प्रथम 10 मिनट में अभ्यर्थी अपनी प्रश्न-पुस्तिका के क्रमांक का मिलान ओ०एम०आर० उत्तर पत्रक के क्रमांक से अवश्य कर लें। यदि ओ० एम० आर० उत्तर पत्रक व प्रश्न-पुस्तिका के क्रमांक भिन्न हैं तो केन्द्र अधीक्षक से निवेदन करके प्रश्न-पुस्तिका बदल लें।

Level : 1
PRT : For Classes I to V

Exam. – 2022

Sub. Code No. : 701

प्रश्न-पुस्तिका क्रमांक एवं ओ०एम०आर० क्रमांक
Question-Booklet Serial No. & O. M. R. Serial No.

अनुक्रमांक (अंकों में) : ☐☐☐☐☐☐☐ **SET : A**
Roll No. (In Figures)

अनुक्रमांक (शब्दों में) : _____
Roll No. (In Words)

परीक्षा केन्द्र का नाम : _____
Name of Examination Centre

अभ्यर्थी का नाम : _____ **अभ्यर्थी के हस्ताक्षर :** _____
Name of Candidate **Signature of Candidate**

इस प्रश्न-पुस्तिका में पृष्ठों की संख्या **No. of Pages in this Question Booklet**	**48**	**प्रश्नों की संख्या** **No. of Questions**	**150**	**समय** **Time**	**2½ hours**

निरीक्षक के हस्ताक्षर (Signature of Invigilator) : _____

अभ्यर्थी को 10 मिनट का समय प्रश्न-पुस्तिका पर छपे निर्देशों को पढ़ने तथा उत्तर पत्रक में अपने विवरण भरने के लिए दिया जाएगा। यदि प्रश्न-पुस्तिका व उत्तर पत्रक की क्रम संख्या गलत अंकित हों तो तुरन्त केन्द्र अधीक्षक से निवेदन करके प्रश्न-पुस्तिका बदल लें। इसके पश्चात् कोई दावा स्वीकार नहीं किया जाएगा। इन 10 मिनटों के अतिरिक्त, प्रश्नों के उत्तर अंकित करने के लिए पूरे 2½ घंटे का समय दिया जाएगा। **यदि किसी अभ्यर्थी को प्रश्न-पुस्तिका में दिए गए किसी भी प्रश्न में कोई त्रुटि होने का संदेह हो तो इसके लिए अभ्यर्थियों को परीक्षा समाप्ति के उपरान्त प्रतिवेदन देने के लिए अवसर दिया जाएगा। अतः अभ्यर्थी निर्धारित अवसर के दौरान इस सम्बन्ध में अपना प्रतिवेदन बोर्ड कार्यालय में दर्ज करवा सकते हैं। इस अवसर के बाद, इस सम्बन्ध में प्राप्त प्रतिवेदनों पर कोई विचार नहीं किया जाएगा।**

यदि किसी प्रश्न में हिन्दी व अंग्रेजी माध्यम में भिन्नता है तो अंग्रेजी माध्यम का प्रश्न ठीक माना जाएगा।
If there is any variance between Hindi and English Version of any question then English Version would be considered correct.

अभ्यर्थियों के लिए निर्देश

1. ओ.एम.आर. उत्तर पत्रक इस प्रश्न-पुस्तिका के अन्दर रखा है। जब आपको प्रश्न-पुस्तिका पढ़ने को कहा जाए, तो उत्तर पत्रक निकाल कर ध्यान से केवल काले बॉल प्वाइंट पैन से विवरण भरें।
2. परीक्षा की अवधि **2½ घंटे** है एवं प्रश्न-पुस्तिका में **150** प्रश्न हैं। **कोई ऋणात्मक अंकन नहीं है।**
3. अपने विवरण अंकित करने एवं उत्तर पत्रक पर निशान लगाने के लिए केवल **काले बॉल प्वाइंट पैन** का प्रयोग करें। अभ्यर्थी प्रश्न-पुस्तिका का उपयोग करने एवं उत्तर पत्रक को भरने में सावधानी बरतें।
4. प्रथम 10 मिनट में, यह भी सुनिश्चित कर लें कि प्रश्न-पुस्तिका क्रमांक और उत्तर पत्रक क्रमांक एक ही हैं। अगर यह भिन्न हों तो अभ्यर्थी दूसरी प्रश्न-पुस्तिका और उत्तर पत्रक लेने के लिए पर्यवेक्षक को तुरन्त अवगत करवाएँ।

INSTRUCTIONS FOR THE CANDIDATES

1. The OMR Answer Sheet is inside this Question Booklet. When you are directed to read the Question Booklet, take out the OMR Answer Sheet and fill in the particulars carefully with black ball point pen only.
2. The test is of **two-and-half hours** duration and consists of **150** questions. **There is no negative marking**.
3. Use **Black Ball Point Pen** only for writing particulars on this page/darkening responses in the Answer Sheet. The candidate should remain careful in handling the question paper and in darkening the responses on the answer sheet.
4. Within first 10 minutes, also ensure that your Question Booklet Serial No. and Answer Sheet Serial No. are the same. In case of discrepancy, the candidate should immediately report the matter to the Invigilator for replacement of both the Question Booklet and the Answer Sheet.

5. लेवल-1 (कक्षा I से V के लिए)

भाग-I	: बाल विकास व शिक्षा शास्त्र	(प्र० **1** से प्र० **30**)
भाग-II	: भाषा :	(प्र० **31** से प्र० **60**)
	(हिन्दी : 15 प्रश्न व अंग्रेजी : 15 प्रश्न)	
भाग-III	: सामान्य अध्ययन :	(प्र० **61** से प्र० **90**)
	(मात्रात्मक योग्यता : 10 प्रश्न, तार्किक अभिक्षमता : 10 प्रश्न, सामान्य ज्ञान एवं अभिज्ञान : 10 प्रश्न)	
भाग-IV	: गणित	(प्र० **91** से प्र० **120**)
भाग-V	: पर्यावरण अध्ययन	(प्र० **121** से प्र० **150**)

5. Level–1 (For Classes I to V)

Part–I	: Child Development and Pedagogy	(Q. **1** to Q. **30**)
Part–II	: Language :	(Q. **31** to Q. **60**)
	(Hindi : 15 Q. & English : 15 Q.)	
Part–III	: General Studies :	(Q. **61** to Q. **90**)
	(Quantitative Aptitude : 10 Q, Reasoning Ability : 10 Q, G. K. & Awareness : 10 Q)	
Part–IV	: Mathematics	(Q. **91** to Q. **120**)
Part–V	: Environmental Studies	(Q. **121** to Q. **150**)

नोट : कृपया इस पुस्तिका के अन्त में दिए गए शेष निर्देशों को पढ़ें। (Please read other remaining instructions given on the last page of this booklet.)

रफ कार्य के लिए (FOR ROUGH WORK)

_ " # $ % &# '	_ Which of the following has been given a moral development theory ?
[1] % (	[1] Piaget
[2] %)* +	[2] Vygotsky
[3] , %-	[3] Freud
[4] -	[4] Bandura
! . +% /+% 0 /% 1 & &#	! Tertiary circular reactions develop during :
[1] 2" " 3 4 #	[1] Sensory Motor Stage
[2] 5 /% 2" 3 4 #	[2] Preoperational Stage
[3] "5 /% 2" 3 4 #	[3] Concrete Operational Stage
[4] 3 # /% 2" 3 4 #	[4] Formal Operational Stage
_ " # 6 4 7 " &&&+ &# '	_ Which of the following statement is not correct with reference to development ?
[1] %& /% &#!	[1] It is continuous process.
[2] %& 3 % "+ & &#!	[2] It is unidimensional.
[3] 8 + %+ . & + &#!	[3] It is cumulative in nature.
[4] 8 " #% 9 7 (+ &#!	8 [4] There is individual differences in development.

"

" 2/": +% %% & + 3 4 &#

[1] "5 /% 2" 3 4

[2] 5 /% 2" 3 4

[3] 3 # /% 2" 3 4

[4] + " 3 4

" Reversibility ability develops in the stage :

[1] Concrete operational stage

[2] Preoperational stage

[3] Formal operational stage

[4] Sensory motor stage

<) $ = + > + %+ &# '

[1] 4 ? - 8 >

[2] ? >

[3] >

[4] + " >

The concept of 'Law of Proximity' has been given by whom ?

[1] Thorndike

[2] Pavlov

[3] Skinner

[4] Wertheimer

$ " 3@%% " 0 BC 7 4 &# '

[1] " (" A

[2] 3 #D " A

[3] E 2" " A

[4] 2" " A

$ The study of which of the following lies at the intersection point of Psychology and Child development ?

[1] Social Psychology

[2] Industrial Psychology

[3] Organizational Psychology

[4] Developmental Psychology

_ " A + 4 " % (F 4

[1] %" :)

[2] - 3 , -

[3] +)

[4] (+ % (

_ Who was the founder of first laboratory of Psychology ?

[1] William Wunt

[2] Alder Alfred

[3] Cyril Burt

[4] Jean Piaget

% " # 6 + % (
A 2" + 3 4 &&#'
[1] "5 /% 2" 3 4
[2] 5 /% 2" 3 4
[3] G 4
[4] 2" " 3 4

% Which of the following is not stage of Piaget's Cognitive Development ?
[1] Concrete Operational Stage
[2] Preoperational Stage
[3] Latency Stage
[4] Sensory Motor Stage

& < /H = 3 4
@ &#'
[1] 5 % 4
[2] % 4
[3] % 4
[4] 4

& 'Imaginary Audience' is related to which stage ?
[1] Early childhood stage
[2] Late childhood stage
[3] Adulthood
[4] Adolescence

__ B & &# < 1 &1 & &#=!
%& " I 8
&#'
[1] 3 2" 7 :
[2] "J"
[3] 2"
[4] 2"

__ A child says 'The moon is laughing'. It indicates which of the following characteristics ?
[1] Egocentrism
[2] Animism
[3] Positivism
[4] Negativism

__ /% 5 3 5 3 # 6
4 &&#'
[1] 2" C +% K%
LM &#!
[2] + % K% & +
&+ (!
[3] - 2" &#!
[4] 2" 3 C +% K%
LM &#!

__ Which statement is correct according to Operant Conditioning ?
[1] Negative reinforcement increases desirable behaviour.
[2] Once a behaviour is learned, it is not forgotten.
[3] Punishment is positive reinforcement.
[4] Negative reinforcement increases undesirable behaviour.

! 37 @ + : >
% % '

[1] #

[2] 4 *)

[3] 4 ? - 8

[4] 3 ?)

! Child apperception test propounded by whom ?

[1] Bellak

[2] Thurston

[3] Thorndike

[4] Allport

__ N@ 3 : $ 7
% 4 '

[1] "# #:-

[2] "

[3])

[4] &(

__ Who propounded achievement motivation theory ?

[1] McClelland

[2] Maslow

[3] Kurt Lewin

[4] Herzberg

" O . 6 2%% 3 @ &#

[1] +% 3 @ $

[2] /% 0 5 3 @ $

[3] " (A 2" $

[4] 0%) $

" The concept of Chaining is based on :

[1] Classical Conditioning Theory

[2] Operant Conditioning Theory

[3] Social Cognitive Theory

[4] Trial and Error Theory

$ 3 % "+ $ 7 >
% % &# '

[1] 4 ? - 8

[2] P-

[3] P+% "#

[4] 4 *)

Tridimension theory of intelligence is propounded by :

[1] Thorndike

[2] Guilford

[3] Sphearman

[4] Thurston

$ " # 6 + +
3 5 +&&# '
[1] 3
[2] 3 0 :
[3] 4 37
[4] 4 3

__ 37 . I) $ 7 > %
% '
[1] K% & + >
[2])) + >
[3] + >
[4] % + >

% % "5 . (-M &# '
[1] % [2] .
[3] -M 8 [4] (A

& " # 6 $ N
: &&5 &# '
[1] $\frac{C.A.}{M.A.}$ 100
[2] $\frac{M.A.}{C.A.}$ 100
[3] $\frac{C.A.}{100}$ M.A.
[4] $\frac{100}{C.A.}$ M.A.

$ Which of the following is not a schedule of reinforcement ?
[1] Variable ratio
[2] Motivation
[3] Fixed interval
[4] Fixed ratio

__ Insight - theory is given by whom ?
[1] Behaviourist
[2] Gestaltist
[3] Structuralist
[4] Functionalist

% The emotion of fear is associated with basic instinct :
[1] Escape [2] Repulsion
[3] Combat [4] Curiosity

& Which of the following is the correct formula to calculate I. Q. ?
[1] $\frac{C.A.}{M.A.}$ 100
[2] $\frac{M.A.}{C.A.}$ 100
[3] $\frac{C.A.}{100}$ M.A.
[4] $\frac{100}{C.A.}$ M.A.

! ? P (# 4 +% 3 %" 3 # 5 & : &#

[1] 5 "

[2] "

[3] .& *

[4] "%

! - # % &#

[1] 3 "

[2] " Q;:

[3] " "

[4] 3 @ " 3 "

!! " # 6 2" R " 0% &&+ &# '

[1]) ?P+

[2])

[3] -M +

[4] #

! " # + : 2" 3 @ " &# '

[1] $"

[2] &:

[3] 3 @

[4] K% 9 2

! According to the Bronfenbrenner's Bioecological model, rules & laws are examples of :

[1] Micro System

[2] Meso System

[3] Macro System

[4] Chrono System

! Dyscalculia is a type of :

[1] Locomotor Disability

[2] Mental Illness

[3] Mental Retardation

[4] Learning Disability

!! Which of the following maynot act as a Positive reinforcer ?

[1] A toffee

[2] A biscuit

[3] A bitter medicine

[4] Money

! Which of the following is a component of Observational Learning ?

[1] Intelligence

[2] Retention

[3] Conditioning

[4] Personality

!" " - , %- ((&#

[1] " ($ 7

[2] " # $ 7

[3] A 2" $ 7

[4] # $ 7

!" Sigmund Freud is known for :

[1] Social development theory

[2] Psycho sexual development theory

[3] Cognitive development theory

[4] Moral development theory

!# 90-110 $ N@ $ + H : + &# '

[1] $

[2] 3 # $

[3] 3 $

[4] "5

!# 90-110 is range of I. Q. represents which category of intelligence ?

[1] Very superior

[2] Average

[3] Dull

[4] Fool

!$ " # + + . I) @ : & 0% + (+ &# '

[1] + 8 +

[2] I

[3]) , "

[4] 8 " 8 &+

!$ Which of the following technique is used to teach Visually Impaired Children ?

[1] PECS

[2] Sign Language

[3] Taylor Frame

[4] None of these

! - ? % % 3 @ 3 #$. I) : + I) &# '

[1] 3 . I) 3 @ "

[2] G 3 @ "

[3] 4 3 @ "

[4] " (3 @ "

! The research carried out on Bobo Doll supports which theoretical view of learning ?

[1] Insight learning

[2] Latent learning

[3] Place learning

[4] Social learning

!% & 3 S :- & # 37 3 &# '	!% According to Kohlberg, the development of morality to avoid punishment comes under which level ?
[1] 5 6R LM + 3 4	[1] Pre-conventional level
[2] R LM + 3 4	[2] Conventional level
[3] 6R LM + 3 4	[3] Post-conventional level
[4] 8 " 8 &+	[4] None of these
!& <3 @ " 3 " = N 0 4% > % % '	!& The term 'Learning Disability' was first coined by whom ?
[1] #	[1] Kanner
[2] -	[2] Down
[3] #" 3	[3] Samuel Kirk
[4] " - , %-	[4] Sigmund Freud
__ < + " 0 3 I : = , %- & &#	__ 'The attraction of boy towards his mother' was termed by Freud as :
[1] 8 9)T 4	[1] Electra Complex
[2] 3 - 4	[2] Oedipus Complex
[3] # > >	[3] Moral Conflict
[4] " # 4	[4] Oral Complex

__ ' ! (-!) % $ (*

[1]

[2] +,

[3] !%

[4] ' -

__ ! $ ' . "%- "% / -),%0' !! 1 2 (*

[1] - "

[2] ' - "

[3] " - '

[4] 31 -

__ . 45',/) ' (! ! 6 (*

[1] ,- 5 7 ! 6

[2] +, ! 6

[3] ! ! 6

[4] , 7 ! 6

! 3 8 !!/) #%

[1] ! (9

[2] , :

[3]

[4]

" .. " % ! 8 (&// '

' (-! ;, <,%: %= (*

[1] ! , ;,

[2] > ;,

[3] ! ' ;,

[4] ' ;,

' ! %%%? (-! (*

[1] !@, " ! 1 &

[2] '(' (&

[3] "A# 8 B &

[4] %'C ! ('(&

__ = ' ! !) ' ! %[(*

[1] '

[2] 7 AF

[3] %

[4] %!

$ ' ! (-! 6 G5, (*

[1] . / [2] . /

[3] ."/ [4] .H/

% . 0 / //) #%

[1] 0

[2] "DE 0

[3] ' 0

[4] G 0

! .'6 % ' /) ' -!(<@,, %DE (*

[1] '

[2] ='

[3] '

[4]

! . /) ' (-! !' ! (*

[1] +,,

[2] @ %I

[3] ' 6 ,

[4] J J

! K L E =6 &M :, ' =

[1] !'%A#," 6 +,,

[2] ! " 6 !># +,,

[3] # ;, -

[4] 7', " 6

! . / (. / ! # 5 (*

[1] ! " 6

[2] ! <

[3]

[4] -

!! . /) 7N O

[1] ,N

[2] ,N

[3] , N

[4] N

!" ' ! (-!) 5 (*

[1] !>

[2]

[3] %N

[4] #

___ Synonym of 'hate' is :

[1] docile [2] creep

[3] anger [4] dislike

___ Fill in the blanks with the correct prepositions :

The boy fell ……. the well ……. 10 O'clock.

[1] in, on [2] into, at

[3] into, on [4] in, at

___ Harish himself wrote the poem.

The underlined words are :

[1] Noun, Pronoun

[2] Noun, Adjective

[3] Noun, Adverb

[4] Noun, Noun

___ The superlative degree of 'Far' is :

[1] Farther

[2] Farthest

[3] Most far

[4] Most farther

___ The young one of a bear is :

[1] calf [2] cub

[3] fawn [4] foal

___ Fill in the blanks with the correct forms of the Verb :

What ……. you ……. with this knife yesterday ?

[1] do, did

[2] do, do

[3] did, do

[4] did, did

___ The milk has turned sour.

The underlined word is :

[1] Noun

[2] Pronoun

[3] Adjective

[4] Adverb

___ Antonym of 'Cool' is :

[1] Cold

[2] Colder

[3] Hot

[4] Warmer

___ Choose the correct spelling of the given word :

[1] bungalowe

[2] bangalow

[3] bangelow

[4] bungalow

___ Choose the part of the sentence that is incorrect :

Keats is (A) a quiet (B) good poet (C)

among the romantic poets (D)

[1] A [2] B

[3] C [4] D

___ Choose the correct option to fill in the blank :

Amartya Sen Gupta is …….N. R. I.

[1] a [2] an

[3] the [4] ´

___ She sang a 'sweet' song.

'sweet' here is :

[1] Adverb [2] Adjective

[3] Noun [4] Pronoun

___ One word for 'A child whose parents are dead' is :

[1] Sibling

[2] Orphan

[3] Bigot

[4] Bastard

___ Choose the grammatically correct sentence :

[1] John has been living in Egypt for 1942.

[2] John had lived in Egypt for 1942.

[3] John has been living in Egypt since 1942.

[4] John have lived in Egypt since 1942.

___ Match the following :

(a) Ass (i) quack

(b) Duck (ii) hum

(c) Fly (iii) bray

(d) Bee (iv) buzz

[1] a-i, b-ii, c-iii, d-iv

[2] a-iii, b-i, c-ii, d-iv

[3] a-iii, b-i, c-iv, d-ii

[4] a-iii, b-ii, c-iv, d-i

! " # $ %

*!" #$ % & #' (! ') **

& $\sqrt{6+\sqrt{6+\sqrt{6+}}}$.....¥ &% &% +,

[1] 3 [2] 4

[3] 5 [4] 6

&' 4,000 -! !% '. / 0 %1 2 3 % 4 + 3& 5% 5 2 5 + 6

[1] 8.75-!

[2] 9.00-!

[3] 10.00-!

[4] 11.25-!

&(12 7) . 8(15 7) . 8(&% &% + ! +,

[1] 20% [2] 25%

[3] 30% [4] 36%

&) $\frac{80 \quad 30\%}{x} = 24$ + 'x' 4 + 6

[1] $\frac{3}{10}$ [2] $\frac{3}{17}$

[3] 1 [4] 2

& $\sqrt{6+\sqrt{6+\sqrt{6+}}}$.....¥ is equal to :

[1] 3 [2] 4

[3] 5 [4] 6

&' What will be the difference between compound and simple interest on a sum of Rs. 4,000 for 2 years at the rate of 5% per annum ?

[1] Rs. 8.75

[2] Rs. 9.00

[3] Rs. 10.00

[4] Rs. 11.25

&(If the selling price of 12 articles is equal to the cost price of 15 articles, then the profit percentage is :

[1] 20% [2] 25%

[3] 30% [4] 36%

&) If $\frac{30\% \text{ of } 80}{x} = 24$, then what would be the value of 'x' ?

[1] $\frac{3}{10}$ [2] $\frac{3}{17}$

[3] 1 [4] 2

& % 9 3

2¸ [2+2¸ { 2+2¸ (2+2¸ 3)}]
&% &% +,

[1] —

[2] —

[3] —

[4] $\frac{1}{\text{—}}$

&& 9 3

[1]

[2] + 9

[3]

[4] #!

& 7& 9 3 5% 5 % &:; 9 +, 7& 9 3 4410+ 2 5 !+ 3 9 9 6

[1] 3600 [2] 3800

[3] 4000 [4] 4200

&* 1 < 1 9 ! 9 3

KTE, SBM, AJU, IRC, ?

[1] QZL [2] QZM

[3] QZN [4] QZK

& Simplify :

2¸ [2+2¸ { 2+2¸ (2+2¸ 3)}] is equal to :

[1] —

[2] —

[3] —

[4] $\frac{1}{\text{—}}$

&& Find the odd one :

[1] Article

[2] Story

[3] Poem

[4] Novel

& The population of a town increases at the rate of 5% annually. If the present population is 4410, what was it 2 years ago ?

[1] 3600 [2] 3800

[3] 4000 [4] 4200

&* Find the next term of the following letter series :

KTE, SBM, AJU, IRC, ?

[1] QZL [2] QZM

[3] QZN [4] QZK

&+ < 1 9 ! 9 3

4, 10, 23, 50, 105, ?

[1] 215

[2] 216

[3] 218

[4] 220

___ P, Q & R, P = >S, T & Q = > +, ? & , +, 6

[1] P [2] Q

[3] S [4] T

___ ' % % @ % 36 7 ? * . 8%9 9>% + ? @ +,

[1] 2500 9>%

[2] 2601 9>%

[3] 2809 9>%

[4] 2916 9>%

'___ $\sqrt{2^n} = 64$ + n +,

[1] 8 [2] 10

[3] 6 [4] 12

&+ Find the next term of the following number series :

4, 10, 23, 50, 105, ?

[1] 215

[2] 216

[3] 218

[4] 220

___ If P is taller than Q, R is shorter than P, S is taller than T but shorter than Q, then who among them is the tallest ?

[1] P [2] Q

[3] S [4] T

___ In order to fence a square fixed 36 poles were used. If the distance between two consecutive poles is 6 meters, then the area of the square is :

[1] 2500 sq. m

[2] 2601 sq. m

[3] 2809 sq. m

[4] 2916 sq. m

'___ If $\sqrt{2^n} = 64$, then the value of n is :

[1] 8 [2] 10

[3] 6 [4] 12

*

(' 8> 5
'CERTAIN' 'XVIGZRM'
'SEQUENCE' 'HVJFVMXV'
3 +, 'MUNDANE'
8> 5 3

[1] NFMWZMX

[2] NFMXZMV

[3] NFMWZMV

[4] NFMWZXM

(If in a certain Code Language, 'CERTAIN' is coded as 'XVIGZRM' and 'SEQUENCE' is coded as 'HVJFVMXV', then 'MUNDANE' is coded as :

[1] NFMWZMX

[2] NFMXZMV

[3] NFMWZMV

[4] NFMWZXM

) 1 < 1 9 !
9 3

AZ, GT, MN, SH, ?

[1] YC [2] ZC

[3] ZB [4] YB

) Find the next term of the following letter series

AZ, GT, MN, SH, ?

[1] YC [2] ZC

[3] ZB [4] YB

)= 9 %1 5 !"1 9
!% + +, * ? 9 %
)$ % 9 %1 +@#$ %
9 3

6241 = 9, 3732 = 20+
4523&% &% +,

[1] 18

[2] 23

[3] 21

[4] 26

Some equations are solved on the basis of a certain system. On the same basis, find the correct answer for the unsolved problem :

If 6241 = 9, and 3732 = 20, then 4523 is equal to :

[1] 18

[2] 23

[3] 21

[4] 26

+

& M +, # 9 9 +,

[1] +

[2] + √ +

[3] + √ -

[4] +

& If M is a square number, then the next immediate square number is

[1] +

[2] + √ +

[3] + √ -

[4] +

___ A B ? +C, D & + +A,
!) D ? +, B, C
!" % & +, 6

[1] ! [2] ' '

[3] ? [4]

___ A and B are brothersC and D are sisters, A's son is D's brother. How is B related to C ?

[1] Father [2] Uncle

[3] Brother [4] Grandfather

* 2 !81). A 7 9 3

i. 4

ii. %

iii. 2

iv. 4

[1] ii, iii, i, iv [2] ii, iii, iv, i

[3] i, iii, ii, iv [4] i, ii, iii, iv

* Arrange the given words in a meaningful sequence :

i. Phrase

ii. Letter

iii. Word

iv. Sentence

[1] ii, iii, i, iv [2] ii, iii, iv, i

[3] i, iii, ii, iv [4] i, ii, iii, iv

+ $6 - x - 2x^2$)1 B +,

[1] + -

[2] + -

[3] - -

[4] - -

+ The factors of $6 - x - 2x^2$ are :

[1] + -

[2] + -

[3] - -

[4] - -

* $\sqrt{1+\sqrt{1-\frac{2176}{2401}}} = 1+\frac{x}{7}$ +,

[1] 1 [2] 3

[3] 5 [4] 7

* If $\sqrt{1+\sqrt{1-\frac{2176}{2401}}} = 1+\frac{x}{7}$, then the value of is :

[1] 1 [2] 3

[3] 5 [4] 7

* + % 1 9 & CD'9 ÜH/B;9 E % 9 +(F 7 +,

[1] ! ')

[2] &

[3]) %

[4] 39

*')- " + %9 !" %1 7 ! & 9 ? 9 6

[1] 5 2015 [2] 5 2017

[3] 5 2016 [4] 5 2018

*(, - % , 7 +, 6

[1] % + %

[2] &% %

[3] & % + %

[4] ! ') 9 %

*) + % 1 & % ! :;

(i) G 7 + +, *

(ii) 7 9) 4 + % 1 % H ! I % 9 +,*

+ 8> ' 9 3

[1] (i) +,*

[2] (ii) +,*

[3] (i) ,% +9(ii) +,*

[4] (i) ,%(ii) +, *

* "Morni Hills" the highest ranges of Haryana are situated in :

[1] Panchkula

[2] Ambala

[3] Yamunanagar

[4] Jind

*' When Gurugram Metropolitan Development Authority was established ?

[1] Year 2015 [2] Year 2017

[3] Year 2016 [4] Year 2018

*(Which of the following temples is situated in Kaithal ?

[1] Sarveshwar Mahadev Temple

[2] Birla Temple

[3] Ambekeshwar Mahadev Temple

[4] Panchmukhi Temple

*) Read the following statements about Haryana Public Service Commission :

(i) The Commission consists of one Chairman and maximum eight members.

(ii) The Chairman and other members are appointed by the Governor of Haryana.

Choose the correct code :

[1] Only statement (i) is true.

[2] Only statement (ii) is true.

[3] Neither (i) nor (ii) is true.

[4] Both (i) and (ii) are true.

* 1857 3 9 /) &) +)?

[1] !

[2] %) %

[3] "8 9

[4] +) '

*& E! % % !+' ! 3 F & % ! :;

(i) 3 + + % 1 7 ! %% J 9 B > & , % 3 %+ +,*

(ii) 7 ,38 3 D 3, = / $ D 2 B9 ! % % ! 3 B;9 3 D 9*

+0 8> ' 9 3

[1] (i) +,*

[2] (ii) +,*

[3] (i) ,% +9 (ii) +,*

[4] (i) ,% (ii) +, *

* + %1) 8')4 , +, 6

[1] <9 % " +

[2] <9 ' " !"

[3] <9 3

[4] <9 3 + & ?

* The hero of 1857, who died in Kabul :

[1] Gopal Das

[2] Rao Tula Ram

[3] Sadruddin

[4] Hukam Chand

*& Read the following statements about 'Parivar Pehchan Patra Yojana' :

(i) Under the scheme authentic and reliable database of all the families of Haryana is being created.

(ii) All the existing schemes such as various scholarships and subsidies will be linked with Parivar Pehchan Patra.

Choose the correct code :

[1] Only statement (i) is true.

[2] Only statement (ii) is true.

[3] Neither (i) nor (ii) is true.

[4] Both (i) and (ii) are true.

* Who is the Chief Information Commissioner of Haryana ?

[1] Shri Narendra Singh Yadav

[2] Shri Chandra Prakash

[3] Shri Vijai Vardhan

[4] Shri Jai Singh Bishnoi

"

** + % 1 % H '))4 , +, 6	** Who is the State Election Commissioner of Haryana ?
[1])% "	[1] Anurag Agrawal
[2] ! +	[2] Dhanpat Singh
[3] 9K # %	[3] V. Umashankar
[4]	[4] Nitin Yadav
*+ E B; / F + % 1 3 +, 6	*+ On which occasion 'Khodia Dance' is performed in Haryana ?
[1] + 9 % !%	[1] On the occasion of Holi
[2] 9 % !%	[2] On the occasion of Wedding
[3] 93 % !%	[3] On the occasion of Teej
[4] 9 % !%	[4] On the occasion of Goga Navami
+ "9 B; !"3 @ 7 +,	+ Central Sheep Breeding Farm is situated at :
[1] &	[1] Ambala
[2] + %	[2] Hisar
[3] ! 9!	[3] Panipat
[4] %	[4] Karnal

!" !"

!

! " #

$ $27^{x-\frac{2}{3}} = 81$, 2^{3x+1} $ %	$ If $27^{x-\frac{2}{3}} = 81$, then value of 2^{3x+1} is :
[1] 64 [2] 128	[1] 64 [2] 128
[3] 256 [4] 512	[3] 256 [4] 512
$ 30% & ' $\frac{1}{6}$ % ( ) * 140 %+ ,-' $ %	$ If 30% of a number is equal to $\frac{1}{6}$ of the second number and the sum of these numbers is 140, then the value of larger number is :
[1] 110	[1] 110
[2] 50	[2] 50
[3] 60	[3] 60
[4] 90	[4] 90

%

$. " ' " / * $ +
,-' " $ %

[1] ,-

[2] 0 1

[3]

[4] * 2

$ If two sides of a triangle are unequal, then opposite angle of larger side is :

[1] greater

[2] small

[3] equal

[4] half

$% 3 "ASSESSMENT" ' *4
3 % 5

[1] 21600

[2] 30240

[3] 151200

[4] 75600

$% How many words can be formed from the all letters of word "ASSESSMENT" ?

[1] 21600

[2] 30240

[3] 151200

[4] 75600

$& "* * * " 1 : 4 % * % 6 7$ 4 : 5 * " $ % + ' 8/) * " %

[1] 5 : 16

[2] 25 : 64

[3] 3 : 4

[4] 64 : 25

$& Ratio of volumes of two cones 1 : 4 and their diameters are in the ratio 4 : 5 respectively, then ratio in their heights is :

[1] 5 : 16

[2] 25 : 64

[3] 3 : 4

[4] 64 : 25

$' $\sqrt{7+\sqrt[3]{x}} = 4$ + x $ %

[1] 27

[2] 729

[3] 512

[4] 216

$' If $\sqrt{7+\sqrt[3]{x}} = 4$, then value of x is :

[1] 27

[2] 729

[3] 512

[4] 216

$ ' 9 * * % $: ; * 450% (400% % # *) 9 15/16 + $& %

[1] 5/6 [2] 7/8

[3] 9/11 [4] 7/12

$ If numerator of a fraction is increased by 450% and the denominator is increased by 400%. Now the new fraction is 15/16. The original fraction is :

[1] 5/6 [2] 7/8

[3] 9/11 [4] 7/12

$((% $1 < +50 % * %5 % = 7$ 7 : 8 : 12 * " $ % # (% $ 560 2< %+ (% 25 % = ' %

[1] 120

[2] 240

[3] 480

[4] 360

$(A bag contains coins of Rs. 1, 50 paisa and 25 paisa in the ratio 7 : 8 : 12 respectively. If the total amount in the bag is Rs. 560, then the number of 25 paisa coins in the bag is :

[1] 120

[2] 240

[3] 480

[4] 360

$$ '4 > $
$ % ? (@@ % 5

[1] 92 @$
AB * 2 % #

[2] C " >A *
* % * ' $ % #

[3] C " >A * 2
' %2 % #

[4] 92 @$ D
* 6 = * ' %#

___ (% $ ' '+ 3 ' (5 ' '
% # (% $: E0 F
' ' % +
' ' %

[1] 19/66 [2] 29/66
[3] 1/6 [4] 17/66

$$ Which of the following statement is correct about types of tests ?

[1] Essay type tests are based on whole curriculum.

[2] Objective type tests are indefinite and unlimited.

[3] Objective type tests are more reliable and valid.

[4] Essay type tests can not assess the thought expression.

___ A bag contains 4 blue, 3 black and 5 yellow balls. At random two balls are drawn from the bag. The probability that both drawn balls are of same colour is :

[1] 19/66 [2] 29/66
[3] 1/6 [4] 17/66

(

___ ' G ,-' ' $ 1 ' &) $\frac{3p}{2}$, ' $ $

[1] 30 $ 1

[2] 45 $ 1

[3] 60 $ 1

[4] 20 $ 1

___ The time taken by the minute hand of a watch to describe an angle of $\frac{3p}{2}$ radian, is :

[1] 30 minutes

[2] 45 minutes

[3] 60 minutes

[4] 20 minutes

___ H (' * ' 7 * I * 2 3 ' 7 " " %#) (C $ $ % ? 4 J "* % 5

[1] I @$

[2] * 2

[3] I

[4] @$

___ A student will use his/her Mathematical operations' knowledge to calculate the total amount to be paid to a vegetable seller. Which of the following teaching objective is used in this situation ?

[1] Knowledge

[2] Understanding

[3] Application

[4] Creativity

$

___ $ % ? l
' % 5

[1] 1'

[2] *C >1

[3] 6 C(

[4]

% 6 " ,

$(x^2 - 6xy + 9y^2) - 16$

[1] $(x - 4)(x + 4)$

[2] $(x - y - 4)(x - y + 4)$

[3] $(x - 3y + 4)(x - 3y - 4)$

[4] $(x + 3y - 4)(x + 3y + 4)$

___ Which of the following does not depict the knowledge of mathematics ?

[1] Exactness

[2] Ambiguous

[3] Systematic

[4] Logical

% Factors of the following expression will be :

$(x^2 - 6xy + 9y^2) - 16$

[1] $(x - 4)(x + 4)$

[2] $(x - y - 4)(x - y + 4)$

[3] $(x - 3y + 4)(x - 3y - 4)$

[4] $(x + 3y - 4)(x + 3y + 4)$

& $ * % ' ".' ' $ * " * " 8 : 5 %# > B ' * " * " 3 : 2 + ".' $ * " %	& The ratio of present age of Ramesh and his daughter is 8 : 5, after 8 years ratio of their ages will be 3 : 2, then the present age of the daughter is :
[1] 40 >	[1] 40 years
[2] 64 >	[2] 64 years
[3] 56 >	[3] 56 years
[4] I ' + * / ,- * K	[4] Insufficient data, cannot be determined
' 10 C "* 7 $&$ C "* 7 $&! %+ *(%	' If selling price of 10 articles is equal to cost price of 6 articles, then net profit or loss is :
[1] 40%	[1] 40% loss
[2] 20%	[2] 20% loss
[3] 10%	[3] 10% profit
[4] * % '	[4] Neither profit nor loss

___ G 20 $'LG 1 ' C(" A' $ H "/ %# 30 $'LG 1 ' (+ 18 $ 1 H "/ %# G H ' %

[1] 18 $'

[2] 12 $'

[3] 16 $'

[4] 24 $'

___ Ravi moving with constant speed of 20 km/h from his home, reaches school on time. If he moves with 30 km/h, then reaches 18 minutes before school time. Distance of school from his home is :

[1] 18 km

[2] 12 km

[3] 16 km

[4] 24 km

(___ $\frac{986^{2} - 986^{2} - 986 - 742^{2} - 742^{2} - 742}{986^{2} - 986 \times 986 + 986^{2} - 742 + 742^{2} - 742}$ $ %

[1] 1044

[2] 344

[3] 144

[4] 244

(___ Value of $\frac{986^{2} - 986^{2} - 986 - 742^{2} - 742^{2} - 742}{986^{2} - 986 \times 986 + 986^{2} - 742 + 742^{2} - 742}$ is :

[1] 1044

[2] 344

[3] 144

[4] 244

$ A 20 $ & % * % ' 10 $ & %+ $ 4 * % B B 0 , + > & A $ 5	$ A can complete a particular task in 20 days whereas B can complete that task in 10 days. Both worked together for 4 days and then B leaves the task, then how many days will A take to complete the remaining task ?
[1] 12 [2] 4	[1] 12 days [2] 4 days
[3] 6 [4] 8	[3] 6 days [4] 8 days
___ $a * b = a^2 + b^2 - ab$, $8 * 7 - 3 * 5$ $ %	___ If $a * b = a^2 + b^2 - ab$, then value of $8 * 7 - 3 * 5$ is :
[1] 41 [2] 58	[1] 41 [2] 58
[3] 64 [4] 38	[3] 64 [4] 38
___ : $ 6 ' ' %	___ Number of diameters in a circle can be :
[1] 1 [2] 2	[1] 1 [2] 2
[3] 4 [4] * 9	[3] 4 [4] Infinite

___ $ % ? ' $ ' % 5

[1] 15/4

[2] 10/3

[3] $\sqrt{2}$

[4] 21/4

___ Which of the following is not a rational number ?

[1] 15/4

[2] 10/3

[3] $\sqrt{2}$

[4] 21/4

___ $ $ ' 12 %+ 4% ' M- ' %+ 2 ' '

[1] 12,92,970

[2] 12,97,920

[3] 12,02,990

[4] 12,20,990

___ Find the population of a city after 2 years which is at present 12 lakhs, if the rate of increase is 4% :

[1] 12,92,970

[2] 12,97,920

[3] 12,02,990

[4] 12,20,990

%

% ' 8/) 15 $'1 %)
8 ' 2 "* %+
& $ (60° %#
') %

[1] 30 $'1

[2] $20\sqrt{3}$ $'1

[3] $10\sqrt{3}$ $'1

[4] $30\sqrt{3}$ $'1

% A wire is tied to the top of a pole whose height is 15 meter and the wire makes an angle of 60° with the ground. The length of the wire is :

[1] 30 meter

[2] $20\sqrt{3}$ meter

[3] $10\sqrt{3}$ meter

[4] $30\sqrt{3}$ meter

& ' 2 $ 3 2
> 2 3 600 < * %(
7 : ; 3 612 < %+ 3
> %

[1] 3%

[2] 6%

[3] 4%

[4] 8%

& If for a certain amount and same interest rate the simple interest is Rs. 600 and compound interest is Rs. 612 of two years, then annual rate of interest is :

[1] 3%

[2] 6%

[3] 4%

[4] 8%

' K " ' *9
%

[1] 1200° [2] 1050°

[3] 720° [4] 900°

' Sum of the interior angles of a regular heptagon is :

[1] 1200° [2] 1050°

[3] 720° [4] 900°

$x^3+kx+12$, (x + 3) &
%+ k $ %

[1] 5 [2] 4

[3] –5 [4] 3

If $x^3+kx+12$ is completely divisible by (x + 3), then value of k is :

[1] 5 [2] 4

[3] –5 [4] 3

(8 & +2007 %? (5

[1]

[2] "2

[3] : C

[4] "7

(Which was the day on 8 June, 2007 ?

[1] Saturday

[2] Wednesday

[3] Thursday

[4] Friday

$	1 $ 2 * % " 7$ 74 * %29 % + 1 ' $ 2 %	$	If mean and mode of a distribution are 74 and 29 respectively, then median of the distribution is :
	[1] 49		[1] 49
	[2] 59		[2] 59
	[3] 62		[3] 62
	[4] 63		[4] 63
___	$ " " 4 . + ' $ 9 " / 7$ 22 $' * %27 $' %($ 9 " * $2 10 $' + %	___	The area of a trapezium, whose parallel sides are 22 cm and 27 cm respectively and the distance between parallel sides is 10 cm, is :
	[1] 152 $'		[1] 152 sq. cm
	[2] 245 $'		[2] 245 sq. cm
	[3] 490 $'		[3] 490 sq. cm
	[4] 560 $'		[4] 560 sq. cm

___ #$ % & ' ( ) $*) * +, +
-

[1] %-. / * , 0 + +. "

[2] + 0 + +. "

[3] %-. / * , 0 + +. "

[4] 1 0 +

___ 2 ! + - 34 +. 5

(i) 6 0 +. 2 % 3) 3 8 3 % 0 9 "

(ii) 6 0 +. !: ,% 3 8 3 %. ;) $* = < 3 2 "

(iii) 6 0 +. , 1 : , $ + "

(iv) 6 0 +. 2 !) + ! 3 7 + "

, 7* #„ , %

[1] (i) (ii)

[2] (i), (ii) (iii)

[3] (ii) (iii)

[4] (i), (ii), (iii) (iv)

___ Disposable plastic plates and glasses should not be used because :

[1] They are made of non-biodegradable materials.

[2] They are made of materials with light weight.

[3] They are made of biodegradable materials.

[4] They are made of toxic materials.

___ What do you mean by balanced diet ?

(i) It means choosing a wide variety of food and drinks from all food groups.

(ii) It means eating certain things in small amounts such as saturated fat, cholesterol, simple sugar etc.

(iii) It means to take all nutrients which are needed as per the required level.

(iv) It means long time dieting to attain balance.

Choose the correct answer using the codes given below :

[1] (i) and (ii)

[2] (i), (ii) and (iii)

[3] (ii) and (iii)

[4] (i), (ii), (iii) and (iv)

___ 3 +, 37+ !
, % % 3 %, 3 69+.
[1] + < + 7
[2] + < +
[3] *> < #?, 7
[4] + < ,@ @ %,@

___ Choose the right group from the following which has no fossil fuel :
[1] Wind, tide and sun
[2] Wind, tide and coal
[3] Petroleum, wood and sun
[4] Wind, CNG and sun

! A 3 B 3 , +.
[1] -
[2] g-
[3] . ,
[4] X-

! Radiation with maximum penetration power is :
[1] Infrared radiation
[2] g-rays
[3] Ultraviolet radiation
[4] X-rays

" 3 . C D 83
$0 , 28 +. 5
[1] % [2] 4,
[3] 3: ,/ [4]

" Which one of the following is an artificial ecosystem ?
[1] Forest [2] Lake
[3] Aquarium [4] Pond

% 3!E+ + 7 , !-
, 3 + % +.<
, 7 + % +." + 7
. , $0 7 +. 5
[1] 6*> %
[2] =- ,%
[3] % 1
[4] # 6 =- (

When air is blown from mouth into a test tube containing lime water, the lime water turns milky. The milkiness is indicator of the presence of which gas ?
[1] Nitrogen
[2] Oxygen
[3] Water vapour
[4] Carbon dioxide

___ 3 . C %, 3 69 +, +. 5
[1] , # ; . & , %,(
[2] + 6#> % & (
[3] = , 0 , * 0 . * & , 6 *,(
[4] *> 3 . & ,

___ Which one of the following is not a fossil fuel ?
[1] Compressed Natural Gas (CNG)
[2] Liquid Hydrogen (LH)
[3] Poly Ethylene Terthalate (PET)
[4] Liquified Petroleum Gas (LPG)

___ % '3 3 !%
% +.< 3 4! &3!#?
+.

[1] % 3! ,
[2]
[3] .
[4] ,

___ When white light passes through a prism the colour which bends the least is :

[1] Indigo
[2] Red
[3] Violet
[4] Orange

$___ E* E .
B ! +. 5

[1] $0 ,
[2] % ,
[3]
[4] 3F$0

$___ Spiny leaves are the characteristics of which type of plants ?

[1] Terrestrial
[2] Aquatic
[3] Epiphytic
[4] Xerophytic

___ 3 . C 3+ G,
B , H 3 $0 +. 5

[1] 7
[2] B , 3
[3] I,
[4] =$*>

___ Which of the following continent lies only in Southern Hemisphere ?

[1] Europe
[2] South America
[3] Africa
[4] Australia

___ = 3C3 .J 3
. = 3C3 !: % , 6 +.

= 3I = 3II

(a) -% 2# (i) 20 - %, !
K 3
(b) # # % (ii)
(c) !6 (iii) ,
(d) = * (iv) *,

___ In Column-I, names of scientists are given and in Column-II, some discoveries are given :

Column-I	Column-II
(a) Alexander Fleming	(i) Anthrax Bacterium
(b) Edward Jenner	(ii) Fermentation
(c) Louis Pasteur	(iii) Penicillin
(d) Robert Koch	(iv) Smallpox Vaccine

.J 3 , %
#„ 3 +.

[1] (a)-iii, (b)-iv, (c)-ii, (d)-i
[2] (a)-i, (b)-iii, (c)-ii, (d)-iv
[3] (a)-iii, (b)-ii, (c)-iv, (d)-i
[4] (a)-iii, (b)-iv, (c)-i, (d)-ii

The correct match of the names of scientists with their discoveries is :

[1] (a)-iii, (b)-iv, (c)-ii, (d)-i
[2] (a)-i, (b)-iii, (c)-ii, (d)-iv
[3] (a)-iii, (b)-ii, (c)-iv, (d)-i
[4] (a)-iii, (b)-iv, (c)-i, (d)-ii

!

___ 3 . C %,
1* L M ; / * +/+. 5

[1] / < < #? <

[2]) . -* < 3 < 3: ,< *#N#

[3] / < 3; < / < N

[4] 3 O < E ð< / < *#N#

___ Which group of organisms is not the constituent of a particular food chain ?

[1] Grass, rabbit, wolf, lion

[2] Plankton, man, fish, grasshopper

[3] Grass, antelope, tiger, vulture

[4] Frog, snake, eagle, grass, grasshopper

___ % % 3 . C
+. 5

[1] #K0 ,

[2] **

[3] + * 6 *

[4] E ,

___ Which of the following is a water borne disease ?

[1] Diphtheria

[2] Tetanus

[3] Hepatitis

[4] Cough

! ___ , 0 +
, + , %

(i) + . 3 # 7 #?
+ +."

(ii) 6 P +."

(iii) 6 #? + * 6* +."

[1] ! &3 ,(

[2] & .* (

[3] ;+$ &%7 * (

[4] 3 &3 (

! ___ Based on the following three facts identify the planet :

(i) It is the second largest planet of the solar system.

(ii) It has ice ring around it.

(iii) Its largest satellite is Titan.

[1] Mercury

[2] Saturn

[3] Jupiter

[4] Mars

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(a) + 6#> * (i) + , Q% E
(b) . 3 (ii)
(c) *, (iii) 7
(d) R + (iv) +7E

7*

[1] (a)-iv, (b)-iii, (c)-ii, (d)-i
[2] (a)-i, (b)-iii, (c)-ii, (d)-iv
[3] (a)-ii, (b)-iii, (c)-i, (d)-iv
[4] (a)-iv, (b)-iii, (c)-i, (d)-ii

" Match the following nutrients (Column-I) with their main sources (Column-II) and find out the correct answer using the codes given below :

Column-I (Nutrients)	Column-II (Sources)
(a) Carbohydrate	(i) Green leafy vegetables
(b) Calcium	(ii) Pulses
(c) Protein	(iii) Milk
(d) Iron	(iv) Wheat

Codes :

[1] (a)-iv, (b)-iii, (c)-ii, (d)-i
[2] (a)-i, (b)-iii, (c)-ii, (d)-iv
[3] (a)-ii, (b)-iii, (c)-i, (d)-iv
[4] (a)-iv, (b)-iii, (c)-i, (d)-ii

!3 # , 2 ,
7 , !3 , % ,
7* 3 #„ 7* , %

(a) B 3 (i) 20 60 3,
(b) 3 3 # (ii) 60 120 3,
(c) 3 3 # (iii) ;0 , , + 20 3,
(d) S3 # (iv) 120 600 3,

7*

[1] (a)-iii, (b)-ii, (c)-i, (d)-iv
[2] (a)-iii, (b)-i, (c)-ii, (d)-iv
[3] (a)-iv, (b)-i, (c)-ii, (d)-iii
[4] (a)-i, (b)-ii, (c)-iii, (d)-iv

Match the various layers of atmosphere with their approximate distance and choose the correct code given below :

(a) Troposphere	(i) 20 to 60 km
(b) Stratosphere	(ii) 60 to 120 km
(c) Mesosphere	(iii) 20 km from earth surface
(d) Thermosphere	(iv) 120 to 600 km

Codes :

[1] (a)-iii, (b)-ii, (c)-i, (d)-iv
[2] (a)-iii, (b)-i, (c)-ii, (d)-iv
[3] (a)-iv, (b)-i, (c)-ii, (d)-iii
[4] (a)-i, (b)-ii, (c)-iii, (d)-iv

!

___ = 3C3 $P %?
= 3C 3 , 6 , . $C
0 !3 , %
7* , + #„
, %

= 3I	= 3II
(a) , , %	(i) #
(b) !2 %?	(ii) 3 #! *, B 8 20 G,
(c) 32 , #?	(iii) 3 #!< * B 8
(d) 2 , %?	(iv) 3

7*

[1] (a)-iv, (b)-iii, (c)-i, (d)-ii
[2] (a)-iv, (b)-i, (c)-ii, (d)-iii
[3] (a)-iii, (b)-iv, (c)-ii, (d)-i
[4] (a)-iii, (b)-ii, (c)-iv, (d)-i

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2*, &3; (! $0 + 5
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[1] / , 3 1* 3 ; H + % ,"
[2] / , 3 1* 3 3, + % ,"
[3] / / % "
[4] / , 3 1* 3 3, + , 0
, 3 1* O? % ,"

___ Match the Biosphere reserves given in Column-I with the geographical location in Column-II and choose the correct answer using the codes given below :

Column-I	Column-II
(a) Nilgiri Reserve	(i) Uttarakhand
(b) Sunderban Reserve	(ii) 20 islands nea coastal area Tamil Nadu
(c) Gulf of Mannar	(iii) Area of Tami Nadu, Karnataka an Kerala
(d) Nanda Dev Reserve	(iv) West Bengal

Codes :

[1] (a)-iv, (b)-iii, (c)-i, (d)-ii
[2] (a)-iv, (b)-i, (c)-ii, (d)-iii
[3] (a)-iii, (b)-iv, (c)-ii, (d)-i
[4] (a)-iii, (b)-ii, (c)-iv, (d)-i

___ What will happen if Antelope is missing in the food chain given below ?

Grass® Antelope® Tiger

[1] The population of tiger increases.
[2] The population of grass decreases.
[3] Tiger will start eating grass.
[4] The population of tiger decreases and the population of grass increases.

!

$ 0 & & = 3(C3C
& = 3((!3 , %
7* #„
, %

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	& 0 (	& (
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(b)	21 3	(ii) 7 3
(c)	5 %7	(iii) 8 ,
(d)	2	(iv)

*7**

[1] (a)-ii, (b)-i, (c)-iv, (d)-iii
[2] (a)-ii, (b)-i, (c)-iii, (d)-iv
[3] (a)-ii, (b)-iv, (c)-i, (d)-iii
[4] (a)-i, (b)-ii, (c)-iv, (d)-iii

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(a) * 3 A , (i) / / & #(3,
(b) , 3, (ii) . ,
(c) . 3 , 3, (iii) +T 3% ,
(d) #, , 3, (iv) -

[1] (a)-ii, (b)-iv, (c)-iii, (d)-i
[2] (a)-ii, (b)-iv, (c)-i, (d)-iii
[3] (a)-iv, (b)-ii, (c)-iii, (d)-i
[4] (a)-i, (b)-ii, (c)-iii, (d)-iv

$ Match the dates (Column-I) with days (Column-II) and choose the correct answer using the codes given below :

	Column-I (Dates)	Column-II (Days)
(a)	2 February	(i) World Forestry Day
(b)	21 March	(ii) World Wetland Day
(c)	5 June	(iii) Bhopal Tragedy Day
(d)	2 December	(iv) World Environmen Day

Codes :

[1] (a)-ii, (b)-i, (c)-iv, (d)-iii
[2] (a)-ii, (b)-i, (c)-iii, (d)-iv
[3] (a)-ii, (b)-iv, (c)-i, (d)-iii
[4] (a)-i, (b)-ii, (c)-iv, (d)-iii

! Find out the correct combination of following two columns :

	Deficiency	Disease
(a)	Lack of Vitamin A	(i) Goiter
(b)	Lack of Iron	(ii) Night blindness
(c)	Lack of Calcium	(iii) Weakness of Bones
(d)	Lack of Iodine	(iv) Anaemia

[1] (a)-ii, (b)-iv, (c)-iii, (d)-i
[2] (a)-ii, (b)-iv, (c)-i, (d)-iii
[3] (a)-iv, (b)-ii, (c)-iii, (d)-i
[4] (a)-i, (b)-ii, (c)-iii, (d)-iv

! = 3C 3 , , .
3$ =3C3
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7* , + #„
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	= 3C	= 3C
(a)	%? B	(i) CO_2, SO_2 N_2O U %
(b)	+ ;+	(ii) $, 37+ 3) +
(c)	, 1	(iii) CFC - , !- . U %
(d)	%. 3 3,	(iv) 6*> % =- 6# U %

7*

[1] (a)-iv, (b)-i, (c)-iii, (d)-ii

[2] (a)-iii, (b)-i, (c)-ii, (d)-iv

[3] (a)-iii, (b)-iv, (c)-i, (d)-ii

[4] (a)-iii, (b)-i, (c)-iv, (d)-ii

! +#N#, V 3 !- , % , +.
- 6 3 .
1 U Q +.

[1] =- ,%

[2] # 3

[3]

[4] P =$F

! Match the Global Environmental problems given in Column-I with their causes given in Column-II and choose the correct answer using the codes given below :

	Column-I	Column-II
(a)	Ozone laye depletion	(i) Emission o CO_2, SO_2 and N_2O
(b)	Green hous effect	(ii) Extinction of Flora and Fauna
(c)	Acid Rain	(iii) Emission o CFCs and chlorinated compounds
(d)	Loss of Biodiversity	(iv) Emission o Nitrogen and Sulphur oxides

Codes :

[1] (a)-iv, (b)-i, (c)-iii, (d)-ii

[2] (a)-iii, (b)-i, (c)-ii, (d)-iv

[3] (a)-iii, (b)-iv, (c)-i, (d)-ii

[4] (a)-iii, (b)-i, (c)-iv, (d)-ii

! Bone is used as a fertilizer because it contains the following plant nutrient :

[1] Oxygen

[2] Sodium

[3] Carbon

[4] Phosphorus

! 3 . C 3+ =$*> 3 . I, 7 3 $0 +. 5

[1] 2 3+

[2] +2 3+

[3] * * 3+

[4] B , 3+

!! ! 71 ; +.

(a) ' 3! , $P *

(b) % ,

(c) $ / *

(d) =* 3 6

, 7* 3 #„ , %

[1] (a) (b)

[2] (a) (d)

[3] (a), (b) (c)

[4] (a), (b) (d)

!" * * ++, % +.

[1] , 7 3

[2] E 3

[3] A 3 3

[4] 7 ;

!# 3 . C %. / * , +! +. 5

[1] = ,0 ,

[2] 6 =6C

[3] = , 6 - 6#

[4] 7

! Which of the following ocean lies to the West of Australia and East of Africa ?

[1] Pacific Ocean

[2] Indian Ocean

[3] Atlantic Ocean

[4] Southern Ocean

!! Natural sources of air pollution are :

(a) Volcanic eruption

(b) Forest fire

(c) Decay of vegetation

(d) Automobile exhausts

Select the most correct answer using the codes given below :

[1] (a) and (b)

[2] (a) and (d)

[3] (a), (b) and (c)

[4] (a), (b) and (d)

!" Tartaric acid is not found in :

[1] Lemon

[2] Amla

[3] Unripe mangoes

[4] Grapes

!# Which of the following is a biodegradable polymer ?

[1] Polythene

[2] Nylon-6

[3] Polyvinyl Chloride

[4] Cellulose

! !3 # , 2 && =3C
! 3 && =3C !3 , %
, 7* #„
! , %
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(a) B 3 # (i) %? , $0
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(c) 3 3 # (iii) + E A W%
UV XC
1 + +.
(d) S !3 # (iv) # +,
% 1* + +.
7*

[1] (a)-ii, (b)-i, (c)-iii, (d)-iv
[2] (a)-i, (b)-ii, (c)-iii, (d)-iv
[3] (a)-ii, (b)-i, (c)-iv, (d)-iii
[4] (a)-ii, (b)-iv, (c)-i, (d)-iii

! 3 SO_2 71
3 7 . C +. 5
[1] P 6* [2] * # P 6*
[3] 6 [4] , & .

!$ *.# 2 + ! ,
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[1] P [2] - ,
[3] #, [4]

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%? 3+ 7 7 3 +. 5
[1] 3 3 # < 3 3 #
[2] B 3 # < 3 3 #
[3] 3 # < 3 3 #
[4] +3 # < S3 #

! Match the various layers of atmosphere (Column-I) with their characteristics (Column-II) and select the correct answer from the codes given below :

Column-I (Layers of Atmosphere)	Column-II (Characteristics of Layers)
(a) Troposphere	(i) Ozone is present
(b) Stratosphere	(ii) all clouds form here
(c) Mesosphere	(iii) high energy UV and X-rays are absorbed here
(d) Thermosphere	(iv) most meteors bu in this region

Codes :
[1] (a)-ii, (b)-i, (c)-iii, (d)-iv
[2] (a)-i, (b)-ii, (c)-iii, (d)-iv
[3] (a)-ii, (b)-i, (c)-iv, (d)-iii
[4] (a)-ii, (b)-iv, (c)-i, (d)-iii

! Which of the following is the best indicator of SO_2 pollution ?
[1] Bryophyte [2] Pteridophyte
[3] Lichen [4] Algae

!$ Which of the following element should be available in water for metamorphosis of tadpoles ?
[1] Sulphur [2] Chlorine
[3] Iodine [4] Carbon

" Name the regions of the atmosphere where oxygen and ozone play key role :
[1] Mesosphere, Stratosphere
[2] Troposphere, Stratosphere
[3] Ionosphere, Mesosphere
[4] Exosphere, Thermosphere