

## SAMPLE PAPER- 2

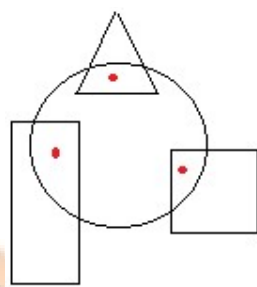
### Verbal & Non Verbal Reasoning

**Q1 .** If '  $\times$  ' stands for 'greater than' ; '  $-$  ' stands for 'Addition' ;  
 '  $\div$  ' stands for 'Division' ; '  $+$  ' stands for 'Equal to' ;  
 '  $<$  ' stands for 'Multiplication' ; '  $>$  ' stands for 'Less than'  
 '  $=$  ' stands for 'Subtraction' ;

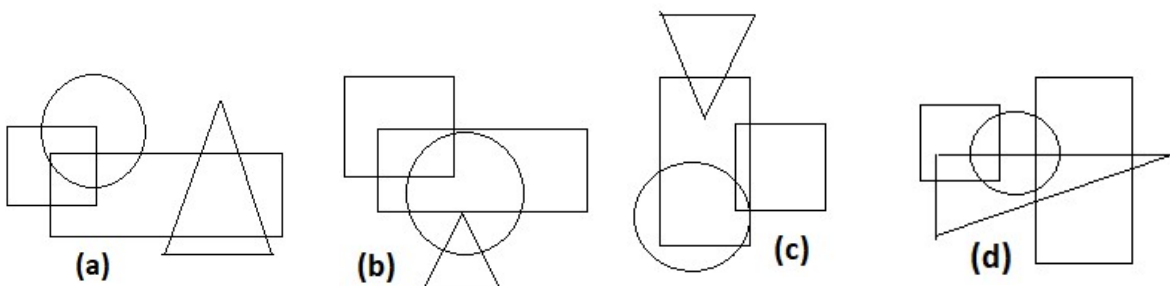
Then which of the following is correct ?

- (a)  $4 < 6 = 5 + 6 < 5 = 1$  (b)  $4 < 6 - 5 + 6 < 5 = 1$   
 (c)  $4 < 6 - 5 + 6 < 5 = 1$  (d)  $4 < 6 - 5 + 6 < 5 = 1$

**Q2.**



Choose the figure from the options which satisfies the same condition of placement of the dots as in the given figure :



**Q3.** Find the missing term

**B12D , F16H , J20L , \_\_\_\_? , R28T**

(a) M22P

(b) R24P

(c) N24P

(d) L21I

**Q4.** Find the missing number , if a certain rule is followed either row-wise or column-wise.

<b>A</b>	<b>E</b>	<b>I</b>
<b>B</b>	<b>?</b>	<b>J</b>
<b>C</b>	<b>G</b>	<b>K</b>

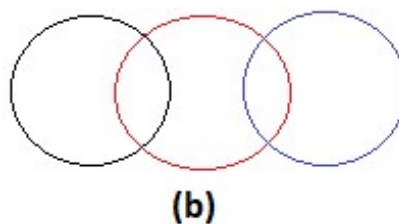
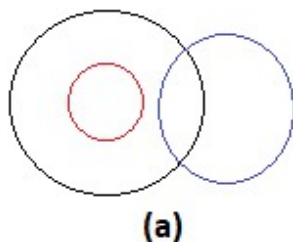
(a) F

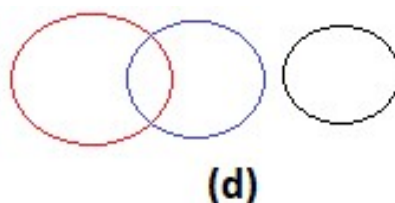
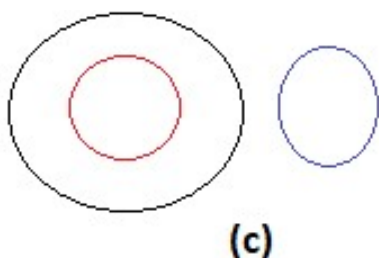
(b) M

(c) P

(d) D

**Q5.** Which of the following Venn diagram best represents the relationship amongst “**Nephews , Mothers and Sisters**”





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### Case Based Study

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**Direction : Read the given passage and answer Q6 to Q7**

**PASSAGE-I :**

#### CAN YOU LIVE WITHOUT PANCREAS ?

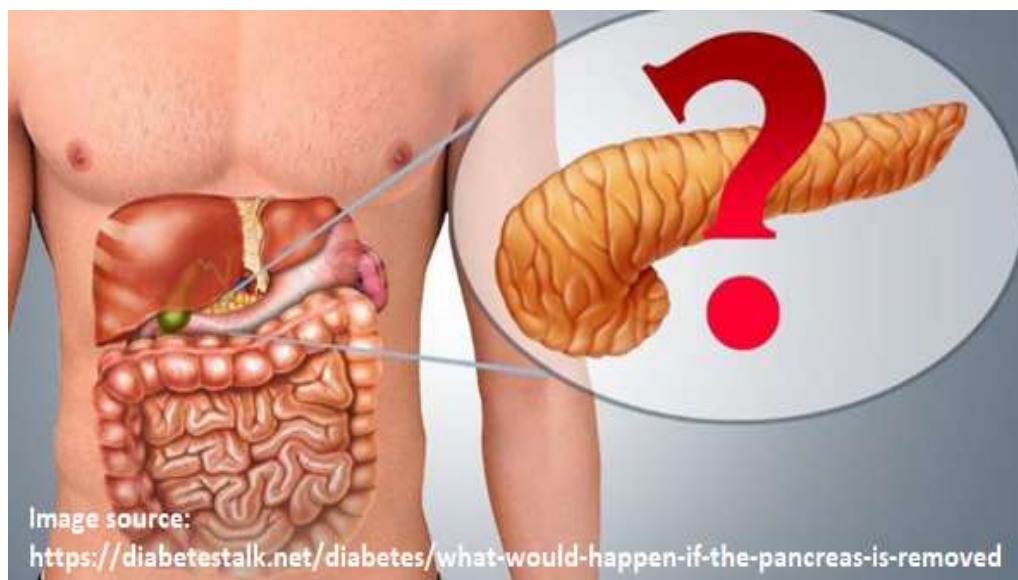
You can live without pancreas, although you need to take medication for the rest of your life to compensate for the important functions that the pancreas perform

The pancreas is a gland organ located in the abdominal cavity, behind the stomach, and is roughly 6 inches long. While few people give their pancreas much thought, it performs a few critical roles within the body.

First and foremost, the pancreas helps in the *digestion of food*, as it can release enzymes from its *exocrine cells* that are required to break down particular types of food. These specialized enzymes include *amylase and lipase*, which help to *metabolize carbohydrates and fats*, respectively, as



well as *trypsin* and *chymotrypsin*, which are needed to *break down carbohydrates*.



Secondly, the pancreas creates a very important hormone in its endocrine cells *insulin*. As

many of you likely know, *insulin* is the hormone that *regulates blood sugar levels* in the body. By creating insulin and releasing it into the bloodstream when necessary, the pancreas controls the glucose being used in the body, and can prevent the onset of diabetes.

**Q6.** Choose the effect in human body, if pancreas is removed :

- (a) immediately become diabetic
- (b) inability to digest certain proteins, carbohydrates and fats
- (c) both (a) and (b)
- (d) Person is not able to digest Fats only.



**Q7.** Pancreas secretes enzymes from endocrine cells .Chose the correct enzymes from the options given below:

- (a) trypsin and chymotrypsin
- (b) Insulin
- (c) amylase , lipase
- (d) amylase , lipase , trypsin and chymotrypsin

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### Multiple Choice Question [MCQ]

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**Q8.**Generally metal react with dilute acid to liberate hydrogen gas but nitric acid does not liberate hydrogen gas with metals . This is because  $HNO_3$  is :

- (a) a reducing agent
- (b) an oxidising agent
- (c) a dehydrating agent
- (d) a hydrogenating agent

**Q9.**Choose the correct statements that describes arteries

- (a) They have thick elastic walls , blood flows under high pressure; collect blood from different organs & bring it back to the heart.
- (b) They have thin walls with valves inside, blood flows under low pressure and carry blood away from the heart to various organs of the body.
- (c) They have thick elastic walls , blood flows under low pressure;



carry blood from the heart to various organs of the body.

(d) They have thick elastic walls without valves inside, blood flows under high pressure and carry blood away from the heart to different parts of the body.

**Q10.** Pancreatic juice contain enzymes to digest protein. Chose the correct options of protein digesting enzymes

- (a) Trypsin ,Lipase and Maltase
- (b) Pepsin , Trypsin and Maltase
- (c) Trypsin and Chymotrypsin
- (d) Trypsin , Pepsin and Amylase

**Q11.** The bile secreted by the Liver cells , passes into gallbladder through :

- |                      |                            |
|----------------------|----------------------------|
| (a) Cystic Duct      | (b) Hepatic Duct           |
| (c) Hepato gall duct | (d) hepato-pancreatic duct |

**Q12.** Which of the following is not an ionic compound ?

- |           |              |
|-----------|--------------|
| (i) NaCl  | (ii) HCl     |
| (iii) KCl | (iv) $CCl_4$ |



- (a) (i) and (ii)  
(c) (ii) and (iii)

- (b) (i) and (iii)  
(d) (ii) and (iv)

**Q13.** Oxide of Aluminum reacts with :

- (a) Only acid  
(c) only water

- (b) only alkalis  
(d) both acid and alkalis

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### Assertion & Reason

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The given below Statement in Assertion(A) is followed by a statement of Reason(R) .Make the correct choice of that :

- (a) Assertion(A) and Reason(R) are both True and Reason is the Correct Explanation  
(b) Assertion(A) and Reason(R) are both True but the Reason(R) is not the correct explanation.  
(c) Assertion(A) is Correct but Reason(R) is not Correct.  
(d) Assertion(A) is not Correct but Reason(R) is Correct.
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**Q14. Assertion :** Second largest digestive gland in the body is pancreas.





**Reason :** Pancreas functions both as exocrine & endocrine gland .

**Q15. Assertion:** The metals at bottom of reactivity series occur in free state .

**Reason:** These are least reactive metal.

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### Achiever's Section

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**Direction :** Read the given passage and answer Q16 to Q17

**PASSAGE-I** Oxide of a metal M can be reduced to metal by carbon monoxide .It reacts with oxygen but does not burn. When It reacts with chlorine , it forms chlorides of the formulae  $MCl_2$  and  $MCl_3$  because of its variable valencies.

**Q16.** Chose the metal M

(a) Mg

(b) Fe

(c) Zn

(d) Co



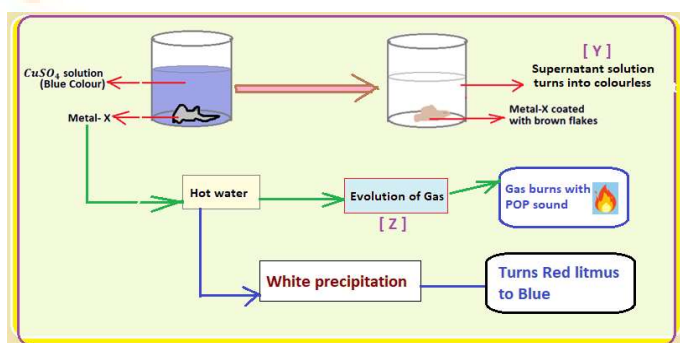


**Q17.** Choose the correct reaction of Ferric oxide with Carbon monoxide (CO) :

- (a)  $Fe_2O_3 + 3CO \rightarrow 2FeC_3 + 3CO_2$
- (b)  $Fe_2O_3 + 3CO_2 \rightarrow 2Fe_2C_3 + 3CO$
- (c)  $Fe_2O_3 + 3CO_2 \rightarrow 2Fe + 3CO$
- (d)  $Fe_2O_3 + 3CO \rightarrow 2Fe + 3CO_2$

**Direction :** Read the given passage and answer Q18 to Q20

**PASSAGE-II :** Metal-X reacts with Copper sulphate solution and turns the blue color solution into colorless solution [Y] . In reactivity series Metal-X is located above Hydrogen. Metal-X gives white precipitate , when it reacts with hot water. This white precipitate turns Red litmus to Blue. In addition a gas [Z] is evolved which burns with a POP sound.



**Q18.** Identify the Metal-X

(a) Mg

(b) Fe

(c) K

(d) Zn

**Q19.** Identify the colorless supernatant solution :

(a)  $ZnSO_4$

(b)  $FeSO_4$

(c)  $K_2SO_4$

(d)  $MgSO_4$

**Q20.** Name of evolved gas :

(a)  $H_2$

(b)  $SO_2$

(c)  $SO_3$

(d)  $O_2$

**Answer Key**

1.(d)	2.(d)	3.(c)	4.(a)	5.(d)	6.(c)	7.(d)	8.(b)	9.(d)	10.(c)	11.(a)	12.(d)	13.(d)	14.(b)	15.(a)
16.(b)	17.(d)	18.(a)	19.(d)	20.(a)										

