

## EMRS Model Test Paper 1

**Q1. Select the option that is the indirect form of the given sentence.**

**Rahul said, "God is omnipresent."**

- (a) Rahul told that God is omnipresent.
- (b) Rahul said that God is omnipresent.
- (c) Rahul asked if God is omnipresent.
- (d) Rahul said to me that God was omnipresent.

**Q2. Select the most appropriate meaning of the idiom.**

**Carry coals to Newcastle**

- (a) To do something redundant or unnecessary
- (b) To deceive, fool, or misdirect
- (c) To satisfy or fulfill everything that is necessary or desired
- (d) To act confidently in a difficult situation

**Q3. Select the most appropriate ANTONYM of the given word.**

**Ingenious**

- (a) Originative
- (b) Shrewd
- (c) Canny
- (d) Unartistic

**Q4. Select the word which means the same as the group of words given.**

**Using high-flown or bombastic language.**

- (a) Magniloquent
- (b) Grandiloquent
- (c) Soliloquy
- (d) Colloquial

**Q5. Select the most appropriate synonym of the given word.**

**Unbridled**

- (a) Hampered
- (b) Hindered
- (c) Temperate

(d) Unbounded

**Q6. Identify the segment in the given sentence which contains the grammatical error.**

**As soon as Anita finished her work, she gone out.**

- (a) finished her work
- (b) As soon as Anita
- (c) she gone out
- (d) No error

**Q7. In the following question, some parts of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.**

**All the members (A)/ of the Board are kindly (B)/ requested to appear in the next meeting. (C)/ No Error (D)**

- (a) A
- (b) B
- (c) C
- (d) D

**Q8. Select the option that is the passive form of the given sentence.**

**Do they speak German?**

- (a) Is the German spoken by them?
- (b) Does the German speak by them?
- (c) Can they speak by German?
- (d) Was the German spoken by them?

**Q9. Select the word which means the same as the group of words given.**

**A form of government in which power is held by the nobility.**

- (a) Stratocracy
- (b) Patriarchy
- (c) Aristocracy
- (d) Theocracy

**Q10. Select the most appropriate meaning of the idiom given in bold in the given sentence.**

With coronavirus, both India's healthcare and disaster management are working over capacity meaning there are no resources if another calamity strikes; it's time to **beef up** the budgets for Disaster Relief and healthcare.

- (a) To boost or develop something
- (b) To increase or grow by large increment
- (c) Increasing, especially in frequency of occurrence

(d) To grow or expand in some quality

## GENERAL HINDI

**Directions (11-20):** निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़िए और प्रश्नों के उत्तर देने के लिए उचित विकल्प का चयन कीजिए।

**Q11.** निम्नलिखित शब्दों में से द्वंद्व समास किस शब्द में है?

- (a) धड़ाधड़
- (b) कलाप्रवीन
- (c) त्रिभुवन
- (d) पाप-पुण्य

**Q12.** निम्नलिखित में से दंतव्य वर्ण है-

- (a) य्
- (b) च्
- (c) त्
- (d) उ

**Q13.** 'ई' प्रत्यय किस शब्द में नहीं है?

- (a) माली
- (b) अलबेली
- (c) फांसी
- (d) सिलाई

**Q14.** 'छिद्रान्वेषी' का अर्थ है-

- (a) चारों ओर से जल से घिरा हुआ भाग
- (b) दूसरों के दोषों को खोजने वाला
- (c) लम्बे समय तक जीवित रहने वाला
- (d) गुप्त सूचनाएँ देने वाला

**Q15.** 'गूलर का फूल होना' का अर्थ है-

- (a) लाल पीला होना
- (b) सुन्दर होना

(c) विवर्ण होना

(d) दुर्लभ होना

**Q16. 'नवग्रह' में कौन सा समास है?**

(a) द्विगु

(b) द्वंद्व

(c) बहुव्रीहि

(d) कर्मधारय

**Q17. 'वृद्ध' का विलोम शब्द है-**

(a) तरुण

(b) नूतन

(c) जारज

(d) वय

**Q18. 'साखी' के रचयिता हैं-**

(a) रसखान

(b) सूरदास

(c) कबीरदास

(d) रहीम

**Q19. तत्सम शब्द का चयन कीजिए:**

(a) विद्युत्

(b) लाज

(c) भंडार

(d) नारियल

**Q20. निम्नलिखित में से किस शब्द के सभी शब्द अशुद्ध हैं?**

(a) शतुरमुर्ग, प्रफुल्लित

(b) अनुगृहित, बहुव्रीहि

(c) अर्चना, विस्मरण

(d) औद्योगिक, प्रक्षेपास्त्र

### GENERAL AWARENESS

**Q21. For how many days did Mahatma Gandhi's volunteers of the Salt Satyagraha walked?**

- (a) 24
- (b) 36
- (c) 12
- (d) 6

**Q22. In which of the following sessions of the Indian National Congress, did Mohan Das Karamchand Gandhi participate for the first time?**

- (a) Calcutta Session 1901
- (b) Banaras Session 1905
- (c) Surat Session 1907
- (d) Lucknow Session 1916

**Q23. Which of the following region is covered by tropical evergreen forest?**

- (a) Eastern Ghat
- (b) Vindhyanchal
- (c) Aravalli
- (d) Western Ghat

**Q24. Which is the highest peak in Andaman and Nicobar islands?**

- (a) Mount Koya
- (b) Mount Diavolo
- (c) Saddle Peak
- (d) Mount Thuiller

**Q25. Anti-defection law was passed in which Constitutional Amendment Act?**

- (a) 41st Constitutional Amendment Act
- (b) 46th Constitutional Amendment Act
- (c) 48th Constitutional Amendment Act
- (d) 52nd Constitutional Amendment Act

**Q26. Which one of the following laws is used to describe the relationship between the changes in unemployment and changes in real GDP of an economy?**

- (a) Say's Law
- (b) Engel's Law
- (c) Okun's Law
- (d) Cambell's Law

**Q27. A ray of light traveling obliquely from denser to rarer medium**

- (a) Bends towards the normal
- (b) Bends away from the normal
- (c) Does deviate from its path
- (d) None of these

**Q28. Breath analysers used by police to test drunken drivers works on the chemical basis of**

- (a) Redox reactions
- (b) Acid-base reactions
- (c) Precipitation reactions
- (d) complexation reaction

**Q29. Which of the following glands regulates calcium level?**

- (a) Parathyroid
- (b) Thyroid
- (c) Thymus
- (d) Adrenal

**Q30. What is the theme of the 2021 World Migratory Bird Day?**

- (a) Unifying Our Voices for Bird Conservation
- (b) Protect Birds: Be the Solution to Plastic Pollution!
- (c) Birds Connect Our World
- (d) Sing, Fly, Soar - Like a Bird!

#### ANALYTICAL ABILITY

**Q31. Which of the following can be described by the Venn diagram below?**

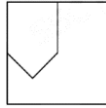


- (a) Dogs, Cats, Sheep
- (b) Chairs, Tables, Furniture
- (c) Planets, Galaxies, Universe
- (d) Physics, Chemistry, Mathematics

**Q32. If 'dear' is coded as 1234, 'head' is coded as 2345, 'tear' is coded as 1346, 'help' is coded as 4758, then What can be the possible code for the word 'their'?**

- (a) 95413
- (b) 95312
- (c) 54961
- (d) 65391

**Q33. From the given answer figures, select the one in which the question figure is hidden/embedded.**



(a)



(b)



(c)



(d)



**Q34. What will come in the place of question mark (?) in the following series?**

**NP OQ QS TV?**

- (a) XX
- (b) XZ
- (c) WZ
- (d) WX

**Directions (35-36): In the following questions select the choice which completes the series.**

**Q35. J L N P R T ? :**

- (a) V
- (b) U
- (c) S
- (d) W

**Q36. A D I P ? :**

- (a) R
- (b) T
- (c) U
- (d) Y

**Q37. In this question, a statement is given followed by four alternative inferences. Select the one which is the most appropriate**

**Statement:**

Many creative persons become artists

**Inferences:**

- (a) Some artists are creative persons
- (b) A high level of creativity is needed to become an artist
- (c) It is not possible to become an artist without creativity
- (d) A creative person will certainly become an artist

**Q38. Saumya is standing facing north. She walks 10 km straight, turns left and walks another 10 km and turns right and walks 5 km and finally turns left and walks 15 km, to reach a park. Which direction is she facing now ?**

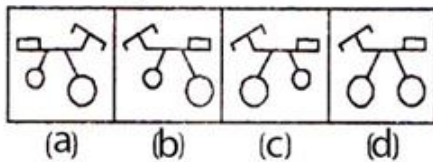
- (a) East
- (b) West
- (c) North
- (d) South

**Q39. If a mirror is placed on the line MN, then which of the answer figures is the correct image of the given question figure?**

**Question Figure :**



**Answer Figure :**



- (a) a
- (b) b
- (c) c
- (d) d

**Q40.**

If '+' means 'division', '÷' means 'multiplication', '×' means 'minus' '-' means 'addition', then

$$(75 \times 25) \div 2 + 50 - 10 = ?$$

- (a) 16.67
- (b) 20
- (c) 977.5
- (d) 12



**Directions (41-42):** In the following questions complete the number series:

**Q41.** 17, 19, 23, 29, \_\_\_

- (a) 33
- (b) 31
- (c) 34
- (d) 36

**Q42.** 204, 100, 48, 22, \_\_\_

- (a) 10
- (b) 9
- (c) 13
- (d) 7

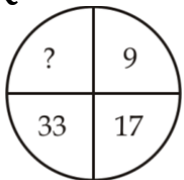
**Directions (43-45):** In each of the following questions, select the missing number from the given responses.

**Q43.**

2	7	9
7	3	4
9	8	?
126	168	216

- (a) 8
- (b) 3
- (c) 6
- (d) 36

**Q44.**



- (a) 60
- (b) 68
- (c) 55
- (d) 65

**Q45.**

5	9	?	= 84
8	6	4	= 56
7	3	7	= 70

- (a) 4

- (b) 7
- (c) 6
- (d) 5

### NUMERICAL ABILITY

**Q46. What least number must be added to 213, so that the sum is completely divisible by 9?**

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

**Q47. Profit of Rs 12,400 has to be divided between three partners A, B and C in the ratio 5:7:8. How much does B get (in Rs)?**

- (a) 4340
- (c) 3440
- (d) 3340
- (d) 4430

**Q48. The average weight of P, Q and R is 47 kg. If the average weight of P and Q be 32.5 kg and that of Q and R be 48.5 kg, then what is the weight of Q (in kgs)?**

- (a) 25
- (b) 21
- (c) 29
- (d) 33

**Q49. What is the value of 20% of 500% of 50?**

- (a) 0.5
- (b) 5000
- (c) 500
- (d) 50

**Q50. If  $5x + 6(3-2x) = 4$ , then what is the value of x?**

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

**Q51. If  $a + b = 1$  and  $ab = -6$ , then what is the value of  $a^3 + b^3$ ?**

- (a) 17
- (b) 15
- (c) 19
- (d) 13

**Q52. The sum of a non-zero number and twenty times its reciprocal is 9. What is the number?**

- (a) - 5
- (b) 3
- (c) -3
- (d) 5

**Q53. What is the HCF of 6345 and 2160?**

- (a) 45
- (b) 135
- (c) 270
- (d) 15

**Q54. If  $9x - [5(2x + 1)/2] = 9/2$ , then the value of x is?**

- (a)  $7/4$
- (b)  $-7/4$
- (c)  $4/7$
- (d)  $-4/7$

**Q55. The sum of a fraction and 10 times its reciprocal is  $37/4$ . What is the fraction?**

- (a)  $5/4$
- (b)  $4/5$
- (c)  $3/4$
- (d)  $4/3$

## COMPUTER BASICS

**Q56. What is that computer program called which translates one program instruction at a time into machine language?**

- (a) Compiler
- (b) CPU
- (c) Compiler
- (d) Interpreter

**Q57. What is another name for additive manufacturing?**

- (a) 3-D printing
- (b) 2-D printing
- (c) CPU Assembly
- (d) Memory management

**Q58. What is decorative text called, that you can add to a document?**

- (a) Table
- (b) Symbol

- (c) WordArt
- (d) Image

**Q59. If a word is typed that is not in MS Word's dictionary, a wavy underline appears below the word. What is the color of the underline that appears in this situation?**

- (a) Blue
- (b) Red
- (c) Green
- (d) Black

**Q60. A type of instruction that can produce several lines of machine language code is called a \_\_\_\_\_.**

- (a) Mnemonic
- (b) Address
- (c) Macro
- (d) Assemble

### **CHILD PEDAGOGY**

**Q61. Creation of learning environment for a class in the school is the responsibility of .....**

- (a) Student Leader
- (b) Local Authority
- (c) Teacher
- (d) Mandal Educational Officer

**Q62. One of the following is Havighurst's developmental task of adolescence stage.**

- (a) Accepting one's physique and using one's body effectively
- (b) Developing concepts necessary for everyday living
- (c) Learning sex differences and sexual modesty
- (d) Building a wholesome attitude toward oneself as a growing organism

**Q63. Identifying differences between two stimuli is .....**

- (a) generalization
- (b) higher order conditioning
- (c) extinction
- (d) discrimination

**Q64. According to Piaget, language development occurs rapidly during this stage.**

- (a) Sensorimotor
- (b) Preoperational
- (c) Concrete operational
- (d) Formal operational

**Q65. 'Freedom of expression' is .....**

- (a) a child right
- (b) a right of all school going children only
- (c) not a child right
- (d) a right of mentally healthy children only

**Q66. The feeling of satisfaction that increases the likelihood of the sequence of the behaviour to occur again is called .....**

- (a) law of readiness
- (b) law of contiguity
- (c) law of exercise
- (d) law of effect

**Q67. Application of bitter agents on thumb to discontinue thumb sucking in a child is .....**

- (a) punishment held
- (b) zero reinforcement
- (c) negative reinforcement
- (d) positive reinforcement

**Q68. The teaching strategy that DOES NOT involve democratic style.**

- (a) Tutorial strategy
- (b) Brainstorming strategy
- (c) Group discussion strategy
- (d) Project strategy

**Q69. One of the following is an example for intraindividual differences.**

- (a) Though having interest in academics and games 'A' always used to excel in games
- (b) 'B' used to quarrel always with peer group members, whereas 'A' used to be calm and quiet
- (c) 'A' and 'B' performed a musical concert in which 'B' excelled
- (d) In spite of studying for the same number of hours, 'A' used to take more time to learn a concept than 'B'

**Q70. An individual's personality is the result of his/her .....**

- (a) social setup
- (b) genetic endowment and environmental exposure
- (c) genetic endowment
- (d) child rearing practices

**Q71. The story of 'fox and sour grapes' is an example of .....**

- (a) Repression
- (b) Regression
- (c) Rationalization
- (d) Reaction formation

**Q72. To study the developmental patterns of the primary school children, a psychologist has chosen the students of classes I to V and conducted the study in a year. The research method adopted by the psychologist is .....**

- (a) Developmental study
- (b) Case study
- (c) Cross sectional study
- (d) Survey

**Q73. According to Kohlberg, child's morality is controlled by the 'fear of punishment' at this stage .**

....

- (a) Stage 3
- (b) Stage 4
- (c) Stage 1
- (d) Stage 2

**Q74. Learning is a process of bringing relatively permanent changes in behaviour through -**

- (a) Growth
- (b) Memory
- (c) Experience
- (d) Maturation

**Q75. According to Vygotsky, the aim of private speech is for the .....**

- (a) Ego - centric development of children.
- (b) Self - guidance of children.
- (c) Self realization of children.
- (d) Direction of parents to children.

**Q76. Cephalocaudal development indicates that the development proceeds from .....**

- (a) Umbilic to head
- (b) Toe to umbilic
- (c) Head to toe
- (d) Centre to other parts

**Q77. Programmed learning is based on following theory.**

- (a) Observational learning theory.
- (b) Trial and Error learning theory.
- (c) Classical conditioning theory.
- (d) Operant conditioning theory.

**Q78. One of the following is not a purpose of formative assessment.**

- (a) Feedback to the parents about their children's studies.
- (b) Certification of completion of a course of study.
- (c) Feedback to the learners about their participation, understanding, etc.
- (d) Feedback to the teachers about their teaching.

**Q79. As per NCF-2005, medium of learning in schools is .....**

- (a) English

- (b) Hindi / Sanskrit
- (c) Home language
- (d) Multilingual

**Q80. If MA = CA, then the I. Q. is . . . . .**

- (a) 120
- (b) 90
- (c) 100
- (d) 110

## SOLUTIONS

**S1. Ans.(b)**

**Sol.** The correct answer is option b.

If the direct speech expresses a historical fact, universal truth, or a habitual fact, then the tense of the direct speech will not change.

The sentence thus formed is- Rahul said that God is omnipresent.

**S2. Ans.(b)**

**Sol.** The correct answer is option b.

Carry coals to Newcastle - It is an idiomatic expression which means, 'To do something redundant, frivolous, or unnecessary.'

Option b portrays the same meaning as that of the given idiom & hence it is the correct choice.

**S3. Ans.(d)**

**Sol.** The correct answer is option d.

Ingenious – Marked by originality, resourcefulness, and cleverness in conception or execution.

Synonyms - Clever, Original, Inventive.

Antonyms - Uncreative, Unimaginative, Uninventive, Unartistic.

**S4. Ans.(a)**

**Sol.** The correct answer is option a.

Magniloquent - Using high-flown or bombastic language.

Option a portrays the same meaning as that of the given group of words & hence it is the correct choice.

**S5. Ans.(d)**

**Sol.** The correct answer is option d.

Unbridled – Uncontrolled, Unconstrained, Unbounded.

Option d portrays the same meaning as that of the given word & hence it is the correct choice.

**S6. Ans.(c)**

**Sol.** The correct answer is option c.

The error lies in part c of the sentence.

Replace 'Gone' by 'Went' to make the sentence grammatically correct.

The given sentence is in past tense. 'As soon as' to show that something happens immediately, i.e. 'at the very moment another action is completed', or 'shortly after another action is completed'.

In the given sentence (Finished) is the 1<sup>st</sup> activity which happened and it is in the past tense hence the 2<sup>nd</sup> activity/action must be in the same tense.

**S7. Ans.(b)**

**Sol.** Remove 'kindly' as 'Kindly' & 'Requested' can't be used together because Kindly, itself is used to make a request in Active Voice.

**S8. Ans.(a)**

**Sol.** The correct answer is option a.

The given sentence is of 'Active voice'.

The given sentence is Interrogative Sentence starts with 'Do' then while making the Passive Voice, usage of 'Is' appropriate.

The sentence thus formed is- Is the German spoken by them?

**S9. Ans.(c)**

**Sol.** The correct answer is option c.

Aristocracy - The highest class in certain societies, typically comprising people of noble birth holding hereditary titles and offices.

Option C portrays the same meaning as that of the given group of words & hence it is the correct choice.

**S10. Ans.(a)**

**Sol.** The correct answer is option a.

To beef up - It is an idiomatic expression which means, 'To add weight, strength, or power to (something).'

Option (a) portrays the same meaning as that of the given idiom & hence it is the correct choice.

**S11. Ans.(d)**

**Sol.** 'पाप-पुण्य' में द्वंद्व समास है।

**S12. Ans.(c)**

**Sol.** 'त' दंतव्य वर्ण है।

**S13. Ans.(d)**

**Sol.** 'सिलाई' शब्द में 'आई' प्रत्यय है। अन्य सभी शब्दों में 'ई' प्रत्यय है।

**S14. Ans.(b)**

**Sol.** 'छिद्रान्वेषी' का अर्थ है- दूसरों के दोषों को खोजने वाला।



**S15. Ans.(d)**

**Sol.** 'गूलर का फूल होना' का अर्थ है- दुर्लभ होना।

**S16. Ans.(a)**

**Sol.** 'नवग्रह' में द्विगु समास है।

**S17. Ans.(a)**

**Sol.** 'वृद्ध' का विलोम शब्द है- तरुण।

**S18. Ans.(c)**

**Sol.** 'साखी' के रचयिता हैं- कबीरदास।

**S19. Ans.(a)**

**Sol.** 'विद्युत्' एक तत्सम शब्द है। अन्य सभी तद्भव शब्द हैं।

**S20. Ans.(c)**

**Sol.** शुद्ध वर्तनी हैं- अर्चना और विस्मरण।

**S21. Ans.(a)**

**Sol.** The 24-day Salt Satyagraha march began from 12 March 1930 and continued until 6 April 1930 as a direct action campaign of tax resistance and nonviolent protest against the British salt monopoly, and it gained worldwide attention which gave impetus to the Indian independence movement and started the nationwide non co-operation movement.

**S22. Ans.(a)**

**Sol.** In the Calcutta Session 1901 of the Indian National Congress, Mohan Das Karmachand Gandhi participated for the first time. In 1901, Gandhi reached India to attend the Calcutta session of the Indian National Congress and had the satisfaction of seeing his resolution on South Africa pass with acclamation.

**S23. Ans.(d)**

**Sol.** In India, tropical evergreen forests are found in the western slopes of the Western Ghats in States such as Kerala and Karnataka.

**S24. Ans.(c)**

**Sol.** Saddle Peak is the highest point of the Andaman and Nicobar Islands.

**S25. Ans.(d)**

**Sol.** The Anti-Defection Law was passed in 1985 through the 52nd Amendment to the Constitution, which added the Tenth Schedule to the Indian Constitution.

**S26. Ans.(c)**

**Sol.** Okun's law investigates the statistical relationship between a country's unemployment rate and the growth rate of its economy. That rule of thumb describes the observed relationship between changes in the unemployment rate and the growth rate of real gross domestic product.

**S27. Ans.(b)**

**Sol.** A ray of light traveling obliquely from denser to rarer medium bends away from the normal.

**S28. Ans.(b)**

**Sol.** Breath analysers used by police to test drunken drivers works on the chemical basis of Acid-base reactions.

**S29. Ans.(a)**

**Sol.** Parathyroid Hormone (PTH) from the parathyroid glands regulates calcium level and it's needed for muscle contraction and blood clotting. It's critical to maintaining plasma concentration of  $Ca^{+2}$ . PTH is essential for life because of calcium effect on neuromuscular capability.

**S30. Ans.(d)**

**Sol.** The theme for 2021 the WMBD is "Sing, Fly, Soar - Like a Bird!"

**S31. Ans.(b)**

**S32. Ans.(c)**

**Sol.**

codes are  $\rightarrow a \Rightarrow 3; d \Rightarrow 2; e \Rightarrow 4; r \Rightarrow 1; h \Rightarrow 5; t \Rightarrow 6$   
 $l \Rightarrow 8 \text{ or } 7; P \Rightarrow 7 \text{ or } 8$ , the code for i is 9

**S33. Ans.(d)**

**S34. Ans.(b)**

**Sol.** The pattern for 1st letter and 2nd letter of every term is +1, +2, +3, +4

**S35. Ans.(a)**

**Sol.** The pattern is +2, +2, +2, +2, +2

**S36. Ans.(d)**

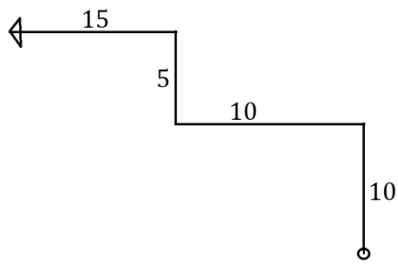
**Sol.** +3, +5, +7, +9

**S37. Ans.(a)**

**Sol.** Only inference 'a' follows

**S38. Ans.(b)**

**Sol.**



She is facing west

**S39. Ans.(b)**

**S40. Ans.(d)**

**Sol.** ATQ,  $(75 - 25) \times 2 \div 50 + 10$   
 $= 100 \div 50 + 10 = 12$

**S41. Ans.(b)**

**Sol.** Series of consecutive prime number starting from 17.

**S42. Ans.(b)**

**Sol.** The pattern is  $\div 2 - 2$

**S43. Ans.(c)**

**Sol.**  $2 \times 7 \times 9 = 126, 9 \times 4 \times x = 216 \Rightarrow x = 6$

**S44. Ans.(d)**

**Sol.** The pattern is  $+8, +16, +32$

**S45. Ans.(c)**

**Sol.**  $(8 + 6) \times 4 = 56, (5 + 9) \times x = 84 \Rightarrow x = 6$

**S46. Ans.(a)**

**Sol.**

$$\begin{array}{r} 9 \overline{) 213} \quad 23 \\ \underline{18} \phantom{0} \\ 33 \\ \underline{27} \\ 6 \end{array}$$

$\Rightarrow$  So, we see clearly, to make 213 completely divisible by 9 we must add  $= 9 - 6 = 3$

**S47. Ans.(a)**

**Sol.** B gets profit  $= 12,400 \times \frac{7}{20} = 4340$

**S48. Ans.(b)**

**Sol.** Required value of  $Q = (47 \times 3) - [47 \times 3 - 65] + [47 \times 3 - 97]$   
 $= 141 - [76 + 44]$   
 $= 141 - 120 = 21$

**S49. Ans.(d)**

**Sol.** The value is  $= \frac{20}{100} \times \frac{500}{100} \times 50 = 50$

**S50. Ans.(c)**

**Sol.**  $5x + 6(3 - 2x) = 4$

$5x + 18 - 12x = 4$

$7x = 14$

$x = 2$

**S51. Ans.(c)**

**Sol.**  $a + b = 1$  &  $a \cdot b = -6$

So,  $a = 3, b = -2$

Satisfied the equations

So,  $a^3 + b^3 = 27 + (-8) = 19$

**S52. Ans.(d)**

**Sol.** ATQ, let the number =  $x$

$x + 20 \times \frac{1}{x} = 9$

$x^2 + 20 = 9x$

$x^2 - 9x + 20 = 0$

$x = 4, 5$  but in option only 5 is given

**S53. Ans.(b)**

**Sol.** HCF of 6345 and 2160

Factors of 6345 =  $5 \times 3 \times 3 \times 3 \times 47$

Factors of 2160 =  $5 \times 3 \times 3 \times 3 \times 2 \times 2 \times 2 \times 2$

So, common factors =  $5 \times 3 \times 3 \times 3 = 135$

**S54. Ans.(a)**

**Sol.**  $9x - \frac{5}{2} \times 2x - \frac{5}{2} = \frac{9}{2}$

$9x - 5x = \frac{9}{2} + \frac{5}{2} = 7$

$4x = 7 \Rightarrow x = \frac{7}{4}$

**S55. Ans.(a)**

**Sol.**  $\frac{x}{y} + \frac{10y}{x} = \frac{37}{4}$

We go through options.

$$\text{Put } \frac{x}{y} = \frac{5}{4}$$

$$\frac{5}{4} + 10 \times \frac{4}{5} = \frac{5}{4} + 8 = \frac{5 + 32}{4} = \frac{37}{4}$$

**S56. Ans.(d)**

**Sol.** Interpreter Takes Single instruction as input and Compiler Takes Entire program as input.

**S57. Ans.(a)**

**Sol.** 3D printing, also known as additive manufacturing (AM), are processes used to synthesize a three-dimensional object in which successive layers of material are formed under computer control to create the object.

**S58. Ans.(c)**

**Sol.** WordArt is decorative text that you can add to a document. You can make changes to WordArt, such as the font size and the text colour, by using the drawing tools options available automatically after you insert or select the WordArt in a document.

**S59. Ans.(b)**

**Sol.** This indicates either a possible spelling error or that Word doesn't recognize a word, such as a proper name or place. Green underline- Word thinks that grammar should be revised. Blue underline- A word is spelled correctly but does not seem to be the correct word for the sentence.

**S60. Ans.(c)**

**Sol.** A Macro instruction is a line of computer program coding that results in one or more lines of program coding in the target programming language, sets variables for use by other statements, etc.

**S61. Ans.(c)**

**Sol.** Creation of learning environment for a class in the school is the responsibility of Teacher

**S62. Ans.(a)**

**Sol.** Accepting one's physique and using one's body effectively

**S63. Ans.(d)**

**Sol.** Identifying differences between two stimuli is discrimination

**S64. Ans.(b)**

**Sol.** In the preoperational stage, children use symbols to represent words, images, and ideas, which is why children in this stage engage in pretend play. Children also begin to use language in the preoperational stage, but they cannot understand adult logic or mentally manipulate information.

**S65. Ans.(a)**

**Sol.** Freedom of expression is a child right

**S66. Ans.(d)**

**Sol.** The feeling of satisfaction that increases the likelihood of the sequence of the behaviour to occur again is called law of effect

**S67. Ans.(c)**

**Sol.** Application of bitter agents on thumb to discontinue thumb sucking in a child is negative reinforcement

**S68. Ans.(a)**

**Sol.** Tutorial strategy

**S69. Ans.(a)**

**Sol.** Though having interest in academics and games 'A' always used to excel in games

**S70. Ans.(b)**

**Sol.** genetic endowment and environmental exposure

**S71. Ans.(c)**

**Sol.** Rationalization

**S72. Ans.(c)**

**Sol.** Longitudinal studies and cross-sectional studies are two different types of research design. In a cross-sectional study you collect data from a population at a specific point in time; in a longitudinal study you repeatedly collect data from the same sample over an extended period of time.

**S73. Ans.(c)**

**Sol.** Obedience and Punishment Orientation – at this stage of moral reasoning, the individual acts from a belief that if they do something wrong they will be punished, so that the best reason for avoiding doing wrong is to avoid punishment.

**S74. Ans.(c)**

**Sol.** Learning is a process of bringing relatively permanent changes in behaviour through Experience

**S75. Ans.(b)**

**Sol.** According to Vygotsky, the aim of private speech is for the Self - guidance of children. Vygotsky sees "private speech" as a means for children to plan activities and strategies and therefore aid their development. Private speech is the use of language for self-regulation of behavior. Language is, therefore, an accelerator to thinking/understanding

**S76. Ans.(c)**

**Sol.** Cephalocaudal development indicates that the development proceeds from head to toe

**S77. Ans.(d)**

**Sol.** Operant conditioning theory.

**S78. Ans.(b)**

**Sol.** Certification of completion of a course of study.

**S79. Ans.(c)**

**Sol.** As per NCF-2005, medium of learning in schools is home language

**S80. Ans.(c)**

**Sol.** If  $MA = CA$ , then the I. Q. is 100