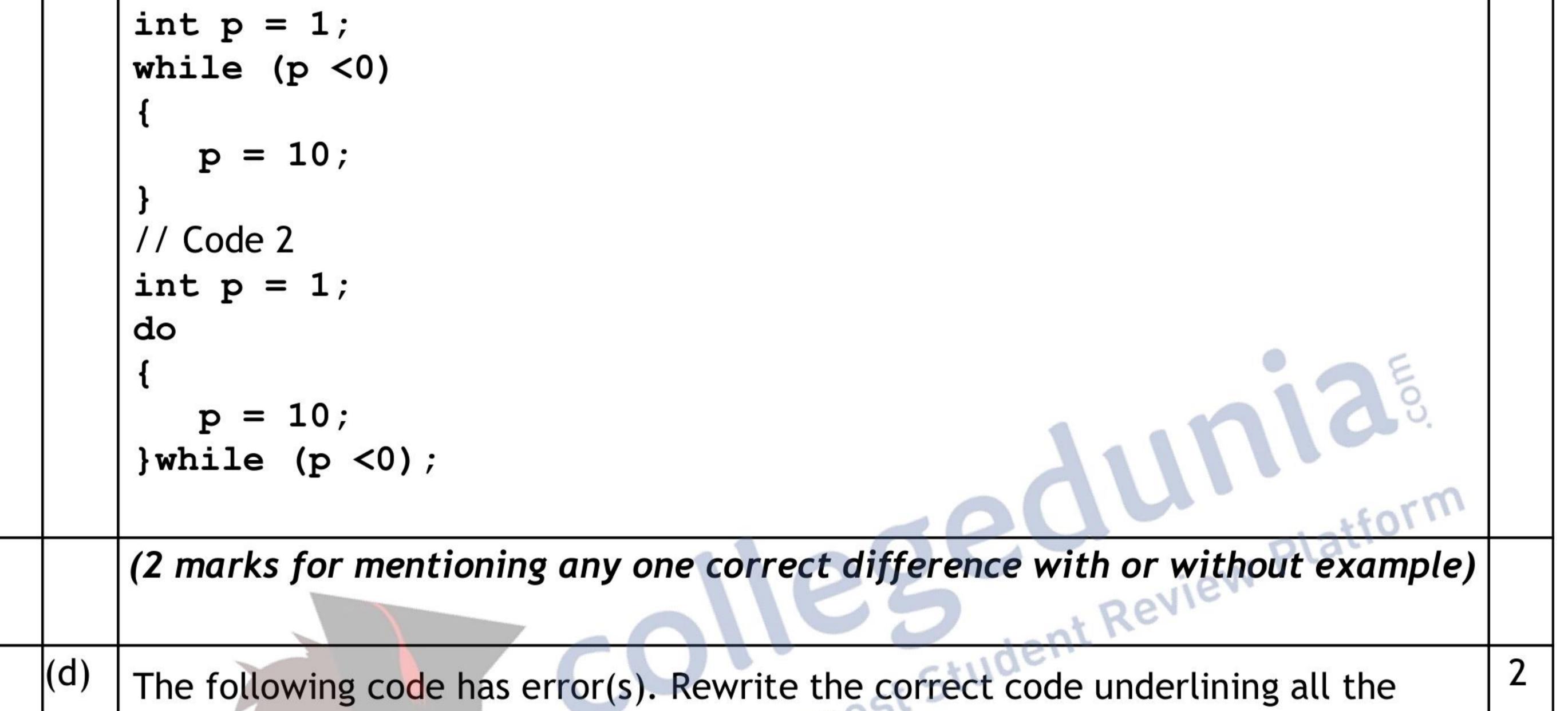


in Java where condition is checked after the body of the loop gets executed.

If the loop condition is initially false, the 'while' loop will not get executed even once whereas 'do...while' will be executed at least once even if the loop condition is initially false.

Example: In the following examples, the p will have value 1 after executing Code 1 whereas p will have value 10 after executing the Code 2.

// Code 1



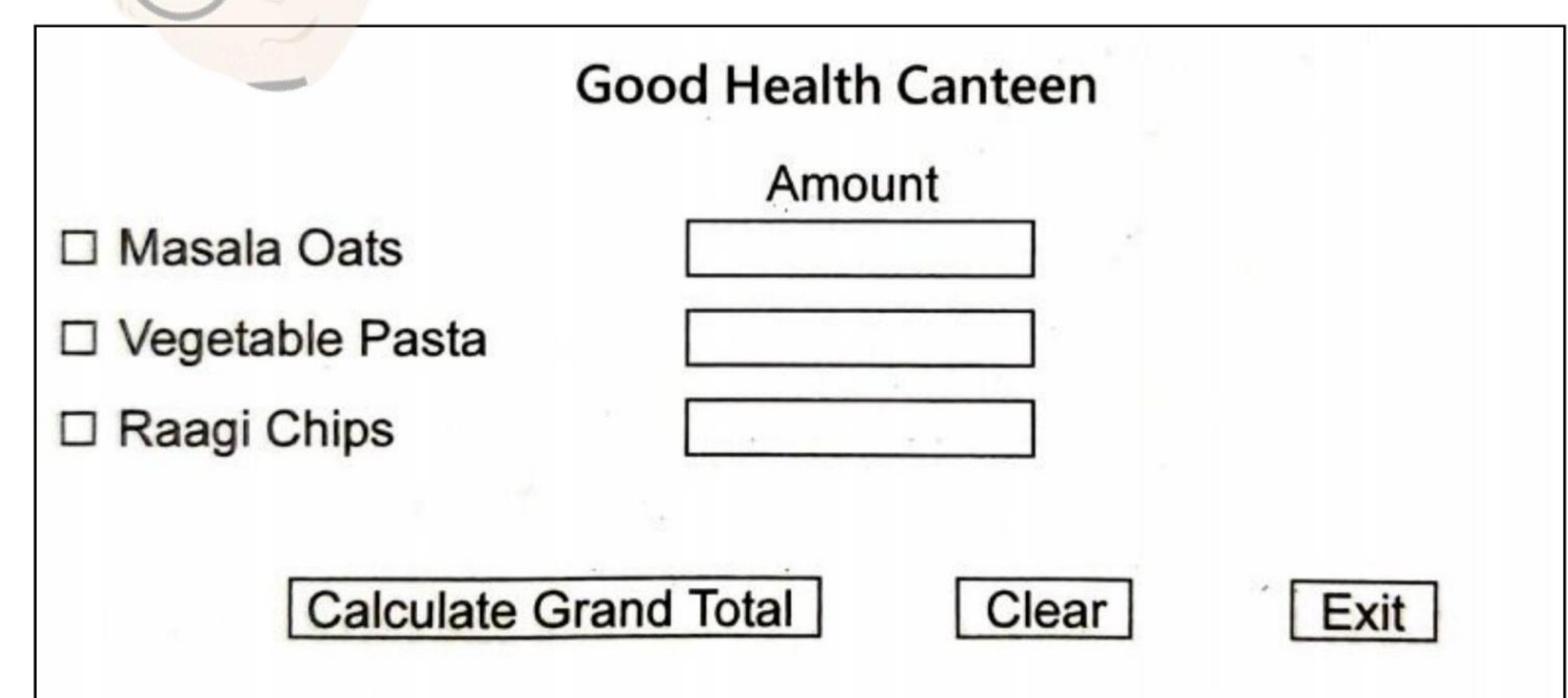
	<pre>switch marks {     case 5: grade =='A';     case 4: grade =='B';         break;     otherwise :grade =='N';         break; }</pre>	
Ans	switch <u>(marks)</u>	
	{	
	case 5: <u>grade ='A'</u> ;	
	case 4: <u>grade ='B'</u> ;	
	break;	
	<u>default:</u> <u>grade='N'</u> ; break;	
	}	
	( <sup>1</sup> /2 mark for correcting each error - Any Four)	
	OR	
	What is the purpose of 'break' statement in switch statement used in a Java program?	2

[Informatics Practices (Old) Sub Code: 265 Set: 4 Series: HMJ/C | Cose No - 490/C] [Page 10 of 18]

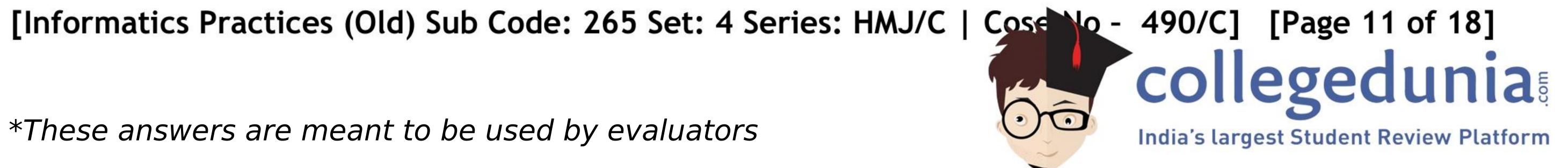


	'break' is used to terminate a case in the 'switch' statement. 'break' in 'switch' is used to immediately terminate the 'switch-case' and the program control resumes at the next statement following 'switch'.						
	Example:						
	switch (Grade)						
	•						
	case 'A': BSalary=60000;						
	break;						
	case 'B': BSalary=40000;						
	break;						
	<pre>default: BSalary=0;</pre>						
	}						
	(2 marks for correctly mention the use of break with or without example)						
(e)	How many times will the following loop execute?						
	int sum = 0;						
	for (int i= 1; i<=7;i=i+3)						
	{						
	$ \sup = \sup + i; $						
	<pre>{     sum = sum+i; }</pre>						

(f) Ms. Suchitra works as a programmer in a School. She has designed a software to 4 compute amount to be paid by students when they buy food items in the School Canteen. A screenshot of the same is shown below:



	Grand Total Amount
(i)	<ul> <li>Help Ms. Suchitra in writing the code to do the following:</li> <li>When a checkbox for a food item is clicked, Amount for that food item should be displayed in front of that food item. The Amount for each food item is as follows:</li> </ul>



Food Item	Amount
Masala Oats	20.00
Vegetable Pasta	25.00
Raagi Chips	15.00

 After selecting appropriate checkbox(es), when 'Calculate Grand Total' button is clicked, 'Grand Total Amount' should be calculated and displayed in the

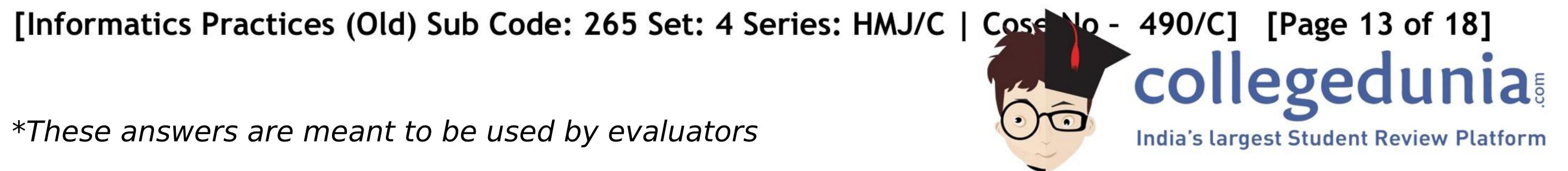
```
respective text field. This will be the sum of amounts depending on food items
      selected.
      For example if Masala Oats and Raagi Chips are selected, 20.00 and 15.00 will
      be displayed in front of selected food items and Grand Total Amount will be
      35.00.
Ans double mo=0.0, vp=0.0, rc=0.0, gta=0.0;
(i) if (jRadioButton1.isSelected())
      mo = 20.00;
    if (jRadioButton2.isSelected())
                                                       Review Platform
      vp=25.00;
    if (jRadioButton3.isSelected())
      rc=15.00;
    jTextField1.setText(""+mo);
    jTextField2.setText(""+vp);
                                      'argest Studel.
    jTextField3.setText(""+rc);
    gta=mo+vp+rc;
    if(jCommandButton1.isSelected())
      jTextField4.setText(""+gta);
    (1 mark for correct use of if statement for Radiobutton/CheckBox/Combobox)
    (1/2 mark for assigning correct value to variable mo, vp, rc)
    (1/2 mark for displaying mo, vp, rc)
     (1 mark for correct use of if statement for calculating Grand Total (gta))
    (1 mark for displaying gta)
    Note :
       2 Marks for any valid/syntactically correct if/switch condition
       2 marks for displaying the cost of items along with Grand Total Amount
    •
(ii) When 'CLEAR' button is clicked, all the textfields and checkboxes should be
                                                                                 1
    cleared.
Ans jRadioButton1.setSelected(false);
```

<pre>jRadioButton2.setSelected(false);</pre>	
<pre>jRadioButton3.setSelected(false);</pre>	
jTextField1.setText("");	
<pre>jTextField2.setText("");</pre>	
<pre>jTextField3.setText("");</pre>	
( <sup>1</sup> / <sub>2</sub> mark for clearing radiobutton)	
( <sup>1</sup> / <sub>2</sub> mark for clearing any text field)	
Note : NULL in place of "" should be accepted for clearing text field.	

[Informatics Practices (Old) Sub Code: 265 Set: 4 Series: HMJ/C | Cose No - 490/C] [Page 12 of 18]

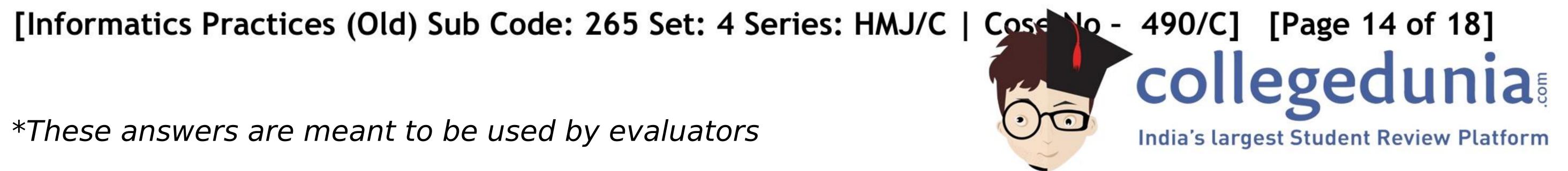


(iii)			n is clicked, the	application	n should	close.			<u> </u> 1
Ans	System.e								╞
	(1 mark for	r correc	t answer)						
5.	Consider th	ne follov	ving Table "Shop	o" shown be	elow. W	rite SOL	statements fo	r (i) to	$\vdash$
	89 DF 2243.9655 9/30		or (ix) and (x).						
				Table : Sh	the state of			2	
		Id	Item	Category	CP	SP	DtManuf		
		101	Oats Biscuits	A	25.00	35.00	2018-10-19		
		102	Ragi Chips	B	50.00	65.00	2018-11-14	5	
		103	Oats	A	90.00	100.00	2019-03-30	5	
		104	Honey Biscuits		50.00	80.00	2018-10-23	¢	
		105	Pumpkin Seeds	C	75.00	85.00	2018-12-25		
	Columns CE	D and SE	odenote Cost Pr	ico and Sol	ling Dri	co rocho	ctivolv		
	1997		tores Dates of Ma			ce respec		E	
(i)			n, CP in descend					3.0.	1
Ans	SELECT ]	d, It	em, CP FROM S	hop					
	ORDER BY							form	╞
			ECT-FROM)				view Pla		
	( 1/2 mark				2	Pante	(evi-		
(ii)	To display	the Na	mes of all the it	ems with c	ategory	as 'A'.			1
	SELECT 1			's large	350				$\vdash$
	WHERE Ca	itegor	v = 'A'; indi	3 3					
		$\sim$	ECT-FROM)						┢
	(1/2 mark								
(iii)					<i>c</i> ,	• • • • •	•	•	
	Io list nan	nes of li Ired aft	tems and their d er 1 <sup>st</sup> October 20	ate of mar	nufactur	ing of th	ose items that	t were	'
				- 2000					-
Ans		1.5	DtManuf FROM >'2018-10-01	(1990) (h)					
			ECT-FROM)	/					┢
	(1/2 mark								
(iv)	To count a	and disp	lay the category	/ and numb	oer of It	ems of e	ach Category.		1
			ry, COUNT(*)						
	GROUP BY			FROM SHO	Ρ				
	(½ mark f (½ mark		ECT-FROM) DUP BY)						
(v)	To display	the Cat	egory of Items. (	Duplicate	Categor	ies shou	ld not be displ	ayed)	1
Ans	SELECT I	ISTIN	CT Category						
	FROM Sho								



	(½ mark for SELECT-FROM) (½ mark for DISTINCT)	
vi)	To display the maximum and minimum Selling Price.	1
Ans	SELECT MAX(SP), MIN(SP) FROM Shop;	
	( <sup>1</sup> / <sub>2</sub> mark for SELECT-FROM) ( <sup>1</sup> / <sub>2</sub> mark for correct uses of any one of MAX and MIN)	
vii)	To display Item names that have 'Biscuit' anywhere in names.	1

eit	To display item names	chae have biseare anythin		
Ans	SELECT Item FROM			
	WHERE Item LIKE '			
	( <sup>1</sup> / <sub>2</sub> mark for SELECT-F ( <sup>1</sup> / <sub>2</sub> mark for correct ι			
	(72 mark jor correct t	ises of LIKE)		
viii)	To display Id, Item nam	ne of those items that hav	ve Category as NULL.	1
Ans	SELECT Id, Item Fi WHERE Category IS		E	
	( <sup>1</sup> / <sub>2</sub> mark for SELECT-F ( <sup>1</sup> / <sub>2</sub> mark for correct ι	ROM)		
ix)	SELECT MAX (DtManu	f), MIN(DtManuf) FR	OM Shop; Review	
Ans	MAX (DtManuf) M	IN(DtManuf)	student	
		2018-10-19'		
	(1/2 mark for each corr	ect line of output)		┢
		eee mage, eacpacy		
<b>(x)</b>	SELECT AVG(CP) FR	-		
	WHERE Category =	'A' or Category = '	B';	
Ans	AVG (CP)			Γ
	55.00 (1 mark for correct ar	(wor)		-
	(I mark jor correct ar	isweij		
6 (a)	Write the SQL query to	create a table 'Vehicle' w	vith the following structure :	
	Field	Туре	Constraint	
	VehicleId	Varchar(5)	Primary key	
	Model	Varchar(50)	Not Null	
	DateManufacture	Date		
	Price	Decimal (9,2)		
Ans	CREATE TABLE Vehi	cle		┢
		VARCHAR(5) PRIMARY	KEV	



	Model DateManuf Price );	VARCHAR acture DATE, DECIMAL		OT NUI	L,		
Ans	( <sup>1</sup> / <sub>2</sub> mark for ( <sup>1</sup> / <sub>2</sub> mark for	CREATE TABLE) PRIMARY KEY cons NOT NULL constra Column Names wit	int)				
	CHAR in place	of INTEGER to be the of VARCHAR to be the of DECIMAL to be	ре ассер	oted			
			(	DR			
		purpose of "NOT N he help of example		onstrain	t applied o	n Column of a	a table?
		constraint is used t umn while data in a			3-01 (1995)		for that
	DateOfBirth f attribute, as i (1 mark for of (1 mark for of Consider the	vARCHAR VARCHAR VARCHAR DATE, details of a stud or later entry, but t has been created any appropriate ex valid explanation) following tables Sta	(50) No	skip, h	can skip to as to enter aint "NOT N	r the value of ULL":	
	the questions	s that follow:					
	ItemNo		Table: S	0.4.20	UnitPrice	DtPurchase	
	101	Gum Tube	SCode 702	<b>Qty</b> 100	15	30-Mar-2019	
	101	Double Stick Tape		150	20	01-Jan-2019	
	102	Pencil	702	125	5	14-Feb-2019	
	104	Colour Pencil	701	200	10	01-Jan-2019	
		Crayons Box	702	210	50	19-Dec-2018	
	105	and the second of the second o	702	60	10	12-Dec-2018	1
	105	Eraser			54850 CONT		
		Eraser Sharpener	702	160	10	23-Jan-2019	

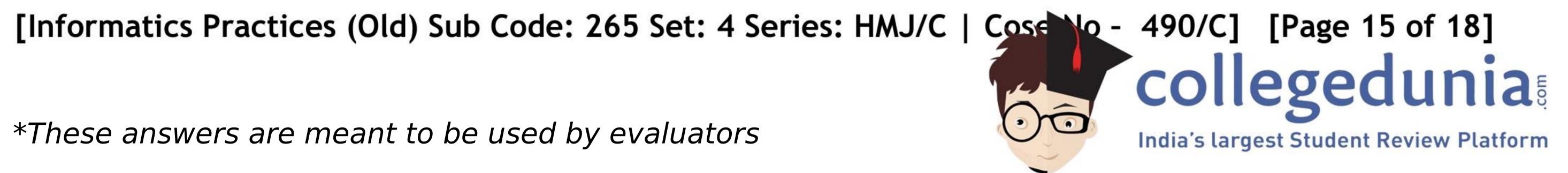
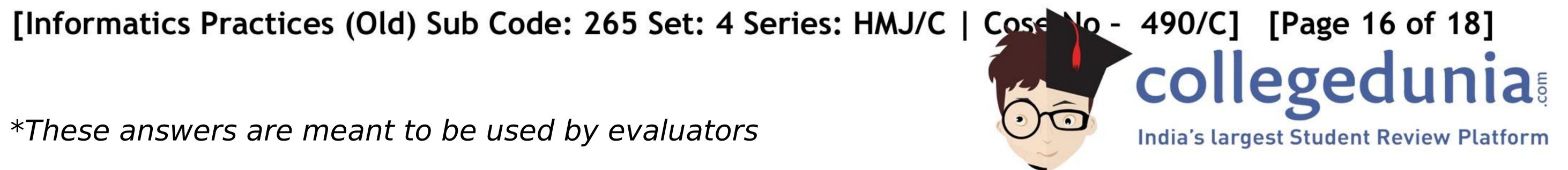


		Table: Supplier	
	SCo	de Snar	ne
	70 <sup>2</sup>	Gupta Stationer	S
	702	2 Study Stationers	
	70!	5 Avon & Company	y
(i)			
(1)	Can we set SCode as the Prir	nary key of Stationery tab	le ? State reason.
	SCode attribute has some received can supply more than one iter (1/2 Mark for the correct and (1/2 Mark for mentioning value)	ems, thus SCode can't be ι swer 'No')	
		OR	
	Identify the Primary key of S	tationery table. Write rea	son for your choice.
	ItemNo can be used as the P	rimary key of Stationery ta unique, which is the requi	
Ans	Primary Key.		

	(ii)	What should be the data type of 'DtPurchase' column?	1
	Ans	Data type : DATE	
		(1 mark for correct data type)	
	(C)	With reference to the above given tables (in Q6 b), write SQL statements for (i), (ii) and (iii) given below:	
		To display ItemNo, Name of Item, Supplier Code and Supplier Name of all items in ascending order of Date of Purchase.	2
Γ	Ans	SELECT ItemNo, IName, SCode, Sname	
		FROM Stationary A, Supplier B	
		WHERE A.SCode=B.SCode	
		ORDER BY DtPurchase;	
1			1

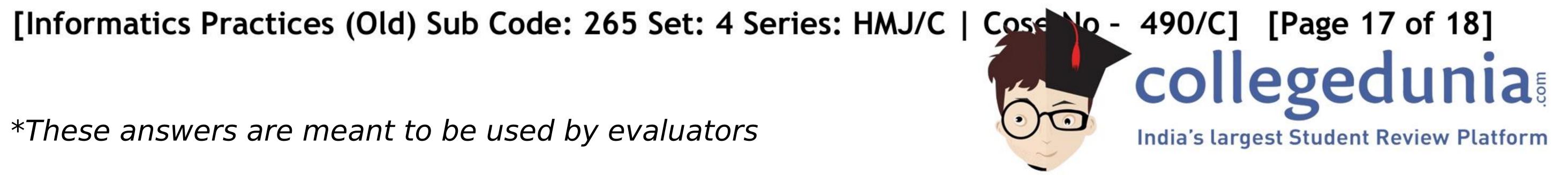
SELECT ItemNo, IName, SCode, Sname	
FROM Stationary, Supplier	
WHERE Stationary.SCode=Supplier.SCode	
ORDER BY DtPurchase;	
(1/2 mark for SELECT)	
(1/2 mark for FROM)	
(1/2 mark for correct use of WHERE/JOIN)	
(1/2 mark for correct use of ORDER BY)	



<b>(ii)</b>	To display Name of Item, Date of Purchase, Supplier Code and Supplier Name of all items that were purchased between '01-Dec-2018' and '31-Jan-2019' (Both dates inclusive)	2
Ans	<pre>SELECT IName, DtPurchase, SCode, Sname FROM Stationary A, Supplier B WHERE A.SCode=B.SCode AND (DtPurchase BETWEEN '2018-12-01' AND '2019-01-31'); OR SELECT IName, DtPurchase, SCode, Sname FROM Stationary A, Supplier B</pre>	

	WHERE A.SCode=B.SCode AND DtPurchase>='2018-12-01' AND DtPurchase<='2019-01-31';	
	(½ mark for SELECT) (½ mark for FROM) (½ mark for correct use of WHERE/JOIN) (½ mark for correct use of BETWEEN or equivalent)	
N (*	To add 10.00 to UnitPrice of all items that have unit price less than 10.00 in Stationery table.	2
Ans	UPDATE Stationery SET UnitPrice=UnitPrice+10 WHERE UnitPrice<10;	
	(1/2 mark for UPDATE)	

		(1 mark for SET) (1/2 mark for WHERE) India's Largest OR	
		Write SQL statement to delete rows with SCode greater than 701 in Supplier table.	2
	Ans	DELETE FROM Supplier WHERE SCode>701;	
		(½ mark for DELETE) (½ mark for FROM) (½ mark for WHERE) (½ mark for correct condition)	
7	(a)	How does e-governance reduce corruption? Write one point.	2
	Ans	<ul> <li>e-Governance reduces corruption as:</li> <li>1. It brings more transparencies of Government processes, policies and decisions</li> <li>2. It reaches to more people and spreads awareness about new policies and facilities being offered by the Government.</li> <li>3. Date and time of every transaction is automatically recorded for which the Government is accountable.</li> <li>4. Practices like influences and bribing are reduced</li> </ul>	
		( 2 marks full for mentioning any one valid point similar to the above points)	



(b)	Write two advantages of Online shopping over traditional shopping.	1
	<ul> <li>Some of the advantages of Online shopping over traditional shopping are as follows:</li> <li>1. More buying options for the customers.</li> <li>2. Shopping can be done at leisure time.</li> <li>3. Travel time and trouble can be avoided.</li> <li>4. Various options for monetary transactions.</li> <li>5. Some stores/websites offer convenient return policies.</li> </ul>	
	( <sup>1</sup> / <sub>2</sub> mark each for any two valid points similar to the above points)	

100	2			2			
		control	gan is creating a form for his Company. Help him choose most appropriate s from ListBox, ComboBox, TextField, TextArea, RadioButton, CheckBox, nd Command Button for the following entries:				
		S.No. Function					
		1	To enter CUSTOMER CODE				
		2	To enter CUSTOMER NAME				
		3	To allow user to enter a brief description about the Customer				
			To choose Type of Items bought by customer (out of Snacks, Groceries, Healthcare, Beauty Products) Note : More than one Type may be chosen.				
	Ans	S.No.	Function				

0.110	- and -	
1 /	Text Field/ComboBox	
2	Text Field	
3	ComboBox/CheckBox	
4	CheckBox	
		$\perp$
( ½ mark	k for each correct answer)	

