

AIPMT 2007

1. Which one of the following is a fat-soluble vitamin and its related deficiency disease ?
- (1) Calciferol - Pellagra
(2) Ascorbic acid - Scurvy
(3) Retinol - Xerophthalmia
(4) Cobalamine - Beri-beri

AIPMT 2008

2. Which one of the following is the **correct matching** of the site of action on the given substrate, the enzyme acting upon it and the end product ?

(1) *Small intestine*: Proteins $\xrightarrow{\text{Pepsin}}$ Amino acids

(2) *Stomach* : Fats $\xrightarrow{\text{Lipase}}$ micelles

(3) *Duodenum* : Triglycerides $\xrightarrow{\text{Trypsin}}$ monoglycerides

(4) *Small intestine* : Starch $\xrightarrow{\alpha\text{Amylase}}$ Disaccharide (Maltose)

3. What will happen if the secretion of parietal cells of gastric glands is blocked with an inhibitor ?
- (1) In the absence of HCl secretion, inactive pepsinogen is not converted into the active enzyme pepsin
(2) Enterokinase will not be released from the duodenal mucosa and so trypsinogen is not converted to trypsin
(3) Gastric juice will be deficient in chymosin
(4) Gastric juice will be deficient in pepsinogen

AIPMT 2009

4. Which one of the following pairs of food components in humans reaches the stomach totally undigested?
- (1) Starch and cellulose
(2) Protein and starch
(3) Starch and fat

5. A young infant that feed entirely on mother's milk which is white in colour but the stools which the infant passes out is quite yellowish. This yellow colour due to ?
- (1) Pancreatic juice poured into duodenum
(2) Intestinal juice
(3) Bile pigments passed through bile juice
(4) Undigested milk protein casein

AIPMT 2014

6. The initial step in the digestion of milk in humans is carried out by ?
- (1) Lipase (2) Trypsin
(3) Rennin (4) Pepsin

AIPMT 2015

7. Gastric juice of infants contains :-
- (1) nuclease, pepsinogen, lipase
(2) pepsinogen, lipase, rennin
(3) amylase, rennin, pepsinogen
(4) maltase, pepsinogen, rennin

NEET-I 2016

8. In the stomach, gastric acid is secreted by the-
- (1) gastrin secreting cells (2) parietal cells
(3) peptic cells (4) acidic cells
9. Which of the following guards the opening of hepatopancreatic duct into the duodenum ?
- (1) Semilunar valve (2) Ileocaecal valve
(3) Pyloric sphincter (4) Sphincter of Oddi

NEET-II 2016

10. Which hormones do stimulate the production of pancreatic juice and bicarbonate?
- (1) Cholecystokinin and secretin
(2) Insulin and glucagon
(3) Angiotensin and epinephrine
(4) Gastrin and insulin

NEET(UG) 2017

11. Which cells of "Crypts of Lieberkuhn" secrete antibacterial lysozyme ?
- (1) Paneth cells (2) Zymogen cells
(3) Kupffer cells (4) Argentaffin cells

12. The hepatic portal vein drains blood to liver from :
- (1) Stomach (2) Kidneys
(3) Intestine (4) Heart
13. A baby boy aged two years is admitted to play school and passes through a dental check - up. The dentist observed that the boy had twenty teeth. Which teeth were absent?
- (1) Canines (2) Pre-molars
(3) Molars (4) Incisors
14. Which of the following options best represents the enzyme composition of pancreatic juice ?
- (1) amylase, pepsin, trypsinogen, maltase
(2) peptidase, amylase, pepsin, rennin
(3) lipase, amylase, trypsinogen, procarboxypeptidase
(4) amylase, peptidase, trypsinogen, rennin

NEET (UG) 2018

15. Which of the following terms describe human dentition ?
- (1) Thecodont, Diphyodont, Homodont
(2) Thecodont, Diphyodont, Heterodont
(3) Pleurodont, Monophyodont, Homodont
(4) Pleurodont, Diphyodont, Heterodont
16. Which of the following gastric cells indirectly help in erythropoiesis ?
- (1) Chief cells (2) Mucous cells
(3) Goblet cells (4) Parietal cells

NEET (UG) 2019

17. Identify the cells whose secretion protects the lining of gastro-intestinal tract from various enzymes :-
- (1) Chief Cells (2) Goblet Cells
(3) Oxyntic Cells (4) Duodenal Cells
18. Match the following structures with their respective location in organs :
- (a) Crypts of Lieberkuhn (i) Pancreas
(b) Glisson's Capsule (ii) Duodenum
(c) Islets of Langerhans (iii) Small intestine
(d) Brunner's Glands (iv) Liver

Select the **correct** option from the following :

- | | (a) | (b) | (c) | (d) |
|-----|-------|------|------|-------|
| (1) | (iii) | (i) | (ii) | (iv) |
| (2) | (ii) | (iv) | (i) | (iii) |
| (3) | (iii) | (iv) | (i) | (ii) |
| (4) | (iii) | (ii) | (i) | (iv) |

NEET (UG) 2019 (ODISHA)

19. Match the items given in column I with those in column II and choose the correct option :
- | Column-I | Column-II |
|-------------------|-----------------------------|
| (a) Rennin | (i) Vitamin B ₁₂ |
| (b) Enterokinase | (ii) Facilitated transport |
| (c) Oxyntic cells | (iii) Milk proteins |
| (d) Fructose | (iv) Trypsinogen |
- (1) a-iii, b-iv, c-ii, d-i (2) a-iv, b-iii, c-i, d-ii
(3) a-iv, b-iii, c-ii, d-i (4) a-iii, b-iv, c-i, d-ii
20. Kwashiorkor disease is due to :-
- (1) Simultaneous deficiency of proteins and fats
(2) Simultaneous deficiency of proteins and calories
(3) Deficiency of carbohydrates
(4) Protein deficiency not accompanied by calorie deficiency

NEET (UG) 2020

21. Goblet cells of alimentary canal are modified from :
- (1) Compound epithelial cells
(2) Squamous epithelial cells
(3) Columnar epithelial cells
(4) Chondrocytes
22. The enzyme enterokinase helps in conversion of :-
- (1) pepsinogen into pepsin
(2) protein into polypeptides
(3) trypsinogen into trypsin
(4) caseinogen into casein
23. Identify the **correct** statement with reference to human digestive system.
- (1) Vermiform appendix arises from duodenum
(2) Ileum opens into small intestine
(3) Serosa is the innermost layer of the alimentary canal
(4) Ileum is highly coiled part

NEET (UG) 2020 (COVID-19)

24. Intrinsic factor that helps in the absorption of vitamin B₁₂ is secreted by :-
 (1) Goblet cells
 (2) Hepatic cells
 (3) Oxyntic cells
 (4) Chief cells
25. The proteolytic enzyme rennin is found in :
 (1) Intestinal juice (2) Bile juice
 (3) Gastric juice (4) Pancreatic juice

NEET (UG) 2021

26. Succus entericus is referred to as :
 (1) Pancreatic juice
 (2) Intestinal juice
 (3) Gastric juice
 (4) Chyme
27. Sphincter of Oddi is present at :
 (1) Ileo-caecal junction
 (2) Junction of hepato-pancreatic duct and duodenum
 (3) Gastro-oesophageal junction
 (4) Junction of jejunum and duodenum

NEET(UG) 2022

28. Which of the following functions is **not** performed by secretions from salivary glands?
 (1) Digestion of complex carbohydrates
 (2) Lubrication of oral cavity
 (3) Digestion of disaccharides
 (4) Control bacterial population in mouth

29. Given below are two statements:

Statement I:

Fatty acids and glycerols cannot be absorbed into the blood.

Statement II:

Specialized lymphatic capillaries called lacteals carry chylomicrons into lymphatic vessels and ultimately into the blood.

In the light of the above statements, choose the **most appropriate** answer from the options given below:

- (1) Both **Statement I** and **Statement II** are incorrect
 (2) **Statement I** is correct but **Statement II** is incorrect
 (3) **Statement I** is incorrect but **Statement II** is correct
 (4) Both **Statement I** and **Statement II** are correct

NEET (UG) 2022

30. Role of enamel is to :
 (1) Connect crown of tooth with its root.
 (2) Masticate the food.
 (3) Form bolus.
 (4) Give basic shape to the teeth.
31. Choose the incorrect enzymatic reaction:
 (1) Maltose $\xrightarrow{\text{Maltase}}$ Glucose + Galactose
 (2) Sucrose $\xrightarrow{\text{Sucrase}}$ Glucose + Fructose
 (3) Lactose $\xrightarrow{\text{Lactase}}$ Glucose + Galactose
 (4) Dipeptides $\xrightarrow{\text{Dipeptidases}}$ Amino acids

EXERCISE-II (Previous Year Questions)

ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	3	4	1	4	3	3	2	2	4	1	1	3	2	3	2
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	4	2	3	4	4	3	3	4	3	3	2	2	3	4	2
Question	31														
Answer	1														

EXERCISE-III (A) (NCERT BASED QUESTIONS)

- Select the incorrect statements :-
 - alimentary canal begins with an anterior cavity called buccal cavity.
 - tooth is embedded in a socket of mandible bone only.
 - human shows strict diphyodont type of dentition.
 - oesophagus and the trachea open into the pharynx.
 - a, b, c & d
 - a, b & c
 - a, c & d
 - a, b & d
- The oesophagus is a thin, long tube which extends ___ passing through the neck.
 - Anteriorly
 - Posteriorly
 - Horizontally
 - Obliquely
- In human _____ is a small blind sac, which hosts some symbiotic micro-organism.
 - Caecum
 - Colon
 - Rumen
 - All of these
- Select the correct structural sequence of alimentary canal facing from inside to outside.
 - Serosa → Muscularis → Submucosa → Mucosa
 - Muscularis → Serosa → Mucosa → Submucosa
 - Mucosa → Submucosa → Muscularis → Serosa
 - Submucosa → Mucosa → Muscularis → Serosa
- All of the following are correct with respect to intestine of human except.
 - Colon having ascending, descending and transverse part.
 - Duodenum is C-shaped structure
 - Pouches are present all along the length of intestine.
 - Highly developed villi is restricted to small intestine.
- Select the correct statements.
 - Salivary glands situated just outside the buccal cavity.
 - Liver is the largest digestive gland.
 - Hepatic duct not arise from gall bladder.
 - Sphincter of Oddi can regulate the release of pancreatic and bile juice in duodenum.
 - a, b, c & d
 - a, b & d
 - b, c & d
 - a, b & c
- The process of digestion is accomplished by:-
 - Mechanical process
 - Chemical process
 - Electrical process
 - Both 1 & 2
- Which of the following helps in lubricating and adhering the masticated food particles into a bolus?
 - Salivary amylase
 - Mucous
 - Secretion of lachrymal gland
 - Gastric juice
- Which of the following electrolytes is/are present in saliva of human?
 - Na⁺
 - K⁺
 - Cl⁻
 - above all
- Select the correct statements.
 - Trypsinogen $\xrightarrow{\text{Chymotrypsin}}$ Trypsin
 - Procarboxypeptidase $\xrightarrow{\text{Pepsin}}$ carboxypeptidase
 - Proamylase $\xrightarrow{\text{Ptylin}}$ Amylase
 - Pepsinogen $\xrightarrow{\text{HCl}}$ Pepsin
- Select the odd with respect to enzymes present in adult human.
 - Rennin
 - Renin
 - Trypsin
 - Pepsin
- Which of the following is not produced by the brush border cells of the intestinal mucosa.
 - Dipeptidases
 - Nucleosidases
 - Lipases
 - Steapsin

13. All of the following is correct with reference to large intestine except.
 (1) No significant digestive activity.
 (2) Absorption of some water
 (3) Absorption of certain minerals.
 (4) Absorption of remaining glucose and amino acid.
14. In which of the following disease liver is affected, skin and eyes turn yellow due to the deposition of bile pigments.
 (1) Vomiting (2) Jaundice
 (3) Diarrhoea (4) Dysentery

EXERCISE-III (B) (ANALYTICAL QUESTIONS)

15. Match the following :

Column-I	Column-II
(A) Salivary gland	(i) Trypsinogen
(B) Stomach	(ii) Bile pigments
(C) Pancreas	(iii) Saliva
(D) Intestine	(iv) Erepsin
(E) Gall bladder	(v) Gastric juice

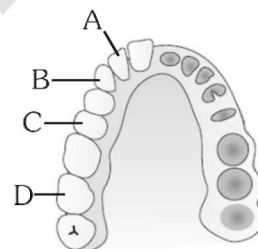
- (1) A-v, B-iii, C-i, D-ii, E-iv
 (2) A-iii, B-v, C-i, D-iv, E-ii
 (3) A-iv, B-iii, C-ii, D-i, E-v
 (4) A-ii, B-v, C-i, D-ii, E-iv
16. Find out the correct match from the following table :-

	Column-I	Column-II	Column-III
A	Goblet cells	Mucus	Prevent mucosa layer from damage of HCl
B	Lysozyme	Saliva	Antibacterial agent
C	Saliva	Submaxillary gland	Secrete salivary amylase
D	Chief cells	HCl	Stimulate gastric lipase

- (1) Only 'A' (2) A and B
 (3) Only C (4) C and D

17. Which of the following statements is/are incorrect regarding digestion and absorption of food in human beings :-
 (a) About 90% of starch is hydrolysed by salivary amylase in our oral cavity
 (b) Mucus cells in our stomach secrete the proenzyme trypsinogen
 (c) Vitamin-D is produced in human body in skin
 (d) Bile salts act as activator of pancreatic lipase
 (1) Two, a and b (2) Two, a and c
 (3) Two, a and d (4) Three, a, b and d

18. Largest internal organ of the body is :-
 (1) Skin (2) Liver
 (3) Pancreas (4) Small intestine
19. Identify A, B, C and D and choose correct option regarding their number in upper jaw:-



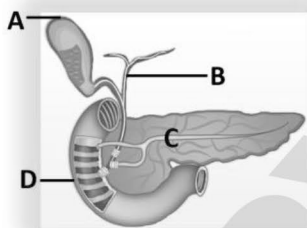
	A	B	C	D
(1)	Incisor-2	Canine-2	Premolar-2	Molar-3
(2)	Incisor-4	Canine-4	Premolar-8	Molar-12
(3)	Incisor-4	Canine-2	Premolar-4	Molar-6
(4)	Incisor-2	Canine-1	Premolar-2	Molar-3

20. Identify the correct match from the column I, II and III.

	Column-I	Column-II	Column-III
A	Salivary gland	a Lacteal	i Emulsification of fat
B	Villi	b Goblet cells	ii One pair
C	Intestinal epithelium	c Bile juice	iii Absorption of fat
D	Liver	d Sub maxillary gland	iv Mucous

- (1) A-d-i, B-a-iii, C-b-iv, D-c-ii
 (2) A-d-ii, B-a-iii, C-b-iv, D-c-i
 (3) A-a-ii, B-d-iv, C-b-iii, D-c-i
 (4) A-b-i, B-a-ii, C-c-iii, D-d-iv
- 21.** Read the following statements (A-D)
 (A) The stomach stores the food for 4-5 hours
 (B) The food mixes thoroughly with the acidic intestinal juice
 (C) Trypsinogen is activated by an enzyme-enterogastrone, secreted by the intestinal mucosa
 (D) Renin is enzyme found in gastric juice of infants which helps in digestion of milk protein
 How many of the above statements are wrong?
 (1) Four (2) One
 (3) Two (4) Three
- 22.** Conversion of large fat globules into smaller globule is :-
 (1) Emulsification (2) Digestion
 (3) Assimilation (4) Specification
- 23.** Micelle formation occurs in :-
 (1) Enterocyte (2) Duodenum
 (3) Lacteals (4) Pancreas
- 24.** Chymotrypsinogen is produced by
 (1) Liver (2) Pancreas
 (3) Stomach (4) Duodenum
- 25.** Which of the following statement is not incorrect
 (a) Human digestive system consists of alimentary canal only
 (b) Oral cavity has a number of teeth & muscular tongue
 (c) Mouth leads to pharynx
 (d) Humans have incomplete alimentary canal
 (1) a & b (2) b & c
 (3) b only (4) a, b and c
- 26.** The longitudinal mucosal folds of inner wall of stomach are called :
 (1) Papilla of vater (2) Rugae
 (3) Villi (4) Fissure
- 27.** Gastric rugae are found in
 (1) Kidney (2) Liver
 (3) Nephron (4) Stomach
- 28.** Trypsinogen is :
 (1) Hormone secreted by mucosa
 (2) Enzyme secreted by mucosa
 (3) Inactive enzyme secreted by pancreas
 (4) Secreted by endocrine gland related to digestion
- 29.** Part of bile juice useful in digestion is :
 (1) Bile salt (2) Bile pigment
 (3) Bile matrix (4) All of them
- 30.** From which of the following pepsin is secreted:
 (1) Lungs (2) Stomach
 (3) Salivary gland (4) Sebaceous gland
- 31.** Given below are two statements:
Statement-I : Glucose, amino acids and Na^+ are absorbed from intestine into blood by active transport.
Statement-II : Absorption of glucose & amino acids never occurs by simple diffusion.
 In the light of the above statements, choose the most appropriate answer from the options given below:
 (1) Both Statement-I and II both are incorrect.
 (2) Statement-I is correct but statement-II is incorrect.
 (3) Both Statement-I and II both are correct.
 (4) Statement-I is incorrect but statement-II is correct.
- 32.** Prorennin is secreted by :
 (1) Zymogen cells (2) Sertoli cells
 (3) Islets of Langerhans (4) Hepatocytes
- 33.** Find out the correctly matched pair :
 (1) Pepsinogen → Zymogenic cells
 (2) HCl → Goblet cells
 (3) Mucus → Oxyntic cells
 (4) Pancreatic juice → Salivary glands
- 34.** Among mammals, a significant role in the digestion of milk is played by :
 (1) Rennin
 (2) Invertase
 (3) Amylase
 (4) Intestinal bacteria

35. pH of gastric juice is :
 (1) 2 (2) 4 (3) 6 (4) 8
36. Given below are two statements:
Statement-I : In wall of alimentary canal, serosa is outermost layer made of thin mesothelium.
Statement-II : Muscularis layer in stomach has outer circular muscle and inner longitudinal muscle.
 In the light of the above statements, choose the most appropriate answer from the options given below:
 (1) Both Statement-I and II both are incorrect.
 (2) Statement-I is correct but statement-II is incorrect.
 (3) Statement-I is incorrect but statement-II is correct.
 (4) Both Statement-I and II both are correct.
37. Identify A, B, C and D in the diagram given below :



	A	B	C	D
(1)	Gall bladder	Cystic duct	Pancreas	Duodenum
(2)	Gall bladder	Hepatic duct	Pancreas	Duodenum
(3)	Liver	Hepatic duct	Pancreas	Duodenum
(4)	Gall bladder	Common bile duct	Pancreas	Duodenum

38. The organ in human body where Brunner's glands are present ?
 (1) Large intestine (2) Small intestine
 (3) Liver (4) Kidney
39. 'Crypts of Lieberkuhn' are found in :
 (1) Gall bladder (2) Liver
 (3) Pancreas (4) Intestinal wall

40. Glisson's capsule is associated with :
 (1) Liver (2) Pancreas
 (3) Lungs (4) Kidney
41. The main digestive function of enterokinase is :
 (1) Conversion of pepsinogen into pepsin
 (2) Conversion of trypsinogen into trypsin
 (3) Conversion of trypsin into trypsinogen
 (4) Stimulation of the gastric glands to secrete gastric juice
42. Castle intrinsic factor helps in absorption of
 (1) Vitamin - B₁₂ (2) Vitamin - B₆
 (3) Vitamin - A (4) Vitamin - C
43. Pancreatic juice contain bicarbonate which is secreted by :
 (1) Paneth cells (2) Goblet cell
 (3) Kupffer's cell (4) Aciner cell
44. Identify the false statement :
 (1) Oesophagus does not secrete any enzyme
 (2) Gall bladder concentrate bile juice
 (3) Human teeth are thecodont
 (4) There are two pairs of salivary glands in humans
45. Pepsinogen is activated by
 (1) Castle intrinsic factor
 (2) HCl
 (3) Bile juice
 (4) Enterokinase
46. Find out the correct match :
- | Column I | | Column II | |
|-------------------------|--------------------------|-----------|--|
| A. Hepatic lobule | i. Submucosal glands | | |
| B. Brunner's glands | ii. Base of villi | | |
| C. Crypts of Lieberkuhn | iii. Glisson's capsule | | |
| D. Sphincter of Oddi | iv. Gall bladder | | |
| E. Cystic duct | v. Hepatopancreatic duct | | |
| | vi. Serous glands | | |
- | | A | B | C | D | E |
|-----|-----|----|-----|----|----|
| (1) | iii | vi | ii | v | iv |
| (2) | v | ii | iii | vi | i |
| (3) | iii | i | ii | v | iv |
| (4) | iv | vi | v | ii | i |

47. Which an organ is affected in jaundice ?
(1) Stomach
(2) Pancreas
(3) Liver
(4) Parotid glands
48. Given below are two statements:
Statement-I : Salivary glands are situated inside buccal cavity & secrete salivary juice into it.
Statement-II : Saliva is mainly produced by parotid, sub maxillary and sub lingual glands. In the light of the above statements, choose the most appropriate answer from the options given below:
(1) Statement-I is incorrect but statement-II is correct.
(2) Both Statement-I and II both are incorrect.
(3) Both Statement-I and II both are correct.
(4) Statement-I is correct but statement-II is incorrect.
49. Identify the false statement ?
(1) Bile is secreted by liver
(2) Stomach is divided into two parts
(3) Parietal cell lie in wall of stomach
(4) Liver is the largest gland of human body
50. Given below are two statements; one is labelled as **Assertion (A)** and the other is labelled as **Reason(R)** .
Assertion (A) : Maximum absorption of digested food takes place in small intestine due to enormously increased surface area.
Reason (R) : Mucosa layer forms villi in intestine which has numerous microscopic projections called microvilli.
In the light of the above statements, choose the **most appropriate** answer from the options given below :
- (1) If (A) & (R) both are correct but (R) is not the correct explanation of (A).
(2) (A) is correct but (R) is incorrect.
(3) (A) is incorrect but (R) correct.
(4) If (A) & (R) both are correct and (R) is the correct explanation of (A).
51. Which one is correct about the "rennin" ?
(1) It helps in digestion of milk-sugar.
(2) It is found in gastric juice of adult human.
(3) It is proteolytic enzyme found in saliva.
(4) It is found in gastric juice of infants.
52. Kwashiorkar disease is due to deficiency of:
(1) Protein (2) Fat
(3) Sugar (4) Hormone
53. Carbohydrate digestion occurs first in which structure?
(1) Mouth (2) Intestine
(3) Stomach (4) None of these
54. Enzyme pepsin acts in :
(1) Acidic medium in the pancreas
(2) Acidic medium in the stomach
(3) Intestine
(4) Mouth
55. Bile secretion is proportional to the concentration of :
(1) Protein (2) Fat
(3) Carbohydrate (4) None of these
56. Protein deficiency leads to :
(1) Kwashiorkar
(2) Marasmus
(3) Cretinism
(4) Both (1) and (2)
57. Defect of which cells leads to pernicious anaemia?
(1) Chief-cells
(2) Oxyntic cells
(3) Mast cells
(4) Peptic cells

58. In mammals the teeth are
 (a) of different types
 (b) embedded in the cuplike socket in the jaw bones
 (c) two sets present throughout life
 The condition are referred as :
 (1) Heterodont, thecodont, diphyodont
 (2) Thecodont, heterodont, diphyodont
 (3) Diphyodont, thecodont, heterodont
 (4) Heterodont, diphyodont, thecodont

59. Which of the following process will be affected by the absence of enterokinase?
 (1) Lipid → Fatty acid + glycerol
 (2) Dipeptides → Amino acid
 (3) Proteoses → Dipeptide
 (4) Amylose → Maltose
60. Gastric juice contains :-
 (1) HCl, Pepsinogen, Lipase
 (2) Amylase, Dipeptidase, Lipase
 (3) Trypsinogen, Pepsin, Rennin
 (4) Chymotrypsinogen, Nucleases, Lipase

Exercise - III

ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	2	2	1	3	3	1	4	2	4	4	1	4	4	2	2
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	2	1	2	3	2	4	1	2	2	3	2	4	3	1	2
Question	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Answer	2	1	1	1	1	2	2	2	4	1	2	1	4	4	2
Question	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Answer	3	3	1	2	4	4	1	1	2	2	4	2	1	3	1