UGC NET 2021 Environmental Sciences

Topic:- GP_Set4_A

1) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

Year-wise Production and Sale of PCs

Year	Number of PCs produced by Company (in Thousands)		Precentage (%) of PCs sold by Company	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

प्रश्न सं. 1-5

निम्नांकित तालिका में दो कंपनियों — A और B द्वारा वर्ष 2014 से 2019 के बीच निर्मित और बिक्रीत पर्सनल कंप्यूटरों की संख्या दर्शाई गई है। तालिका में प्रदत्त आंकड़े के आधार पर प्रश्न का उत्तर दें :

पर्सनल कंप्यूटरों का वर्षवाद उत्पादन और बिक्री

वर्ष	कंपनी द्वारा निर्मित पर्सनल कंप्यूटरों की संख्या (हजार में)		कंपनी द्वारा बेचे गए पर्सनल कंप्यूटरों का प्रतिशत (%)	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

What is the total number of PCs produced by Company A which remain unsold in all the six years together?

(1) 137400 (2) 144340
(3) 152200 (4) 168000

A कंपनी द्वारा तैयार ऐसे पर्सनल कंप्यूटरों की संख्या कितनी है तो छह वर्षों में अनबिके रह गए?

(1) 137400 (2) 144340
(3) 152200 (4) 168000

[Question ID = 4582][Question Description = Q01_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17791]
2. 2 [Option ID = 17792]
3. 3 [Option ID = 17793]
4. 4 [Option ID = 17794]

2) The following table embodies details about the number of Personal Computer (PCs) produced

and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

Year-wise Production and Sale of PCs

Year	Number of PCs produced by Company (in Thousands)		Precentage (%) of PCs sold by Company	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

प्रश्न सं. 1-5

निम्नांकित तालिका में दो कंपनियों — A और B द्वारा वर्ष 2014 से 2019 के बीच निर्मित और बिक्रीत पर्सनल कंप्यूटरों की संख्या दर्शाई गई है। तालिका में प्रदत्त आंकड़े के आधार पर प्रश्न का उत्तर दें :

पर्सनल कंप्यूटरों का वर्षवाद उत्पादन और बिक्री

वर्ष	कंपनी द्वारा निर्मित पर्सनल कंप्यूटरों की संख्या (हजार में)		कंपनी द्वारा बेचे गए पर्सनल कंप्यूटरों का प्रतिशत (%)	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

What is the ratio of the number of PCs sold by Company B in 2018 to the number of PCs that remained unsold by Company A in the year 2015?

(1) 5 : 2 (2) 4 : 1
(3) 5 : 3 (4) 4 : 3

A कंपनी द्वारा वर्ष 2015 में न बेचे जा सके पर्सनल कंप्यूटरों की तुलना में B कंपनी द्वारा 2018 में बेचे गए पर्सनल कंप्यूटरों का अनुपात क्या है?

(1) 5 : 2 (2) 4 : 1

(3) 5 : 3 (4) 4 : 3

[Question ID = 4583][Question Description = Q02_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17795]
2. 2 [Option ID = 17796]
3. 3 [Option ID = 17797]
4. 4 [Option ID = 17798]

3) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

Year-wise Production and Sale of PCs

Year	Number of PCs produced by	Precentage (%) of PCs sold

	Company (in Thousands)		by Company	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

प्रश्न सं. 1-5

निम्नांकित तालिका में दो कंपनियों — A और B द्वारा वर्ष 2014 से 2019 के बीच निर्मित और बिक्रीत पर्सनल कंप्यूटरों की संख्या दर्शाई गई है। तालिका में प्रदत्त आंकड़े के आधार पर प्रश्न का उत्तर दें :

पर्सनल कंप्यूटरों का वर्षवाद उत्पादन और बिक्री

वर्ष	कंपनी द्वारा निर्मित पर्सनल कंप्यूटरों की संख्या (हजार में)		कंपनी द्वारा बेचे गए पर्सनल कंप्यूटरों का प्रतिशत (%)	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

What is the difference between the total number of PCs sold and the total number of unsold PCs of Company B in all the six years together?

(1) 68700 (2) 70500
(3) 72100 (4) 73800

छह वर्षों में B कंपनी के बिके और अनबिके पर्सनल कंप्यूटरों की संख्या का अंतर कितना है?

(1) 68700 (2) 70500
(3) 72100 (4) 73800

[Question ID = 4584][Question Description = Q03_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17799]
2. 2 [Option ID = 17800]
3. 3 [Option ID = 17801]
4. 4 [Option ID = 17802]

4) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

Year-wise Production and Sale of PCs

Year	Number of PCs produced by Company (in Thousands)		Precentage (%) of PCs sold by Company	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%

2018	72	65	40%	80%
2019	90	80	60%	50%

प्रश्न सं. 1-5

निम्नांकित तालिका में दो कंपनियों — A और B द्वारा वर्ष 2014 से 2019 के बीच निर्मित और बिक्रीत पर्सनल कंप्यूटरों की संख्या दर्शाई गई है। तालिका में प्रदत्त आंकड़े के आधार पर प्रश्न का उत्तर दें :

पर्सनल कंप्यूटरों का वर्षवाद उत्पादन और बिक्री

वर्ष	कंपनी द्वारा निर्मित पर्सनल कंप्यूटरों की संख्या (हजार में)		कंपनी द्वारा बेचे गए पर्सनल कंप्यूटरों का प्रतिशत (%)	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

The number of PCs sold by Company A in 2015 is what percentage of the number of PCs sold by Company B in the year 2019?

(1) 82.5% (2) 87.5%
(3) 90% (4) 97.5%

A कंपनी द्वारा 2015 में बेचे गए पर्सनल कंप्यूटरों की कुल संख्या B कंपनी द्वारा 2019 में बेचे गए पर्सनल कंप्यूटरों का कितना प्रतिशत है?

(1) 82.5% (2) 87.5%
(3) 90% (4) 97.5%

[Question ID = 4585][Question Description = Q04_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17803]
2. 2 [Option ID = 17804]
3. 3 [Option ID = 17805]
4. 4 [Option ID = 17806]

5) The following table embodies details about the number of Personal Computer (PCs) produced and the percentage of PCs sold by two companies A and B from the year 2014 to 2019. Based on the data in the table, answer the question

Year-wise Production and Sale of PCs

Year	Number of PCs produced by Company (in Thousands)		Precentage (%) of PCs sold by Company	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

प्रश्न सं. 1-5

निम्नांकित तालिका में दो कंपनियों — A और B द्वारा वर्ष 2014 से 2019 के बीच निर्मित और बिक्रीत पर्सनल कंप्यूटरों की

संख्या दर्शाई गई है। तालिका में प्रदत्त आंकड़े के आधार पर प्रश्न का उत्तर दें :

पर्सनल कंप्यूटरों का वर्षवाद उत्पादन और बिक्री

वर्ष	कंपनी द्वारा निर्मित पर्सनल कंप्यूटरों की संख्या (हजार में)		कंपनी द्वारा बेचे गए पर्सनल कंप्यूटरों का प्रतिशत (%)	
	A	B	A	B
2014	40	45	60%	50%
2015	52	48	75%	40%
2016	60	64	50%	75%
2017	70	62	80%	60%
2018	72	65	40%	80%
2019	90	80	60%	50%

The number of PCs sold by Company A in year 2017 is what percentage more than the number of PCs unsold by Company B in year 2016?

(1) 250%> (2) 200%
(3) 120% (4) 80%

वर्ष 2017 में A कंपनी द्वारा बेचे गए पर्सनल कंप्यूटरों की संख्या वर्ष 2016 में B कंपनी द्वारा न बेचे जा सके पर्सनल कंप्यूटरों की संख्या से कितना प्रतिशत अधिक है?

(1) 250% (2) 200%

(3) 120% (4) 80%

[Question ID = 4586][Question Description = Q05_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17807]
2. 2 [Option ID = 17808]
3. 3 [Option ID = 17809]
4. 4 [Option ID = 17810]

Topic:- GP_Set4_B

1) Which level of teaching is also designated as 'exploratory understanding'?

(1) Memory level (2) Understanding level
(3) Reflective level (4) Autonomous development level

अधिगम के किस स्तर को समन्वेषी अवबोध भी कहा जाता है?

(1) स्मृति स्तर (2) अवबोध स्तर

(3) विमर्शी–चिन्तन स्तर (4) स्वायत्त विकास स्तर

[Question ID = 4587][Question Description = Q06_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17811]
2. 2 [Option ID = 17812]
3. 3 [Option ID = 17813]
4. 4 [Option ID = 17814]

2) Identify the characteristics of 'Field-independent learner'
(A) Seeks guidance and demonstrations from teacher
(B) Focuses on details of curriculum materials
(C) Likes to compete
(D) Relates concepts to personal experience
(E) Can organize imformation by himself or herself
Choose the correct answer from the options given below :

(1) (A), (B) and (C) only (2) (A), (C) and (D) only
(3) (B), (C) and (E) only (4) (C), (D) and (E) only

क्षेत्र–मुक्त अधिगमकर्ता की विशेषताएँ हैं :

(A) शिक्षक से मार्ग निर्देश और प्रायोगिक प्रदर्शन की अपेक्षा करता है।

(B) पाठ्य-सामग्री की सूक्ष्मताओं पर ध्यान केंद्रित करता है।

(C) प्रतिस्पर्धी बनना पसंद करता है।

(D) अवधारणाओं को वैयक्तिक अनुभव के सापेक्ष देखता है।

(E) सूचना को स्वयं व्यवस्थित कर सकता/सकती है।

नीचे दिए गए विकल्पों में से सही उत्तर को चयन कीजिए :

(1) केवल (A), (B) और (C)

(2) केवल (A), (C) और (D)

(3) केवल (B), (C) और (E)

(4) केवल (C), (D) और (E)

[Question ID = 4588][Question Description = Q07_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17815]
2. 2 [Option ID = 17816]
3. 3 [Option ID = 17817]
4. 4 [Option ID = 17818]

3) Match List I with List II

List I List II

(Teaching Method) (Examples)

(A) Monologic teaching method (I) Cybernetics and computer-aided instruction

(B) Dialogic teaching method (II) Case studies and tutorials

(C) Action based teaching method (III) Team teaching and demonstration

(D) Self study based teaching method (IV) Simulation and role playing

Choose the correct answer from the options given below :

(1) (A)-(II), (B)-(III), (C)-(I), (D)-(IV) (2) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

(3) (A)-(I), (B)-(IV), (C)-(II), (D)-(III) (4) (A)-(IV), (B)-(I), (C)-(III), (D)-(II)

सूची-I के साथ सूची-II का मिलान कीजिए

	सूची-I (शिक्षण विधि)		सूची-II (उदाहरण)
(A)	एकालापी शिक्षण विधि	(I)	साइबरनेटिक्स और कंप्यूटर-सहाय्यित अनुदेश
(B)	संवादी शिक्षण विधि	(II)	व्यष्टि अध्ययन और अनुशिक्षण
(C)	कार्य-आधारित शिक्षण विधि	(III)	दल शिक्षण और प्रदर्शन
(D)	स्वाध्याय-आधारित अध्यापन	(IV)	अनुरूपण और भूमिका निर्वहन

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)

(2) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

(3) (A)-(I), (B)-(IV), (C)-(II), (D)-(III)

(4) (A)-(IV), (B)-(I), (C)-(III), (D)-(II)

[Question ID = 4589][Question Description = Q08_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17819]
2. 2 [Option ID = 17820]
3. 3 [Option ID = 17821]
4. 4 [Option ID = 17822]

4) Given below are two statements :

Statement I : Engagement in the learning process refers to the amount of time students devote to learning in the classroom.

Statement II : Formative assessment is formal whereas summative assessment is informal.

In the light of the above statements, Choose the correct answer from the options given below :

(1) Both Statement I and Statement II are true. **(2) Both Statement I and Statement II are false.**
(3) Statement I is true but Statement II is false. **(4) Statement I is false but Statement II is true.**

नीचे दो कथन दिए गए हैं :

कथन (I) : अधिगम प्रक्रिया में संलग्नता का संदर्भ कक्षा में अधिगम पर विद्यार्थी द्वारा विनियोजित समय में है।

कथन (II) : निर्माणात्मक आकलन औपचारिक होता है जबकि संकलनात्मक आकलन अनौपचारिक होता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) कथन (I) और (II) दोनों सत्य हैं

(2) कथन (I) और (II) दोनों असत्य हैं

(3) कथन (I) सत्य है, लेकिन कथन (II) असत्य है

(4) कथन (I) असत्य है, लेकिन कथन (II) सत्य है

[Question ID = 4590][Question Description = Q09_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17823]
2. 2 [Option ID = 17824]
3. 3 [Option ID = 17825]
4. 4 [Option ID = 17826]

5) Given below are two statements : One is labelled as Assertion A and the other is labelled as Reason R.
Assertion (A) : Teaching support system as provided by ICT based gadgets is intended to optimise learning and interest in learning material.
Reasons (R) : Any meaningful support in teaching has to be instrumental in augmenting learning conditions and outcomes.
In the light of the above statements, Choose the most appropriate answer from the options given below :

(1) Both (A) and (R) are correct and (R) is the correct explanation of (A). **(2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).**
(3) (A) is correct but (R) is not correct. **(4) (A) is not correct but (R) is correct.**

नीचे दो कथन दिए गए हैं : एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में :

अभिकथन (A) : आइसीटी-आधारित गैजेट में यथाउपलब्ध अध्ययन सहायता प्रणाली का आशय अधिगम और अधिगम सामग्री में रूचि के यथेष्टिकरण से है।

कारण (R) : अध्यापन संबंधी हर सार्थक-सहायता समर्थन, अधिगम की परिस्थितियों और परिणामों के संवर्धन में उपयोगी होनी चाहिए।

उपरोक्त कथनों के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए :

(1) (A) और (R) दोनों सही हैं और (R), (A) की सही व्याख्या है

(2) (A) और (R) दोनों सही हैं, लेकिन (R), (A) की सही व्याख्या नहीं है

(3) (A) सही है, लेकिन (R) सही नहीं है

(4) (A) सही नहीं है, लेकिन (R) सही है

[Question ID = 4591][Question Description = Q10_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17827]
2. 2 [Option ID = 17828]
3. 3 [Option ID = 17829]
4. 4 [Option ID = 17830]

6) Data of research take the forms of words or pictures with the researcher as the key instrument in which of the following studies?

(1) Participant observation based Studies **(2) Ex Post Facto Studies**
(3) Experimental Studies **(4) Descriptive survey Studies**

निम्नांकित में से किस अध्ययन में अनुसंधान के उदत्त मुख्य साधन के रूप में शब्द अथवा चित्र का रूप ले लेता है?

(1) सहभागी प्रेक्षण आधारित अध्ययन (2) कार्योत्तर अध्ययन

(1) सहभागी प्रेक्षण-आधारित अध्ययन (2) कार्यात्तर अध्ययन

(3) प्रायोगिक अध्ययन (4) विवरणात्मक सर्वेक्षण अध्ययन

[Question ID = 4592][Question Description = Q11_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17831]
2. 2 [Option ID = 17832]
3. 3 [Option ID = 17833]
4. 4 [Option ID = 17834]

7) Identify the characteristic features of 'Hypothetico-deductive research' paradigm :
(A) Researcher is detached from the study to avoid bias
(B) Researcher becomes immersed in the research situation present or past
(C) The researcher seeks to establish relationships and explains causes of changes in measured social facts
(D) Actual settings are the direct source of data
(E) An attempt is made to set up universal context free generalizations.
Choose the correct answer from the options given below :

(1) (A), (B) and (C) only (2) (B), (C) and (D) only
(3) (A), (C) and (E) only (4) (C), (D) and (E) only

परिकल्पना-आधारित नियमन पर अनुसंधान की मुख्य विशेषताओं को चिह्नित कीजिए :

(A) पक्षपात से बचने के लिए अनुसंधानकर्ता अध्ययन से असंयुक्त हो जाता है।

(B) अनुसंधानकर्ता अनुसंधानगत परिस्थिति में निमग्न हो जाता है - चाहे वह वर्तमान की हो अथवा भूत की।

(C) अनुसंधानकर्ता संबंध स्थापित करना चाहता है और मापित सामाजिक तथ्यों में प्रेक्षित परिवर्तन के कारणों को व्याख्या करता है।

(D) वास्तविक परिस्थितियों प्रदत्तों के प्रत्यक्ष स्रोत होते हैं।

(E) सार्वभौम सन्दर्भमुक्त सामान्यीकरण के प्रतिपादन का प्रयास किया जाता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल (A), (B) और (C)

(2) केवल (B), (C) और (D)

(3) केवल (A), (C) और (E)

(4) केवल (C), (D) और (E)

[Question ID = 4593][Question Description = Q12_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17835]
2. 2 [Option ID = 17836]
3. 3 [Option ID = 17837]
4. 4 [Option ID = 17838]

8) Match List I with List II
List I List II
Research Types Goal of Research
(A) Fundamental Research (I) Appraising impact of interventions
(B) Applied Research (II) Amelioration of a given situation
(C) Action of Research (III) Exploring applicability of already established principles
(D) Evaluative Research (IV) Advancing the corpus of knowledge in a field
Choose the correct answer from the options given below :

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV) (2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
(3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II) (4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

सूची-I के साथ सूची-II का मिलान कीजिए

सूची-I		सूची-II	
(A)	मौलिक अनुसंधान	(I)	हस्तक्षेपों के प्रभाव का आकलन
(B)	व्यवहृत अनुसंधान	(II)	प्रदत्त परिस्थिति में सुधार लाना
(C)	क्रियात्मक अनुसंधान	(III)	पूर्व स्थापित सिद्धांतों की प्रयोन्यता का अन्वेषण
(D)	मूल्यांकन परक अनुसंधान	(IV)	क्षेत्र-विशेष में ज्ञान कोष का संवर्द्धन

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

(3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

(4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

[Question ID = 4594][Question Description = Q13_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17839]
2. 2 [Option ID = 17840]
3. 3 [Option ID = 17841]
4. 4 [Option ID = 17842]

9) Given below are two statements :
Statement I : At every step of research genuineness is to be vouched. Hence the issue of research ethics becomes germane.
Statement II : ICT application in research is supportive and facilitative rather than mandatory and absolute.
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 correct. (2) Both Statement I and Statement II are incorrect.
(3) Statement I is correct but Statement II is incorrect. (4) Statement I is incorrect but Statement II is correct.

नीचे दो कथन दिए गए हैं :

कथन (I) : अनुसंधान के प्रत्येक चरण में वास्तविकता के प्रति निष्ठा बनाए रखी जाती है। अतएव अनुसंधानों में शोध–नीतिशास्त्र का विषय महत्वकारी हो जाता हैं।

कथन (II) : अनुसंधान में आईसीटी अनुप्रयोग समर्थनकारी और सुसाध्यकर है, न कि अनिवार्य और निरपेक्ष।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए :

(1) कथन (I) और (II) दोनों सही हैं

(2) कथन (I) और (II) दोनों गलत हैं

(3) कथन (I) सही है, लेकिन कथन (II) गलत है

(4) कथन (I) गलत है, लेकिन कथन (II) सही है

[Question ID = 4595][Question Description = Q14_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17843]
2. 2 [Option ID = 17844]
3. 3 [Option ID = 17845]
4. 4 [Option ID = 17846]

10) Given below are two statements : One is labelled as Assertion A and the other is labeled as Reason R.
Assertion (A) : Research Hypothesis (H1) cannot be directly verified.
Reasons (R) : Null Hypothesis (H0) is helpful in making a claim by the researcher that his/her findings are not fortuitous or by chance.
In the light of the above statements, Choose the most appropriate answer from the options given below :

(1) Both (A) and (R) are correct and (R) is the correct explanation of (A). (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).
(3) (A) is correct but (R) is not correct. (4) (A) is not correct but (R) is correct.

नीचे दो कथन दिए गए हैं : एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में :

अभिकथन (A) : शोध परिकल्पना (H_1) प्रत्यक्षतः सत्यापित नहीं की जा सकती।

कारण (R) : निराकलीय परिकल्पना (H_0) अनुसंधानकर्ता के इस दावे में सहायक होती है कि उसके शोध परिणाम आकस्मिक अथवा संयोगवंश नहीं हैं।

उपरोक्त कथनों के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए :

(1) (A) और (R) दोनों सही हैं और (R), (A) की सही व्याख्या है

(2) (A) और (R) दोनों सही हैं, लेकिन (R), (A) की सही व्याख्या नहीं है

(3) (A) सही है, लेकिन (R) सही नहीं है

(4) (A) सही नहीं है, लेकिन (R) सही है

[Question ID = 4596][Question Description = Q15_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17847]
2. 2 [Option ID = 17848]
3. 3 [Option ID = 17849]
4. 4 [Option ID = 17850]

11) Which type of Communication is most difficult in gearing message to an audience?

(1) Interpersonal Communication (2) Mass Communication
(3) Intrapersonal Communication (4) Group Communication

श्रोता तक किस प्रकार के संदेश का संचार सर्वाधिक किलष्ट है?

(1) अंतर्वैयक्तिक संचार (2) जन संचार

(3) अंतःवैयक्तिक संचार (4) समूह संचार

[Question ID = 4597][Question Description = Q16_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17851]
2. 2 [Option ID = 17852]
3. 3 [Option ID = 17853]
4. 4 [Option ID = 17854]

12) Given below are two statements :
Statement I : Audience noise is potent when the message is controversial.
Statement II : It is impossible for any communication to convert an audience from one viewpoint to another.
In the light of the above statements, Choose the correct answer from the options given below :

(1) Both Statement I and Statement II are true. (2) Both Statement I and Statement II are false.
(3) Statement I is true but Statement II is false. (4) Statement I is false but Statement II is true.

नीचे दो कथन दिए गए हैं :

कथन (I) : संदेश विवादास्पद हो तो श्रोताओं का कोलाहल प्रबल हो जाता है।

कथन (II) : श्रोता की विचार-दृष्टि में परिवर्तन किसी भी संचार में असंभव होता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) कथन (I) और (II) दोनों सत्य हैं

(2) कथन (I) और (II) दोनों असत्य हैं

(3) कथन (I) सत्य है, लेकिन कथन (II) असत्य है

(4) कथन (I) असत्य है, लेकिन कथन (II) सत्य है

[Question ID = 4598][Question Description = Q17_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17855]
2. 2 [Option ID = 17856]
3. 3 [Option ID = 17857]
4. 4 [Option ID = 17858]

13) Given below are two statements : One is labelled as Assertion A and the other is labeled as Reason R.
Assertion (A) : Research has shown that the two-step flow theory is oversimplified for every field of interest.
Reasons (R) : People tend to make great use of the media now in their respective interest.
In the light of the above statements, Choose the most appropriate answer from the options given below :

(1) Both (A) and (R) are correct and (R) is the correct explanation of (A). (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).

(3) (A) is correct but (R) is not correct. (4) (A) is not correct but (R) is correct.

नीचे दो कथन दिए गए हैं : एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में :

अभिकथन (A) : अनुसंधान से स्पष्ट हुआ है कि प्रत्येक रूचि-क्षेत्र के लिए द्वि-चरणीय प्रवाह सिद्धांत का अतिसरलीकरण किया गया है।

कारण (R) : लोग अब अपनी रूचि में मीडिया का काफी उपयोग करना चाहते हैं।

उपरोक्त कथनों के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए :

(1) (A) और (R) दोनों सही हैं और (R), (A) की सही व्याख्या है

(2) (A) और (R) दोनों सही हैं, लेकिन (R), (A) की सही व्याख्या नहीं है

(3) (A) सही है, लेकिन (R) सही नहीं है

(4) (A) सही नहीं है, लेकिन (R) सही है

[Question ID = 4599][Question Description = Q18_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17859]
2. 2 [Option ID = 17860]
3. 3 [Option ID = 17861]
4. 4 [Option ID = 17862]

14) Physical barriers to communication are rapidly disappearing, but psychological obstacles remain owing to which of the following?
(A) By formal language
(B) By visual presentation
(C) By use of technology
(D) By emotional appeal
(E) By cultural attitude
Choose the correct answer from the options given below :

(1) (A), (D) and (E) only (2) (A), (B) and (C) only
(3) (B), (C) and (D) only (4) (C), (D) and (E) only

संचार संबंधी भौतिक बाधाएँ तेजी से विलुप्त हो रही हैं किंतु निम्नांकित में से किससे संबद्ध मनोवैज्ञानिक व्यवधान शेष हैं?

(A) औपचारिक भाषा में

(B) दृश्य प्रस्तुति में

(C) प्रौद्योगिकीय उपयोग में

(D) भावनात्मक अपील में

(E) सांस्कृतिक अभिवृत्ति में

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल (A), (D) और (E)

(2) केवल (A), (B) और (C)

(3) केवल (B), (C) और (D)

(4) केवल (C), (D) और (E)

[Question ID = 4600][Question Description = Q19_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17863]
2. 2 [Option ID = 17864]
3. 3 [Option ID = 17865]
4. 4 [Option ID = 17866]

15) Match List I with List II.

List I List II
Elements of Communication Characteristic feature
(A) Source (I) Means used to convey the message
(B) Receiver (II) Set of verbal and nonverbal cues from a source
(C) Message (III) A person who interprets the message
(D) Channel (IV) A person or an event which provides verbal/non verbal cues.
Choose the correct answer from the options given below :

सूची-I के साथ सूची-II का मिलान कीजिए

	सूची-I संचार के तत्व		सूची-II मूलभूत विशेषताएँ
(A)	स्रोत	(I)	संदेश संप्रेषित करने हेतु प्रयुक्त साधन
(B)	प्रापक	(II)	स्रोत से वाचिक और गैर-वाचिक संकेत
(C)	संदेश	(III)	संदेश की व्याख्या करनेवाला व्यक्ति
(D)	चैनल	(IV)	वाचिक/गैर-वाचिक संकेत देने वाला व्यक्ति अथवा घटना

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
(2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
(3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
(4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

[Question ID = 4601][Question Description = Q20_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17867]
2. 2 [Option ID = 17868]
3. 3 [Option ID = 17869]
4. 4 [Option ID = 17870]

16) If the selling price is doubled, the profit triples. What would be the profit percentage?

(1) 25% (2) 50%
(3) 100% (4) 125%

अगर विक्रय मूल्य दोगुना होने पर लाभ तिगुना हो जाए तो लाभ प्रतिशत क्या है?

(1) 25% (2) 50%
(3) 100% (4) 125%

[Question ID = 4602][Question Description = Q21_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17871]
2. 2 [Option ID = 17872]
3. 3 [Option ID = 17873]
4. 4 [Option ID = 17874]

17) Mohan buys a second hand television at a cost of Rs. 7,500 and spends Rs. 500 on its repair. Later on he sells it at a cost of Rs. 9,000. How much profit he gets in this process?

(1) 7.5% (2) 12.5%
(3) 20% (4) 25%

मोहन ने 7,500/- रुपए में एक पुराना टेलीविजन खरीदा और उसकी मरम्मत पर 500/- रुपए खर्च किए। बाद में, उसे 9,000/- रुपए में बेच दिया। उसके लाभ का प्रतिशत कितना है?

(1) 7.5% (2) 12.5%
(3) 20% (4) 25%

[Question ID = 4603][Question Description = Q22_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17875]
2. 2 [Option ID = 17876]
3. 3 [Option ID = 17877]
4. 4 [Option ID = 17878]

18) The cost price of 10 items is same as the selling price of N items. If the profit is 25%, then the value of N is?

(1) 8% (2) 16%
(3) 20% (4) 25%

अगर 10 वस्तुओं का लागत मूल्य N वस्तुओं के विक्रय-मूल्य के बराबर है और लाभ 25% हो तो N का मूल्य क्या है?

(1) 8% (2) 16%

(3) 20% (4) 25%

[Question ID = 4604][Question Description = Q23_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17879]
2. 2 [Option ID = 17880]
3. 3 [Option ID = 17881]
4. 4 [Option ID = 17882]

19) The average age of A, B and C is 25 years. If the average age of A and B is 22 and that of B and C is 23. Then what is the age of B?

(1) 15 years (2) 20 years
(3) 25 years (4) 30 years

A, B और C की औसत उम्र 25 वर्ष है। अगर A और B की औसत उम्र 22 वर्ष और B तथा C की 23 वर्ष हो, तो B की उम्र क्या है?

(1) 15 वर्ष (2) 20 वर्ष

(3) 25 वर्ष (4) 30 वर्ष

[Question ID = 4605][Question Description = Q24_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17883]
2. 2 [Option ID = 17884]
3. 3 [Option ID = 17885]
4. 4 [Option ID = 17886]

20) In a cricket match, in the first 20 overs run rate was 4.5. What should be the run rate in the remaining 30 overs to meet a target of 325?

(1) 6.24 (2) 7.83
(3) 5.94 (4) 8.21

अगर किसी क्रिकेट मैच में प्रथम 20 ओवर का रन औसत 4.5 हो, तो 325 का लक्ष्य प्राप्त करने के लिए शेष 30 ओवर में रन की दर क्या होनी चाहिए?

(1) 6.24 (2) 7.83

(3) 5.94 (4) 8.21

[Question ID = 4606][Question Description = Q25_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17887]
2. 2 [Option ID = 17888]
3. 3 [Option ID = 17889]
4. 4 [Option ID = 17890]

21) Which of the following statements is true regarding two contrary propositions?

(1) They can both be true (2) The truth of one entails the falsity of the other
(3) They cannot both be false (4) The falsity of one entails the truth of the other

दो विरोधी प्रतिज्ञप्तियों के संबंध में निम्नांकित में से कौन-सा अभिकथन सत्य है?

(1) दोनों सत्य हो सकते हैं।

(2) एक की सत्यता दूसरे की असत्यता को प्रकट करती है।

(3) दोनों असत्य नहीं हो सकते।

(4) एक की अहस्तान्तरणीय दूसरे की सत्यता को प्रकट करती है।

[Question ID = 4610][Question Description = Q29_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17903]
2. 2 [Option ID = 17904]
3. 3 [Option ID = 17905]
4. 4 [Option ID = 17906]

22) Given below are two statements :
Statement I : An informal fallacy is one that may be identified through mere inspection of the form or structure of an argument.
Statement II : Formal fallacy is one that can be detected only through analysis of the content of the argument.
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 correct. **(2) Both Statement I and Statement II are incorrect.**
(3) Statement I is correct but Statement II is incorrect. **(4) Statement I is incorrect but Statement II is correct.**

नीचे दो कथन दिए गए हैं :

कथन (I) : अनौपचारिक हेत्वाभास वह है जिसका ज्ञान तर्क के स्वरूप अथवा संचरना के निरीक्षण मात्र से स्थापित किया जा सकता है।

कथन (II) : औपचारिक हेत्वाभास वह है जिसकी पहचान तर्क की विषय-वस्तु के विश्लेषण मात्र से की जा सकती है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए :

(1) कथन (I) और (II) दोनों सही हैं

(2) कथन (I) और (II) दोनों गलत हैं

(3) कथन (I) सही है, लेकिन कथन (II) गलत है

(4) कथन (I) गलत है, लेकिन कथन (II) सही है

[Question ID = 4611][Question Description = Q30_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17907]
2. 2 [Option ID = 17908]
3. 3 [Option ID = 17909]
4. 4 [Option ID = 17910]

23) Which of the following statements about blogs in network communication is True?

(1) The content of a blog can be edited by anyone. **(2) A blog is a synchronous communication system that allows people to chat in real-time.**
(3) A blog consists of posts in reverse chronological order. **(4) A blog is a history of web pages that you have visited, maintained by an ISP.**

नेटवर्क संचार में, ब्लॉग के बारे में निम्नांकित में से कौन-सा कथन सत्य है?

(1) ब्लॉग की सामग्री को कोई भी संपादित कर सकता है।
(2) ब्लॉग एक सुसंबद्ध संचार प्रणाली है जो लोगों को तत्सम संवाद की सुविधा प्रदान करता है।
(3) ब्लॉग के पोस्ट विपरीत कालक्रम में होते हैं।
(4) ब्लॉग ऐसे वेब पृष्ठों का इतिहास होता है जिसे आपने देखा है और जिसका अनुरक्षण आईएसपी से होता है।

[Question ID = 4612][Question Description = Q31_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17911]
2. 2 [Option ID = 17912]
3. 3 [Option ID = 17913]
4. 4 [Option ID = 17914]

24) Identify the correct order of the following INTEL processors in the increasing order of speed.
(A) 80486
(B) 8085
(C) Dual Core
(D) Pentium-III
Choose the correct answer from the options given below :

(1) (A), (B), (C), (D) **(2) (B), (A), (D), (C)**
(3) (A), (B), (D), (C) **(4) (A), (C), (D), (B)**

इंटेल के निम्नांकित प्रोसेसरों को उनकी संवर्धी गति के क्रम में व्यवस्थित कीजिए :

(A) 80486

(B) 8085

(C) इयूअल कोर

(D) पेंटियम–III

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) (A), (B), (C), (D)

(2) (B), (A), (D), (C)

(3) (A), (B), (D), (C)

(4) (A), (C), (D), (B)

[Question ID = 4613][Question Description = Q32_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17915]
2. 2 [Option ID = 17916]
3. 3 [Option ID = 17917]
4. 4 [Option ID = 17918]

25) Given below are two statements :
Statement I : Bus, Ring, Star, and Mesh are types of network protocols.
Statement II : A short-range radio communication standard that transmits data over short distances upto approximately 30 feet is known as Bluetooth.
In the light of the above statements, Choose the correct answer from the options given below :

(1) Both Statement I and Statement II are true. **(2) Both Statement I and Statement II are false.**
(3) Statement I is true but Statement II is false. **(4) Statement I is false but Statement II is true.**

नीचे दो कथन दिए गए हैं :

कथन (I) : बस, रिंग, स्टार और मेश नेटवर्क प्रोटोकॉल के प्रकार हैं।

कथन (II) : लगभग 30 फीट तक की दूरी में डेटा पारेषित करने वाले शॉर्टरेंज रेडियो संचार को ब्लूटूथ के रूप में जाना जाता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) कथन (I) और (II) दोनों सत्य हैं

(2) कथन (I) और (II) दोनों असत्य हैं

(3) कथन (I) सत्य है, लेकिन कथन (II) असत्य है

(4) कथन (I) असत्य है, लेकिन कथन (II) सत्य है

[Question ID = 4614][Question Description = Q33_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17919]
2. 2 [Option ID = 17920]
3. 3 [Option ID = 17921]
4. 4 [Option ID = 17922]

26) Which of the following group of statements in the context of Information Technology (IT) is correct?
(A) Mouse, Keyboard, and Plotter are all input devices.
(B) Unix, Windows, and Linux are all operating systems.
(C) Register, Cache Memory, and Hard Disk are all memory modules.
(D) Montior, Printer, and Scanner are all output devices.
Choose the correct answer from the options given below :

(1) (A) and (B) only **(2) (A) and (D) only**
(3) (C) and (D) only **(4) (B) and (C) only**

सूचना प्रौद्योगिकी के परिप्रेक्ष्य में, निम्नांकित में से कौन–सा वक्तव्य समूह सही है?

(A) माउस, की–बोर्ड और प्लॉटर इनपुट उपकरण हैं।

(B) यूनिक्स, विंडोज और लिनक्स ऑपरेटिंग सिस्टम हैं।

(C) रजिस्टर, कैचे मेमोरी और हार्ड डिस्क मेमोरी मॉड्यूल हैं।

(D) मॉनिटर, प्रिंटर और स्कैनर आउटपुट उपकरण हैं।

नीचे दिए गए विकल्पों में से सही उत्तर को चयन कीजिए :

(1) केवल (A) और (B)

(2) केवल (A) और (D)

(3) केवल (C) और (D)

(4) केवल (B) और (C)

[Question ID = 4615][Question Description = Q34_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17923]
2. 2 [Option ID = 17924]
3. 3 [Option ID = 17925]
4. 4 [Option ID = 17926]

27) Match List I with List II

List I List II

(Computer Terms) (Description)

(A) Processor (I) Part that runs executable programs

(B) RAM (II) Part that stores files permanently

(C) Hard Disk (III) Part that stores instructions and data temporarily for use

(D) Compiler (IV) Part that translates source program to executable program

Choose the correct answer from the options given below :

(1) (A)-(I), (B)-(III), (C)-(II), (D)-(IV) (2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

(3) (A)-(II), (B)-(I), (C)-(III), (D)-(IV) (4) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)

सूची-I के साथ सूची-II का मिलान कीजिए

	सूची-I		सूची-II
(A)	प्रोसेसर	(I)	एक्जीक्यूटेबल प्रोग्राम संचलित करनेवाला हिस्सा
(B)	रैम	(II)	फाइलों को स्थायी रूप से स्टोर करनेवाला हिस्सा
(C)	हार्ड डिस्क	(III)	अनुदेशों और डेटा को उपयोग के लिए अस्थायी रूप से स्टोर करनेवाला हिस्सा
(D)	कंपाइलर	(IV)	स्रोत प्रोग्राम को एक्जीक्यूटेबल प्रोग्राम का रूप देनेवाला हिस्सा

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)

(2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

(3) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

(4) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)

[Question ID = 4616][Question Description = Q35_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17927]
2. 2 [Option ID = 17928]
3. 3 [Option ID = 17929]
4. 4 [Option ID = 17930]

28) A coal fired thermal power plant has an efficiency of 35%. The electricity from the power plant is used entirely for lighting purposes with average efficiency of 20%. What is the overall efficiency of conversion form coal to lighting?

(1) 15% (2) 55%

(3) 70% (4) 7%

एक कोयला-चालित तापविद्युत संयंत्र की दक्षता 35% है। विद्युत संयंत्र की पूरी बिजली का उपयोग 20% की औसत दक्षता के साथ प्रकाशमानन के प्रयोजन में होता है। कोयले के प्रकाश में रूपांतरण की समग्र दक्षता क्या है?

(1) 15% (2) 55%

(3) 70% (4) 7%

[Question ID = 4617][Question Description = Q36_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17931]
2. 2 [Option ID = 17932]
3. 3 [Option ID = 17933]
4. 4 [Option ID = 17934]

29) As per Sustainable Development Goal 3, one of the targets is to reduce under-5 mortality per 1000 live births to at least as low as

(1) 50 (2) 40
(3) 25> (4) 15

संधारणीय विकास लक्ष्य-3 के अनुसार, एक लक्ष्य प्रति 1000 जीवित प्रसव पर 5 वर्ष से कम उम्र के बच्चों की मृत्युदर को घटाकर कम से कम कितना किया जाना है?

(1) 50 (2) 40

(3) 25 (4) 15

[Question ID = 4619][Question Description = Q38_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17939]
2. 2 [Option ID = 17940]
3. 3 [Option ID = 17941]
4. 4 [Option ID = 17942]

30) In a polluted urban area, which of the following constituents of photochemical smog has the least concentration (parts per billion by volume)?

(1) CO Carbon monoxide (2) Nitrogen dioxide
(3) Hydrocarbons (without methane) (4) Ozone

प्रदूषित शहरी क्षेत्र में, पेट्रो-रसायन स्मॉग का कौन सा घटक सबसे कम मात्रा (आयतन में प्रति अरब कण में अंश) में रहता है?

(1) CO कार्बन मोनोऑक्साइड (2) नाइट्रोजन डाईऑक्साइड

(3) हाइड्रोकार्बन (मिथेनरहित) (4) ओज़ोन

[Question ID = 4620][Question Description = Q39_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17943]
2. 2 [Option ID = 17944]
3. 3 [Option ID = 17945]
4. 4 [Option ID = 17946]

31) For drinking and irrigation purposes, the availability of suitable water out of earth's total water supplies is about less than

(1) 1% (2) 5%
(3) 6% (4) 10%

पेय और सिंचाई के प्रयोजनों हेतु, पृथ्वी की कुल जलापूर्ति में से उपयुक्त जल की उपलब्धता है :

(1) 1% (2) 5%

(3) 6% (4) 10%

[Question ID = 4621][Question Description = Q40_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17947]
2. 2 [Option ID = 17948]
3. 3 [Option ID = 17949]
4. 4 [Option ID = 17950]

32) The Indian council of Social Science Research was established for :
(A) strengthening different disciplines
(B) promoting researches in social science
(C) enhancing quality of social science as a discipline
(D) providing a platform for discussion on social scientists' concerns
(E) supporting seminars and conferences organized by Universities

Choose the correct answer from the options given below :

(1) (A) and (C) only (2) (B) and (C) only
(3) (A) and (B) only (4) (B) and (D) only

भारतीय समाज विज्ञान अनुसंधान परिषद की स्थापना हुई थी :

(A) विभिन्न विधाओं के सशक्तिकरण हेतु

(B) समाज विज्ञान में अनुसंधान के संवर्द्धन हेतु

(C) एक विधा के रूप में समाज विज्ञान की गुणवत्ता का संवर्द्धन करने हेतु

(D) समाज विज्ञानियों की चिंताओं के लिए मंच उपलब्ध कराने हेतु

(E) विश्वविद्यालयों द्वारा आयोजित संगोष्ठियों और सम्मेलनों को सहायता प्रदान करने हेतु

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल (A) और (C)

(2) केवल (B) और (C)

(3) केवल (A) और (B)

(4) केवल (B) और (D)

[Question ID = 4622][Question Description = Q41_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17951]
2. 2 [Option ID = 17952]
3. 3 [Option ID = 17953]
4. 4 [Option ID = 17954]

33) The first regulatory body in higher education in India was set up under the rubric of :

(1) UGC (2) MCI
(3) BCI (4) AICTE

भारत में उच्च शिक्षा संबंधी प्रथम नियामक निकाय की स्थापना किसके अंतर्गत की गई?

(1) विश्व विद्यालय अनुदान आयोग (2) एमसीआई
(3) बीसीआई (4) एआईसीटीई

[Question ID = 4623][Question Description = Q42_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17955]
2. 2 [Option ID = 17956]
3. 3 [Option ID = 17957]
4. 4 [Option ID = 17958]

34) Who among the following was the Chairman of University Education Commission (1948)?

(1) Dr. D.S. Kothari (2) Maulana Abul Kalam Azad
(3) Dr. Zakir Hussain (4) Dr. S. Radhakrishnan

विश्वविद्यालय शिक्षा आयोग (1948) का अध्यक्ष निम्नांकित में से कौन था?

(1) डॉ. डी. एस. कोठारी (2) मौलाना अबुल कलाम आज़ाद
(3) डॉ. ज़ाकिर हुसैन (4) डॉ. एस. राधाकृष्णन

[Question ID = 4624][Question Description = Q43_GP_21NOV_S2_SHAAN_Shift2]
1. 1 [Option ID = 17959]
2. 2 [Option ID = 17960]
3. 3 [Option ID = 17961]
4. 4 [Option ID = 17962]

35) For maintenance of standards of teaching examination and research and coordination of University Education which of the following section of UGC act should be referred to?

(1) Section 28 (2) Section 25
(3) Section 15 (4) Section 12

विश्वविद्यालय अनुदान आयोग अधिनियम की निम्नांकित में से किस धारा को विश्वविद्यालय शिक्षा के शिक्षण, परीक्षा, अनुसंधान और शिक्षण के मानकों के अनुरक्षण के लिए संदर्भित किया जा सकता है?

(1) धारा 28 (2) धारा 25

(3) धारा 15 (4) धारा 12

[Question ID = 4625][Question Description = Q44_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17963]
2. 2 [Option ID = 17964]
3. 3 [Option ID = 17965]
4. 4 [Option ID = 17966]

36) The NEP 2020 prioritises the increase in the GER in preschool to secondary level by 100% by the year

(1) 2025 (2) 2030

(3) 2035 (4) 2040

नई शिक्षा नीति–2020 में, विद्यालय–पूर्व और माध्यमिक स्तर पर जी ई आर में 100% वृद्धि का लक्ष्य किस वर्ष तक के लिए रखा गया है?

(1) 2025 (2) 2030

(3) 2035 (4) 2040

[Question ID = 4626][Question Description = Q45_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17967]
2. 2 [Option ID = 17968]
3. 3 [Option ID = 17969]
4. 4 [Option ID = 17970]

37) Which fallacy is committed in the argument — "Sound is a quality because it is visible"?

(1) Asryāsiddha (2) Vyāpyatvāsiddha

(3) Svarupāsiddha (4) Sādhyāsiddha

"ध्वनि एक गुण है क्योंकि यह दृश्यमान है" कथन में कौन–सा हेत्वाभास है?

(1) आश्रायासिद्ध (2) व्याप्यत्वासिद्ध

(3) स्वरुपासिद्ध (4) साध्यासिद्ध

[Question ID = 4627][Question Description = Q26_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17971]
2. 2 [Option ID = 17972]
3. 3 [Option ID = 17973]
4. 4 [Option ID = 17974]

38) Which kind of inference is illustrated when one argues that sound must be a quality because it cannot be a substance or an activity or a relation and so on?

(1) Seṣāvata (2) Purvāvata

(3) Samanyaodṛsta (4) Both Purvavata and Sāmānyatodṛsta

"ध्वनि एक गुण है क्योंकि यह पदार्थ अथवा क्रिया अथवा संबंध अथवा कुछ अन्य नहीं हो सकता" के तर्क में किस प्रकार का अनुमान व्याख्यापित है?

(1) शेषवत् (2) पूर्ववत्

(3) सामान्यतोद्रष्ट (4) पूर्ववत् एवं सामान्यतोदृष्ट दोनों

[Question ID = 4628][Question Description = Q27_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17975]
2. 2 [Option ID = 17976]
3. 3 [Option ID = 17977]
4. 4 [Option ID = 17978]

39) Under which of the following conditions an inference may be categorized as Kevalānvayi ?

(1) When it is based on middle term which is only positively related to the major term

(2) When it is based on middle term which is only negatively related to the major term

(3) When it is based on middle term which is both positively and negatively related to the major term

(4) When middle term and major term have the relationship of identity (tādātmaya) between them

निम्नांकित में से किन परिस्थितियों में अनुमान को केवलान्वयी के रूप में श्रेणीकृत किया जा सकता है?

(1) जब यह मध्य पद पर आधारित हो जो मुख्य पद से केवल सकारात्मक रूप से संबद्ध है।

(2) जब यह मध्य पद पर आधारित हो जो मुख्य पद से केवल नकारात्मक रूप से संबद्ध है।

(3) जब यह मध्य पद पर आधारित हो जो मुख्य पद से केवल सकारात्मक और नकारात्मक दोनों रूप से संबद्ध है।

(4) जब मध्य पद और मुख्य पद के मध्य तादात्मय का संबंध हो।

[Question ID = 4629][Question Description = Q28_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17979]
2. 2 [Option ID = 17980]
3. 3 [Option ID = 17981]
4. 4 [Option ID = 17982]

40) Tidal range (R) is a critical factor in determining whether an estuary would be useful for tidal power generation as energy (E) available per tidal cycle depends on scales with R as according to the following relation :

(1) $E \propto R$ (2) $E \propto R^{3/2}$

(3) $E \propto R^2$ (4) $E \propto R^3$

ज्वारीय विद्युत सृजन हेतु ज्वारनदमुख उपयोगी होगी अथवा नहीं, इसके निर्धारण में ज्वारीय विस्तार (रेंज) एक महत्वपूर्ण कारक होता है क्योंकि प्रति ज्वार-चक्र ऊर्जा (E) की उपलब्धता निम्नांकित के अनुसार R की व्यापकता पर निर्भर करती है :

(1) $E \propto R$ (2) $E \propto R^{3/2}$

(3) $E \propto R^2$ (4) $E \propto R^3$

[Question ID = 4630][Question Description = Q37_GP_21NOV_S2_SHAAN_Shift2]

1. 1 [Option ID = 17983]
2. 2 [Option ID = 17984]
3. 3 [Option ID = 17985]
4. 4 [Option ID = 17986]

Topic:- GP_Set4_C

1) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the colloborative process, which may or may not have occured as intended. Providing 15 or 20 minutes at the begining of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

What is the main determinant of time allocation in cooperative learning?

(1) Time devoted to group work (2) Time devoted to all groups

(3) Time devoted to presentation of reports (4) Complexity and the number of tasks involved

निम्नांकित गद्यांश को पढ़िए और नीचे दिए गए प्रश्न का उत्तर दीजिए :

समूह कार्य पर आप कितना समय दें, यह कार्य की जटिलता पर निर्भर करता है. किंतु, एतदर्थ आपको कुछ अधिक परिशोधित आकलन भी करना होगा। आपको यह निश्चय करना होगा कि आप समूह कार्य और अपने योगदानों को साझा करने के लिए शामिल हो रहे सभी समूहों पर कितना समय दे पाएंगे। इस उत्तरवर्ती समय का उपयोग समूह रिपोर्टों, समग्र कक्षा चर्चा, अंतिम परिणति के संबंध में प्रत्येक समूह के कार्यानुभवों के उप-विवेचन अथवा इन कार्यों के सम्मिश्रण के लिए किया जा सकता है। भावप्रवण चर्चा के क्रम में उत्तेजना, विवाद और अनुवर्ती संवाद से समूह कार्य को सहज ही अनियंत्रित बना सकता है। ऐसी आशंका को टालने के लिए आवश्यक है कि सहयोगात्मक अधिगम क्रियाकलाप के प्रत्येक चरण की सीमा निर्धारित की जाए ताकि किसी चरण विशेष में उत्तरवर्ती चरण का समय न लेना पड़े और अधिगमकर्ता के मस्तिष्क में कोई भी कार्य असंयुक्त और अपूर्ण न रह जाए। स्वभावतः, इस क्रम में अधिकतर समय व्यक्ति समूहों के कार्य को दिया जाएगा जिसके दौरान अंतिम परिणति का अधिकांश सम्मिलित होगा। इस प्रकार सामान्यतः, सहकारी अधिगम कार्यकलाप में आवंटित समय का 60 से 80% व्यक्ति समूह के कार्य पर व्यतीत होगा। अनिवार्यतः, शेष समय को व्यक्ति समूह की प्रस्तुतियों और/अथवा समग्र कक्षा विमर्श तथा उप-विवेचन में विभाजित किया जाना चाहिए ताकि समूह कार्य को एकल अंतिम परिणति के परिप्रेक्ष्य में ही देखा जा सके। यदि आप एक ही दिन समूह रिपोर्ट और समग्र कक्षा-विमर्श-दोनों की योजना बनाते हैं, तो ध्यान रहे कि सार्थक विमर्श के लिए अपेक्षित समय का अंशमात्र ही मिल पाएगा। इससे बचने के लिए, समूह विमर्श अथवा अनुवर्ती कक्षा दिवस के लिए उप-विवेचन का समय-निर्धारण इस प्रकार किया जाना चाहिए कि कक्षा के सदस्यों को अपनी समूह रिपोर्टों को परिलक्षित करने और सहयोगी प्रक्रिया (जो संभव है, यथालक्षित अनुसार हुई भी हो अथवा न भी हुई हो) के संबंध में उनके विचारों को जानने के लिए पर्याप्त समय रहे। प्रायः, अगले दिन कक्षा के प्रारंभ में 15 अथवा 20 मिनट का समय अपने अनुभवों की सार्थक अभिव्यक्ति और उससे सीखने के लिए उचित अंतराल बनाए रखने के प्रयोजन से विद्यार्थियों के लिए पर्याप्त समय होता है।

सहयोगात्मक अधिगम में समय आवंटन का मुख्य निर्धारक तत्व क्या है?

(1) समूह कार्य के लिए आवंटित समय

(2) सभी समूहों को आवंटित समय

(3) रिपोर्टों की प्रस्तुति के लिए आवंटित समय

(4) शामिल कार्यों की जटिलता और संख्या

[Question ID = 4631][Question Description = Q46_GP_21NOV_S2_SHAAN_Shift2]

1. 1

   [Option ID = 17987]
2. 2

   [Option ID = 17988]
3. 3

   [Option ID = 17989]
4. 4

   [Option ID = 17990]

2) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the colloborative process, which may or may not have occured as intended. Providing 15 or 20 minutes at the begining of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

What can disrupt group work?

(1) Difficulty of task (2) A whole class discussion
(3) Discussions which involve emotions (4) Arguments on various points

निम्नांकित गद्यांश को पढ़िए और नीचे दिए गए प्रश्न का उत्तर दीजिए :

समूह कार्य पर आप कितना समय दें, यह कार्य की जटिलता पर निर्भर करता है. किंतु, एतदर्थ आपको कुछ अधिक परिशोधित

आकलन भी करना होगा। आपको यह निश्चय करना होगा कि आप समूह कार्य और अपने योगदानों को साझा करने के लिए शामिल हो रहे सभी समूहों पर कितना समय दे पाएंगे। इस उत्तरवर्ती समय का उपयोग समूह रिपोर्टों, समग्र कक्षा चर्चा, अंतिम परिणति के संबंध में प्रत्येक समूह के कार्यानुभवों के उप-विवेचन अथवा इन कार्यों के सम्मिश्रण के लिए किया जा सकता है। भावप्रवण चर्चा के क्रम में उत्तेजना, विवाद और अनुवर्ती संवाद से समूह कार्य को सहज ही अनियंत्रित बना सकता है। ऐसी आशंका को टालने के लिए आवश्यक है कि सहयोगात्मक अधिगम क्रियाकलाप के प्रत्येक चरण की सीमा निर्धारित की जाए ताकि किसी चरण विशेष में उत्तरवर्ती चरण का समय न लेना पड़े और अधिगमकर्ता के मस्तिष्क में कोई भी कार्य असंयुक्त और अपूर्ण न रह जाए। स्वभावतः, इस क्रम में अधिकतर समय व्यक्ति समूहों के कार्य को दिया जाएगा जिसके दौरान अंतिम परिणति का अधिकांश सम्मिलित होगा। इस प्रकार सामान्यतः, सहकारी अधिगम कार्यकलाप में आवंटित समय का 60 से 80% व्यक्ति समूह के कार्य पर व्यतीत होगा। अनिवार्यतः, शेष समय को व्यक्ति समूह की प्रस्तुतियों और/अथवा समग्र कक्षा विमर्श तथा उप-विवेचन में विभाजित किया जाना चाहिए ताकि समूह कार्य को एकल अंतिम परिणति के परिप्रेक्ष्य में ही देखा जा सके। यदि आप एक ही दिन समूह रिपोर्ट और समग्र कक्षा-विमर्श-दोनों की योजना बनाते हैं, तो ध्यान रहे कि सार्थक विमर्श के लिए अपेक्षित समय का अंशमात्र ही मिल पाएगा। इससे बचने के लिए, समूह विमर्श अथवा अनुवर्ती कक्षा दिवस के लिए उप-विवेचन का समय-निर्धारण इस प्रकार किया जाना चाहिए कि कक्षा के सदस्यों को अपनी समूह रिपोर्टों को परिलक्षित करने और सहयोगी प्रक्रिया (जो संभव है, यथालक्षित अनुसार हुई भी हो अथवा न भी हुई हो) के संबंध में उनके विचारों को जानने के लिए पर्याप्त समय रहे। प्रायः, अगले दिन कक्षा के प्रारंभ में 15 अथवा 20 मिनट का समय अपने अनुभवों की सार्थक अभिव्यक्ति और उससे सीखने के लिए उचित अंतराल बनाए रखने के प्रयोजन से विद्यार्थियों के लिए पर्याप्त समय होता है।

समूह कार्य में किससे व्यवधान हो सकता है?

(1) कार्य की कठिनता

(2) समग्र कक्षा विमर्श

(3) भावप्रवण विमर्श

(4) विभिन्न बिंदुओं पर तर्क-वितर्क

[Question ID = 4632][Question Description = Q47_GP_21NOV_S2_SHAAN_Shift2]

1. 1

   [Option ID = 17991]
2. 2

   [Option ID = 17992]
3. 3

   [Option ID = 17993]
4. 4

   [Option ID = 17994]

3) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the colloborative process, which may or may not have occured as intended. Providing 15 or 20 minutes at the begining of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

A major chunk of time in cooperative learning is devoted to which of the following?

(1) Individual group presentation (2) Whole class discussion
(3) Individual group work (4) Debriefing

निम्नांकित गद्यांश को पढ़िए और नीचे दिए गए प्रश्न का उत्तर दीजिए :

समूह कार्य पर आप कितना समय दें, यह कार्य की जटिलता पर निर्भर करता है. किंतु, एतदर्थ आपको कुछ अधिक परिशोधित आकलन भी करना होगा। आपको यह निश्चय करना होगा कि आप समूह कार्य और अपने योगदानों को साझा करने के लिए शामिल हो रहे सभी समूहों पर कितना समय दे पाएंगे। इस उत्तरवर्ती समय का उपयोग समूह रिपोर्टों, समग्र कक्षा चर्चा, अंतिम परिणति के संबंध में प्रत्येक समूह के कार्यानुभवों के उप-विवेचन अथवा इन कार्यों के सम्मिश्रण के लिए किया जा सकता है।

भावप्रवण चर्चा के क्रम में उत्तेजना, विवाद और अनुवर्ती संवाद से समूह कार्य को सहज ही अनियंत्रित बना सकता है। ऐसी आशंका को टालने के लिए आवश्यक है कि सहयोगात्मक अधिगम क्रियाकलाप के प्रत्येक चरण की सीमा निर्धारित की जाए ताकि किसी चरण विशेष में उत्तरवर्ती चरण का समय न लेना पड़े और अधिगमकर्ता के मस्तिष्क में कोई भी कार्य असंयुक्त और अपूर्ण न रह जाए। स्वभावतः, इस क्रम में अधिकतर समय व्यक्ति समूहों के कार्य को दिया जाएगा जिसके दौरान अंतिम परिणति का अधिकांश सम्मिलित होगा। इस प्रकार सामान्यतः, सहकारी अधिगम कार्यकलाप में आवंटित समय का 60 से 80% व्यक्ति समूह के कार्य पर व्यतीत होगा। अनिवार्यतः, शेष समय को व्यक्ति समूह की प्रस्तुतियों और/अथवा समग्र कक्षा विमर्श तथा उप-विवेचन में विभाजित किया जाना चाहिए ताकि समूह कार्य को एकल अंतिम परिणति के परिप्रेक्ष्य में ही देखा जा सके। यदि आप एक ही दिन समूह रिपोर्ट और समग्र कक्षा-विमर्श-दोनों की योजना बनाते हैं, तो ध्यान रहे कि सार्थक विमर्श के लिए अपेक्षित समय का अंशमात्र ही मिल पाएगा। इससे बचने के लिए, समूह विमर्श अथवा अनुवर्ती कक्षा दिवस के लिए उप-विवेचन का समय-निर्धारण इस प्रकार किया जाना चाहिए कि कक्षा के सदस्यों को अपनी समूह रिपोर्टों को परिलक्षित करने और सहयोगी प्रक्रिया (जो संभव है, यथालक्षित अनुसार हुई भी हो अथवा न भी हुई हो) के संबंध में उनके विचारों को जानने के लिए पर्याप्त समय रहे। प्रायः, अगले दिन कक्षा के प्रारंभ में 15 अथवा 20 मिनट का समय अपने अनुभवों की सार्थक अभिव्यक्ति और उससे सीखने के लिए उचित अंतराल बनाए रखने के प्रयोजन से विद्यार्थियों के लिए पर्याप्त समय होता है।

सहयोगात्मक अधिगम का एक बड़ा हिस्सा किसे आवंटित किया जाता है?

(1) व्यक्ति द्वारा समूह प्रस्तुति (2) समग्र कक्षा विमर्श

(3) वैयक्तिक समूह कार्य (4) उप-विवेचन

[Question ID = 4633][Question Description = Q48_GP_21NOV_S2_SHAAN_Shift2]

1. 1

   [Option ID = 17995]
2. 2

   [Option ID = 17996]
3. 3

   [Option ID = 17997]
4. 4

   [Option ID = 17998]

4) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the colloborative process, which may or may not have occured as intended. Providing 15 or 20 minutes at the begining of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

The members of cooperative learning team should be given enough time to

(1) reflect (2) discuss

(3) ask questions (4) present new ideas

निम्नांकित गद्यांश को पढ़िए और नीचे दिए गए प्रश्न का उत्तर दीजिए :

समूह कार्य पर आप कितना समय दें, यह कार्य की जटिलता पर निर्भर करता है. किंतु, एतदर्थ आपको कुछ अधिक परिशोधित आकलन भी करना होगा। आपको यह निश्चय करना होगा कि आप समूह कार्य और अपने योगदानों को साझा करने के लिए शामिल हो रहे सभी समूहों पर कितना समय दे पाएंगे। इस उत्तरवर्ती समय का उपयोग समूह रिपोर्टों, समग्र कक्षा चर्चा, अंतिम परिणति के संबंध में प्रत्येक समूह के कार्यानुभवों के उप-विवेचन अथवा इन कार्यों के सम्मिश्रण के लिए किया जा सकता है। भावप्रवण चर्चा के क्रम में उत्तेजना, विवाद और अनुवर्ती संवाद से समूह कार्य को सहज ही अनियंत्रित बना सकता है। ऐसी आशंका को टालने के लिए आवश्यक है कि सहयोगात्मक अधिगम क्रियाकलाप के प्रत्येक चरण की सीमा निर्धारित की जाए ताकि किसी चरण विशेष में उत्तरवर्ती चरण का समय न लेना पड़े और अधिगमकर्ता के मस्तिष्क में कोई भी कार्य असंयुक्त और अपूर्ण न रह जाए। स्वभावतः, इस क्रम में अधिकतर समय व्यक्ति समूहों के कार्य को दिया जाएगा जिसके दौरान अंतिम परिणति का अधिकांश सम्मिलित होगा। इस प्रकार सामान्यतः, सहकारी अधिगम कार्यकलाप में आवंटित समय का 60 से 80% व्यक्ति

समूह के कार्य पर व्यतीत होगा। अनिवार्यतः, शेष समय को व्यक्ति समूह की प्रस्तुतियों और/अथवा समग्र कक्षा विमर्श तथा उप-विवेचन में विभाजित किया जाना चाहिए ताकि समूह कार्य को एकल अंतिम परिणति के परिप्रेक्ष्य में ही देखा जा सके। यदि आप एक ही दिन समूह रिपोर्ट और समग्र कक्षा-विमर्श-दोनों की योजना बनाते हैं, तो ध्यान रहे कि सार्थक विमर्श के लिए अपेक्षित समय का अंशमात्र ही मिल पाएगा। इससे बचने के लिए, समूह विमर्श अथवा अनुवर्ती कक्षा दिवस के लिए उप-विवेचन का समय-निर्धारण इस प्रकार किया जाना चाहिए कि कक्षा के सदस्यों को अपनी समूह रिपोर्टों को परिलक्षित करने और सहयोगी प्रक्रिया (जो संभव है, यथालक्षित अनुसार हुई भी हो अथवा न भी हुई हो) के संबंध में उनके विचारों को जानने के लिए पर्याप्त समय रहे। प्रायः, अगले दिन कक्षा के प्रारंभ में 15 अथवा 20 मिनट का समय अपने अनुभवों की सार्थक अभिव्यक्ति और उससे सीखने के लिए उचित अंतराल बनाए रखने के प्रयोजन से विद्यार्थियों के लिए पर्याप्त समय होता है।

सहयोगात्मक अधिगम दल को निम्नांकित के लिए पर्याप्त समय दिया जाना चाहिए :

(1) विमर्शी सोच हेतु (2) परिचर्चा हेतु

(3) प्रश्न-प्रच्छा हेतु (4) नए विचारों की प्रस्तुति हेतु

[Question ID = 4634][Question Description = Q49_GP_21NOV_S2_SHAAN_Shift2]

1. 1

   [Option ID = 17999]
2. 2

   [Option ID = 18000]
3. 3

   [Option ID = 18001]
4. 4

   [Option ID = 18002]

5) Read the passage carefully and answer the question that follow:

How much time should you allot for group work? It depends on task complexity, but you must make some more refined estimates as well. You need to determine the time to devote to group work and time to devote to all groups coming together to share their contributions. This latter time may be used for group reports, a whole-class discussion, debriefing to relate the work experiences of each group to the end product, or some combination of these tasks. Group work can easily get out of hand in the excitement, controversy, and natural dialogue that can come from passionate discussion. This possibility requires you to place limits on each stage of the cooperative learning activity, so one stage does not take time from another and leave the task disjointed and incomplete in your learners' minds. Most time naturally will be devoted to the work of individual groups, during which the major portion of the end product will be completed. Individual group work normally will consume 60% to 80% of the time devoted to the cooperative learning activity. The remaining time must be divided among individual group presentations and/or whole class discussion and debriefing that places the group work into the perspective of a single end product. If you plan both group reports and whole class discussion for the same day, be aware that the discussion probably will get squeezed into a fraction of the time required to make it meaningful. To avoid this, the group discussion or debriefing for the following class day may be so scheduled so that class members have ample time to reflect on their group reports and to pull together their own thoughts about the colloborative process, which may or may not have occured as intended. Providing 15 or 20 minutes at the begining of class the next day is usually enough time for students to have acquired the proper distance to reflect meaningfully on their experiences of the day before-and to learn from them.

The most appropriate caption for the passage will be :

(1) Guidelines for cooperative learning (2) Procedure for cooperative learning

(3) Precaution in the conduct of cooperative learning (4) Limitations of cooperative learning

निम्नांकित गद्यांश को पढ़िए और नीचे दिए गए प्रश्न का उत्तर दीजिए :

समूह कार्य पर आप कितना समय दें, यह कार्य की जटिलता पर निर्भर करता है. किंतु, एतदर्थ आपको कुछ अधिक परिशोधित आकलन भी करना होगा। आपको यह निश्चय करना होगा कि आप समूह कार्य और अपने योगदानों को साझा करने के लिए शामिल हो रहे सभी समूहों पर कितना समय दे पाएंगे। इस उत्तरवर्ती समय का उपयोग समूह रिपोर्टों, समग्र कक्षा चर्चा, अंतिम परिणति के संबंध में प्रत्येक समूह के कार्यानुभवों के उप-विवेचन अथवा इन कार्यों के सम्मिश्रण के लिए किया जा सकता है। भावप्रवण चर्चा के क्रम में उत्तेजना, विवाद और अनुवर्ती संवाद से समूह कार्य को सहज ही अनियंत्रित बना सकता है। ऐसी आशंका को टालने के लिए आवश्यक है कि सहयोगात्मक अधिगम क्रियाकलाप के प्रत्येक चरण की सीमा निर्धारित की जाए ताकि किसी चरण विशेष में उत्तरवर्ती चरण का समय न लेना पड़े और अधिगमकर्ता के मस्तिष्क में कोई भी कार्य असंयुक्त और अपूर्ण न रह जाए। स्वभावतः, इस क्रम में अधिकतर समय व्यक्ति समूहों के कार्य को दिया जाएगा जिसके दौरान अंतिम परिणति का अधिकांश सम्मिलित होगा। इस प्रकार सामान्यतः, सहकारी अधिगम कार्यकलाप में आवंटित समय का 60 से 80% व्यक्ति समूह के कार्य पर व्यतीत होगा। अनिवार्यतः, शेष समय को व्यक्ति समूह की प्रस्तुतियों और/अथवा समग्र कक्षा विमर्श तथा उप-विवेचन में विभाजित किया जाना चाहिए ताकि समूह कार्य को एकल अंतिम परिणति के परिप्रेक्ष्य में ही देखा जा सके। यदि आप एक ही दिन समूह रिपोर्ट और समग्र कक्षा-विमर्श-दोनों की योजना बनाते हैं, तो ध्यान रहे कि सार्थक विमर्श के लिए अपेक्षित समय का अंशमात्र ही मिल पाएगा। इससे बचने के लिए, समूह विमर्श अथवा अनुवर्ती कक्षा दिवस के लिए उप-विवेचन का समय-निर्धारण इस प्रकार किया जाना चाहिए कि कक्षा के सदस्यों को अपनी समूह रिपोर्टों को परिलक्षित करने और सहयोगी प्रक्रिया (जो संभव है, यथालक्षित अनुसार हुई भी हो अथवा न भी हुई हो) के संबंध में उनके विचारों को जानने

के लिए पर्याप्त समय रहे। प्रायः, अगले दिन कक्षा के प्रारंभ में 15 अथवा 20 मिनट का समय अपने अनुभवों की सार्थक अभिव्यक्ति और उससे सीखने के लिए उचित अंतराल बनाए रखने के प्रयोजन से विद्यार्थियों के लिए पर्याप्त समय होता है।

गद्यांश का सर्वाधिक उपयुक्त शीर्षक होगा :

(1) सहयोगात्मक–अधिगम हेतु दिशानिर्देश (2) सहयोगात्मक–अधिगम हेतु प्रक्रिया

(3) सहयोगात्मक–अधिगम संचालन हेतु ध्यातव्य (4) सहयोगात्मक–अधिगम की सीमाएँ

[Question ID = 4635][Question Description = Q50_GP_21NOV_S2_SHAAN_Shift2]

1. 1

[Option ID = 18003]

2. 2

[Option ID = 18004]

3. 3

[Option ID = 18005]

4. 4

[Option ID = 18006]

Topic:- 89EVS_A

1) The pioneer community in human evolution is :

(1) Pastoralists (Nomadic) (2) Agrosociety
(3) Hunting and Gathering Society (4) Industrial Society

[Question ID = 4636][Question Description = Q01_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18007]

2. 2

[Option ID = 18008]

3. 3

[Option ID = 18009]

4. 4

[Option ID = 18010]

2) Name the person, who launched the ''Green Belt Movement'' in Kenya, and got the Nobel Peace Prize :

(1) Wangari Maathai (2) Gehard Ertl
(3) Koichi Tanaka (4) Ryojii Noyori

[Question ID = 4637][Question Description = Q02_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18011]

2. 2

[Option ID = 18012]

3. 3

[Option ID = 18013]

4. 4

[Option ID = 18014]

3) Identify the environmental system with lowest entropy

(1) Land in monoculture agriculture sustained by high energy input (2) Soils containing a balanced community of living organisms
(3) Coal reduced to CO_2 (4) Polluted rivers

[Question ID = 4638][Question Description = Q03_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18015]

2. 2

[Option ID = 18016]

3. 3

[Option ID = 18017]

4. 4

[Option ID = 18018]

4) Which chemical form of mercury is completely water soluble?

(1) Elemental mercury in liquid state **(2) Monomethyl mercury**
(3) Elemental mercury in vapour state **(4) Dimethyl mercury**

[Question ID = 4639][Question Description = Q04_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18019]
2. 2

   [Option ID = 18020]
3. 3

   [Option ID = 18021]
4. 4

   [Option ID = 18022]

5) The water is classified as ''aggressive'' if :

(1) The Ca^{2+} concentration is much less than $CaCO_3$ saturation **(2) The Ca^{2+} concentration is equal to the $CaCO_3$ saturation**
(3) The Ca^{2+} concentration is more than the $CaCO_3$ saturation **(4) The Ca^{2+} concentration is double of the $CaCO_3$ saturation**

[Question ID = 4640][Question Description = Q05_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18023]
2. 2

   [Option ID = 18024]
3. 3

   [Option ID = 18025]
4. 4

   [Option ID = 18026]

6) The portion of UV spectrum which readily destroys DNA and causes skin cancer is :

(1) 320 mm to 400 mm **(2) 280 mm to 320 mm**
(3) 100 mm to 280 mm **(4) 400 mm to 700 mm**

[Question ID = 4641][Question Description = Q06_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18027]
2. 2 [Option ID = 18028]
3. 3 [Option ID = 18029]
4. 4 [Option ID = 18030]

7) Free energy (ΔG) value of zero indicates :

(1) Spontaneous reaction in forward direction

(2) The state of equilibrium

(3) Spontaneous reaction in backward direction

(4) No reaction at all

[Question ID = 4642][Question Description = Q07_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18031]
2. 2 [Option ID = 18032]
3. 3 [Option ID = 18033]
4. 4 [Option ID = 18034]

8) A gas fired, combined heat and power plant produces 5000 MWh electricity and heat of 30,000 GJ. If the input energy required to run the power plant is 60,000 GJ, the efficiency of the plant is :

(1) 35% **(2) 40%**
(3) 50% **(4) 80%**

[Question ID = 4643][Question Description = Q08_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18035]
2. 2

   [Option ID = 18036]

3. 3

[Option ID = 18037]

4. 4

[Option ID = 18038]

9) Which of the following compounds has the least Ozone Depleting Potential?

(1) CFC-11 (2) Halons
(3) HCFCs (4) Methyl Bromide

[Question ID = 4644][Question Description = Q09_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18039]
2. 2 [Option ID = 18040]
3. 3 [Option ID = 18041]
4. 4 [Option ID = 18042]

10) Which one among the following is not an example of detrital sedimentary rocks?

(1) Sandstone (2) Chalk
(3) Shale (4) Conglomerate

[Question ID = 4645][Question Description = Q10_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18043]

2. 2

[Option ID = 18044]

3. 3

[Option ID = 18045]

4. 4

[Option ID = 18046]

11) According to the U.S. Department of Agriculture system of classification, the size of silt particles in soil ranges between :

(1) 0.02 to 0.2 mm (2) 0.05 to 0.5 mm
(3) 0.002 to 0.05 mm (4) 0.0002 to 0.002 mm

[Question ID = 4646][Question Description = Q11_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18047]

2. 2

[Option ID = 18048]

3. 3

[Option ID = 18049]

4. 4

[Option ID = 18050]

12) Which one among the following has the lowest hydraulic conductivity (m/day)?

(1) Gravel (2) Sandstone
(3) Sand (4) Clay

[Question ID = 4647][Question Description = Q12_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18051]

2. 2

[Option ID = 18052]

3. 3

[Option ID = 18053]

4. 4

[Option ID = 18054]

13)

At locations characterized by latitude $\phi = 30^\circ$, pressure is found to vary by 1.0 mb over a distance of 100 km. If the density of air mass is ~1.25 kg/m^3, the geostrophic wind velocity is:

(1) ~11 m/s (2) ~15 m/s
(3) ~26 m/s (4) ~7 m/s

[Question ID = 4648][Question Description = Q13_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18055]
2. 2 [Option ID = 18056]
3. 3 [Option ID = 18057]
4. 4 [Option ID = 18058]

14) The internal relationship between α, β and γ diversity can be presented as :

(1) $\beta = \frac{\gamma}{\alpha}$ (2) $\gamma = \beta \times \alpha$

(3) $\alpha = \gamma \times \beta$ (4) $\gamma = \beta + \alpha$

[Question ID = 4649][Question Description = Q14_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18059]
2. 2 [Option ID = 18060]
3. 3 [Option ID = 18061]
4. 4 [Option ID = 18062]

15) The minimum time needed for the formation of one inch of the top soil is :

(1) Less than 10 years (2) 10-50 years
(3) 100-400 years (4) 1,000-2,000 years

[Question ID = 4650][Question Description = Q15_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18063]
2. 2

   [Option ID = 18064]
3. 3

   [Option ID = 18065]
4. 4

   [Option ID = 18066]

16) Which zone of a pond/lake ecosystem does not receive light?

(1) Littoral (2) Limnetic
(3) Profundal (4) Epilimnion

[Question ID = 4651][Question Description = Q16_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18067]
2. 2

   [Option ID = 18068]
3. 3

   [Option ID = 18069]
4. 4

   [Option ID = 18070]

17) ''Slash and burn'' is a term that is usually associated with the practice of :

(1) Illicit felling and encroachment (2) Grazing and lopping
(3) Incineration of waste (4) Shifting cultivation
[Question ID = 4652][Question Description = Q17_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18071]
2. 2 [Option ID = 18072]
3. 3 [Option ID = 18073]
4. 4 [Option ID = 18074]

18) A species that has profound effect on the ecological processes of an ecosystem and whose removal or loss would result in disturbing the community structure is known as :

(1) Dominant species (2) Keystone species
(3) Indicator species (4) Flagship species
[Question ID = 4653][Question Description = Q18_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18075]
2. 2 [Option ID = 18076]
3. 3 [Option ID = 18077]

4. 4 [Option ID = 18078]

19) The flagship species of Kedarnath Wildlife sanctuary is :

(1) Elephant (2) Musk Deer
(3) Tiger (4) Wild Boar

[Question ID = 4654][Question Description = Q19_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18079]
2. 2

   [Option ID = 18080]
3. 3

   [Option ID = 18081]
4. 4

   [Option ID = 18082]

20) The maximum permissible limit of BOD (mg/l) in the treated waste water that can be discharged into garden for watering is :

(1) 20 (2) 30
(3) 40 (4) 10
[Question ID = 4655][Question Description = Q20_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18083]
2. 2 [Option ID = 18084]
3. 3 [Option ID = 18085]
4. 4 [Option ID = 18086]

21) What is the concentration of H+ in a solution of 0.1 N NaOH at 25^0 C?

(1) 10^{13} M (2) 10^{-13} M
(3) 10^{-14} M (4) 10^{14} M

[Question ID = 4656][Question Description = Q21_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18087]
2. 2

   [Option ID = 18088]
3. 3

   [Option ID = 18089]
4. 4

   [Option ID = 18090]

22) Which method is used to separate proteins on the basis of their sizes?

(1) Ion exchange chromatography (2) Thin layer chromatography
(3) Adsorption chromatography (4) Gel filtration chromatography
[Question ID = 4657][Question Description = Q22_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18091]
2. 2 [Option ID = 18092]
3. 3 [Option ID = 18093]
4. 4 [Option ID = 18094]

23) Which of the following is not a molecular method for identification of microbial population form soil or water?

(1) MPN (2) rRNA sequencing
(3) RT-PCR (4) PCR

[Question ID = 4658][Question Description = Q23_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18095]
2. 2

   [Option ID = 18096]
3. 3

   [Option ID = 18097]
4. 4

   [Option ID = 18098]

24) The rate of increase in temperature with depth in the earth also known as geothermal gradient, is equal to :

(1) 6.8^0C/Km (2) 20^0C/Km
(3) 25^0C/Km (4) 37.4^0C/Km
[Question ID = 4659][Question Description = Q24_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18099]
2. 2 [Option ID = 18100]
3. 3 [Option ID = 18101]
4. 4 [Option ID = 18102]

25) For wind power generation, the percentage of maximum extractable power contained in the wind is :

(1) ~45% (2) ~59%
(3) ~62% (4) ~37%
[Question ID = 4660][Question Description = Q25_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18103]
2. 2 [Option ID = 18104]
3. 3 [Option ID = 18105]
4. 4 [Option ID = 18106]

26) Carbon content in a certain type of coal is 0.81. Assume that the combustion efficiency of coal is ~100%, then how much CO_2 will be produced on combustion of 1 kg of coal?

(1) ~3 kg (2) ~5.4 kg
(3) ~1.8 kg (4) ~4.8 kg
[Question ID = 4661][Question Description = Q26_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18107]
2. 2 [Option ID = 18108]
3. 3 [Option ID = 18109]
4. 4 [Option ID = 18110]

27) At STP, 1 ppb sulphur dioxide is equivalent to :

(1) $\sim 7.31\,\mu g\,m^{-3}$ (2) $\sim 3.16\,\mu g\,m^{-3}$

(3) $\sim 4.52\,\mu g\,m^{-3}$ (4) $\sim 2.86\,\mu g\,m^{-3}$

[Question ID = 4662][Question Description = Q27_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18111]
2. 2 [Option ID = 18112]
3. 3 [Option ID = 18113]
4. 4 [Option ID = 18114]

28) Which of the following organisms is the most tolerant to sewage pollution?

(1) Scenedesmus (2) Daphnia
(3) Chironomus (4) Chlorella
[Question ID = 4663][Question Description = Q28_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18115]
2. 2 [Option ID = 18116]
3. 3 [Option ID = 18117]
4. 4 [Option ID = 18118]

29) The process of illuviation in soil indicates :

(1) Removal of particles from the top soil (2) Removal of particles from the C horizon
(3) Percolation of soluble salts into deeper soil layers (4) Accumulation of particles in the B horizon

[Question ID = 4664][Question Description = Q29_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18119]
2. 2

   [Option ID = 18120]
3. 3

   [Option ID = 18121]
4. 4

   [Option ID = 18122]

30) Carbonmonooxide is harmful to human beings, as it :

(1) causes cancer **(2) causes eye irritation**
(3) depletes ozone layer **(4) has high affinity with haemoglobin as compared to oxygen**

[Question ID = 4665][Question Description = Q30_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18123]
2. 2

   [Option ID = 18124]
3. 3

   [Option ID = 18125]
4. 4

   [Option ID = 18126]

31) The ash content in coal used in stand-alone thermal power plants in India should not be more than

(1) 20% **(2) 27%**
(3) 34% **(4) 40%**

[Question ID = 4666][Question Description = Q31_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18127]
2. 2 [Option ID = 18128]
3. 3 [Option ID = 18129]
4. 4 [Option ID = 18130]

32) Pyrolysis of solid wastes refers to :

(1) High temperature burning in presence of excess air **(2) High temperature anaerobic distillation**
(3) Low temperature combustion in pressure of limited air **(4) Ambient anaerobic distillation**

[Question ID = 4667][Question Description = Q32_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18131]
2. 2 [Option ID = 18132]
3. 3 [Option ID = 18133]
4. 4 [Option ID = 18134]

33) Which of the following mixture of gases can be found in biogas?

(1) CO, CH_4, NO, H_2S, H_2O vapor **(2) CO_2, CH_4, NH_3, H_2S, H_2O vapor**
(3) CO_2, CH_4, N_2O, NH_3, H_2O vapor **(4) CO_2, CH_4, NO, NH_3**

[Question ID = 4668][Question Description = Q33_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18135]
2. 2

   [Option ID = 18136]
3. 3

   [Option ID = 18137]
4. 4

   [Option ID = 18138]

34) India became a party to CITES in the year :

(1) 1972 **(2) 1976**
(3) 1974 **(4) 1986**

[Question ID = 4670][Question Description = Q35_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18143]
2. 2 [Option ID = 18144]
3. 3 [Option ID = 18145]
4. 4 [Option ID = 18146]

35) Time clocked by an athlete in a 100 m race is an example of which type of variable?

(1) discrete **(2) continuous**
(3) nominal **(4) oridnal**

[Question ID = 4671][Question Description = Q36_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18147]
2. 2 [Option ID = 18148]
3. 3 [Option ID = 18149]
4. 4 [Option ID = 18150]

36) In a class of 13 students, 3 students failed in a test. The marks of 10 students who passed were 6, 9, 4, 8, 7, 6, 5, 6, 7, 5. The median value of marks of all the 13 students is :

(1) 5 (2) 5.5
(3) 6 (4) 6.5

[Question ID = 4672][Question Description = Q37_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18151]
2. 2

   [Option ID = 18152]
3. 3

   [Option ID = 18153]
4. 4

   [Option ID = 18154]

37)

The probability that a standard normal variate lies between $-\infty$ and $+1$ is :

(1) ~0.84 (2) ~0.78
(3) ~0.72 (4) ~0.68

[Question ID = 4673][Question Description = Q38_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18155]
2. 2 [Option ID = 18156]
3. 3 [Option ID = 18157]
4. 4 [Option ID = 18158]

38) Population of a city doubled in a span of 20 years. Assuming exponential growth at a constant rate over the given period, the growth rate would have been :

(1) ~3.5% (2) ~3.0%
(3) ~2.5% (4) ~2.0%

[Question ID = 4674][Question Description = Q39_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18159]
2. 2 [Option ID = 18160]
3. 3 [Option ID = 18161]
4. 4 [Option ID = 18162]

39)

Following information is given regarding a one-way ANOVA test :

There are 'k' treatments, each having sample size $n_1, n_2, n_3, ..., n_k$ such that the total sample size $N = n_1 + n_2 + n_3 + ... + n_k$.

The degrees of freedom for the mean error sum of squares in the test will be

(1) k (2) $k-1$
(3) $N-1$ (4) $N-k$

[Question ID = 4675][Question Description = Q40_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18163]
2. 2 [Option ID = 18164]
3. 3 [Option ID = 18165]
4. 4 [Option ID = 18166]

40) For a regression model, the following information is given :
Unexplained sum of squares = 25
Explained sum of squares = 75
The value of coefficient of determination for this model is

(1) 0.33 (2) 3
(3) 0.67 (4) 0.75

[Question ID = 4676][Question Description = Q41_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18167]
2. 2 [Option ID = 18168]
3. 3 [Option ID = 18169]
4. 4 [Option ID = 18170]

41)

Among all the unbiased estimators of the population regression coefficients which are linear in the dependent variable (say Y_i), the least squares estimators have the smallest variance. This statement is known as :

(1) Bayes' theorem (2) Central limit theorem

(3) Chebyshev's theorem (4) Gauss-Markov theorem

[Question ID = 4677][Question Description = Q42_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18171]
2. 2 [Option ID = 18172]
3. 3 [Option ID = 18173]
4. 4 [Option ID = 18174]

42) The place of origin of the National River Ganga is :

(1) Bhagirath Kharak (2) Chaukhamba Peak
(3) Gomukh (4) Pindari Glacier

[Question ID = 4678][Question Description = Q43_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18175]
2. 2

   [Option ID = 18176]
3. 3

   [Option ID = 18177]
4. 4

   [Option ID = 18178]

43) Water remains in liquid state over a wide range of temperature because of its :
(A) Specific heat
(B) Heat of vaporisation
(C) Density at 0^0C
(D) Bipolar nature
Choose the most appropriate answer from the options given below :

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

[Question ID = 4679][Question Description = Q44_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18179]
2. 2

   [Option ID = 18180]
3. 3

   [Option ID = 18181]
4. 4

   [Option ID = 18182]

44) The difference in values of theoretical oxygen demand and actual oxygen demand is observed because of :
(A) difference in rate of reaeration and deoxygenation
(B) addition of dead cell biomass of bacteria as waste
(C) accumulation of waste in bacterial tissue
(D) formation of humus which resists degradation
Choose the most appropriate answer from the options given below :

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

[Question ID = 4680][Question Description = Q45_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18183]
2. 2 [Option ID = 18184]
3. 3 [Option ID = 18185]
4. 4 [Option ID = 18186]

45) The crystal structure of a compound/material can be determined using :
(A) Scanning Electron Microscope
(B) X-Ray Fluorescence
(C) Transmission Electron Microscopy
(D) X-Ray Diffraction

Choose the most appropriate answer from the options given below :

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

[Question ID = 4681][Question Description = Q46_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18187]
2. 2 [Option ID = 18188]
3. 3 [Option ID = 18189]
4. 4 [Option ID = 18190]

46) Which of the following are living fossils?
(A) Ginkgo biloba
(B) Panthera tigris
(C) Elephas Maximas
(D) Latimavia
Choose the most appropriate answer from the options given below :

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

[Question ID = 4682][Question Description = Q47_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18191]
2. 2 [Option ID = 18192]
3. 3 [Option ID = 18193]
4. 4 [Option ID = 18194]

47) Consider the following statements :
(A) Earth is farthest from the sun at the time of perehelion
(B) When perehelion occurs, it is winter season in the northern hemisphere
(C) Seasons on earth occur due to inclination in earth's axis of rotation
Choose the most appropriate answer from the options given below :

(1) (A) and (B) Only (2) (B) and (C) Only
(3) (A) and (C) Only (4) (A), (B) and (C)

[Question ID = 4683][Question Description = Q48_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18195]
2. 2 [Option ID = 18196]
3. 3 [Option ID = 18197]
4. 4 [Option ID = 18198]

48) Ferromagnesian minerals are :
(A) a group of silicates
(B) black, brown or green colour minerals
(C) a group of bicarbonates
(D) highly resistant to weathering and erosional process
Choose the most appropriate answer from the options given below :

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

[Question ID = 4684][Question Description = Q49_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18199]
2. 2 [Option ID = 18200]
3. 3 [Option ID = 18201]
4. 4 [Option ID = 18202]

49) Consider the following statements regarding clay minerals in soil :
(A) Some clay particles are technically not colloids yet they have colloid like properties
(B) There are four major types of colloids present in soil
(C) All types of clays are crystalline in nature
(D) Soil humus are not considered as colloids
Choose the most appropriate answer from the options given below :

Choose the most appropriate answer from the options given below :

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

[Question ID = 4685][Question Description = Q50_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18203]
2. 2

[Option ID = 18204]

3. 3

[Option ID = 18205]

4. 4

[Option ID = 18206]

50) Consider the following statements :
(A) Richter magnitude is based upon the amplitude of the largest seismic wave produced during an earthquake
(B) An earthquake with Richter magnitude 7 producers 10 times larger displacement on the seismogram than does a magnitude 6
(C) S-waves travel faster than P waves through solid materials
Choose the most appropriate answer from the options given below :

(1) (A) and (B) Only (2) (B) and (C) Only
(3) (A) and (C) Only (4) (A), (B) and (C)

[Question ID = 4686][Question Description = Q51_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18207]

2. 2

[Option ID = 18208]

3. 3

[Option ID = 18209]

4. 4

[Option ID = 18210]

51) Consider the following statements regarding lines of regression between two variables X and Y.

(A) The correlation between X and Y is the geometric mean of the regression coefficients of Y on X and X on Y

(B) If the variables are uncorrelated, the two lines of regression (i.e. Y on X and X on Y) are perpendicular to each other

(C) If the regression co-efficient Y on X is greater than one, the co-efficient of X on Y must also be greater than one

Choose the most appropriate answer from the options given below :

(1) (A) and (B) Only (2) (B) and (C) Only
(3) (A) and (C) Only (4) (A), (B) and (C)

[Question ID = 4687][Question Description = Q52_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18211]
2. 2 [Option ID = 18212]
3. 3 [Option ID = 18213]
4. 4 [Option ID = 18214]

52) Energy crops :
(A) are fast growing plants
(B) can be grown on degraded, waste, saline or water logged lands
(C) can not be used to produce liquid fuels
(D) usually have high calorific values
Choose the most appropriate answer from the options given below :

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

[Question ID = 4688][Question Description = Q53_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18215]
2. 2 [Option ID = 18216]
3. 3 [Option ID = 18217]
4. 4 [Option ID = 18218]

53) Among the following effects of noise on people, identify the Auditory effects :
(A) Annoyance
(B) Speech interference
(C) Acoustical privacy
(D) Sleep interference

(E) Hearing loss
Choose the most appropriate answer from the options given below :

(1) (A), (B) (C) and (E) Only (2) (B) and (E) Only
(3) (B), (C) and (E) Only (4) (A), (C), (D) and (E) Only
[Question ID = 4689][Question Description = Q54_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18219]
2. 2 [Option ID = 18220]
3. 3 [Option ID = 18221]
4. 4 [Option ID = 18222]

54) In Isokinetic air sampling :
(A) the inlet is faced against the prevailing wind
(B) sampling flow rate is chosen so that inlet speed is same as the wind speed
(C) there should be least possibility of distortion of particles sampled
Choose the most appropriate answer from the options given below :

(1) (A), (B) and (C) (2) (B) and (C) Only
(3) (A) and (C) Only (4) (A) and (B) Only
[Question ID = 4690][Question Description = Q55_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18223]
2. 2 [Option ID = 18224]
3. 3 [Option ID = 18225]
4. 4 [Option ID = 18226]

55) Consider the following statements regarding organic carbon estimation following Walkley and Black method :
(A) Organic carbon estimated by this method excludes most of the less active organic matter
(B) 100% of the total oxidizable organic carbon is oxidized in this method
(C) Soil organic matter percentage can be calculated by multiplying estimated organic carbon percentage by 1.724
(D) K_2SO_4 and H_2SO_4 are used as reagents
Choose the most appropriate answer from the options given below :

(1) (B) and (D) Only (2) (A) and (B) Only
(3) (A) and (C) Only (4) (B) and (C) Only
[Question ID = 4691][Question Description = Q56_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18227]
2. 2 [Option ID = 18228]
3. 3 [Option ID = 18229]
4. 4 [Option ID = 18230]

56)

Which of the following deposition mechanisms dominate(s) for particles in the size range 3-10 μ m?

(A) Diffusion
(B) Impaction
(C) Sedimentation

Choose the most appropriate answer from the options given below :

(1) (B) Only (2) (B) and (C) Only
(3) (A) Only (4) (A) and (C) Only

[Question ID = 4692][Question Description = Q57_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

[Option ID = 18231]
2. 2

[Option ID = 18232]
3. 3

[Option ID = 18233]
4. 4

[Option ID = 18234]

57) Consider the following statements regarding the 2012 application of vermicompost :
(A) Vermicompost is an excellent base for the establishment of beneficial microorganisms
(B) Presence of earthworms helps in aerating the soil
(C) Plants respond slowly compared to compost or farm yard manure

(D) Application of vermicompost augments the growth of N-fixing microbes
(E) Earthworm casts do not harbor vesicular arbuscular micorrhizal (VAM) propagules
Choose the most appropriate answer from the options given below :

(1) (A), (B) and (E) Only (2) (A), (D) and (E) Only
(3) (A), (B) and (D) Only (4) (B), (C) and (E) Only
[Question ID = 4693][Question Description = Q58_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18235]
2. 2 [Option ID = 18236]
3. 3 [Option ID = 18237]
4. 4 [Option ID = 18238]

58) Consider the following statements regarding incineration of urban waste :

(A) Incineration of urban waste is a clean process
(B) Under ideal condition, incineration may reduce the volume of waste by 75-95%
(C) Ash is generated as by-product of incineration
(D) This process of pollutant abatement is inexpensive

Choose the most appropriate answer from the options given below :

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

[Question ID = 4694][Question Description = Q59_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18239]
2. 2

   [Option ID = 18240]
3. 3

   [Option ID = 18241]
4. 4

   [Option ID = 18242]

59) Match List I with List II

List I		List II	
(A)	Stenothermal	(i)	Daphnia
(B)	Eurythermal	(ii)	Heteroneries
(C)	Cyclomorphosis	(iii)	Toads
(D)	Circalunar rhythms	(iv)	Fishes

Choose the correct answer from the options given below :

(1) (A)-(iv), (B)-(iii), (C)-(i), (D)-(ii) (2) (A)-(ii), (B)-(iv), (C)-(iii), (D)-(i)

(3) (A)-(iv), (B)-(iii), (C)-(ii), (D)-(i) (4) (A)-(iii), (B)-(ii), (C)-(i), (D)-(iv)

[Question ID = 4700][Question Description = Q65_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18263]
2. 2

   [Option ID = 18264]
3. 3

   [Option ID = 18265]
4. 4

   [Option ID = 18266]

60) Match List I with List II :

List I		List II	
Mineral type		Geometric shape	
(A)	Helicitic	(i)	Arranged like a star
(B)	Micaceous	(ii)	Consists of small ellipsoid or spheroids
(C)	Oolitic	(iii)	Consists of thin plate like lamelae
(D)	Stellate	(iv)	Twisted and curved, like coral branching

Choose the correct answer from the options given below :

(1) (A)-(iv), (B)-(iii), (C)-(i), (D)-(ii) (2) (A)-(iv), (B)-(iii), (C)-(ii), (D)-(i)

(3) (A)-(i), (B)-(ii), (C)-(iii), (D)-(iv) (4) (A)-(i), (B)-(ii), (C)-(iv), (D)-(iii)

[Question ID = 4701][Question Description = Q66_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18267]
2. 2

   [Option ID = 18268]
3. 3

   [Option ID = 18269]
4. 4

   [Option ID = 18270]

61) Match List I with List II :

List I		List II	
Air Quality Index		Categorization	
(A)	0 - 50	(i)	Poor
(B)	51 - 100	(ii)	Severe
(C)	201 - 300	(iii)	Good
(D)	401 - 500	(iv)	Satisfactory

Choose the correct answer from the options given below :

(1) (A)-(iii), (B)-(iv), (C)-(ii), (D)-(i) (2) (A)-(iii), (B)-(iv), (C)-(i), (D)-(ii)

(3) (A)-(i), (B)-(ii), (C)-(iv), (D)-(iii) (4) (A)-(i), (B)-(ii), (C)-(iii), (D)-(iv)

[Question ID = 4702][Question Description = Q67_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18271]
2. 2

   [Option ID = 18272]
3. 3

   [Option ID = 18273]
4. 4

   [Option ID = 18274]

62) Match List I with List II :

List I		List II	
Water Quality Parameter		Chemical/Reagent used in Analysis	
(A)	Iron	(i)	Barium Chloride
(B)	Dissolved Oxygen	(ii)	Phenanthroline
(C)	Calcium	(iii)	Murexide
(D)	Sulphate	(iv)	Manganous Sulphate

Choose the correct answer from the options given below :

(1) (A)-(i), (B)-(iii), (C)-(ii), (D)-(iv) (2) (A)-(ii), (B)-(iv), (C)-(iii), (D)-(i)

(3) (A)-(ii), (B)-(iii), (C)-(i), (D)-(iv) (4) (A)-(iv), (B)-(ii), (C)-(iii), (D)-(i)

[Question ID = 4703][Question Description = Q68_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18275]
2. 2

   [Option ID = 18276]
3. 3

   [Option ID = 18277]
4. 4

   [Option ID = 18278]

63) Match List I with List II :

List I		List II	
(A)	Animal Anatomical Waste	(i)	White
(B)	Waste sharp	(ii)	Blue
(C)	Discarded catheters	(iii)	Yellow
(D)	Disposable glasswares	(iv)	Red

Choose the correct answer from the options given below :

(1) (A)-(ii), (B)-(iii), (C)-(iv), (D)-(i) (2) (A)-(iii), (B)-(ii), (C)-(iv), (D)-(i)

(3) (A)-(iv), (B)-(i), (C)-(ii), (D)-(iii) (4) (A)-(iii), (B)-(i), (C)-(iv), (D)-(ii)

[Question ID = 4704][Question Description = Q69_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18279]
2. 2

   [Option ID = 18280]
3. 3

   [Option ID = 18281]
4. 4

   [Option ID = 18282]

64) Match List I with List II :

List I (Waste type)		List II (Toxic elements)	
(A)	Wood preservatives	(i)	Cadmium
(B)	Food cans	(ii)	Mercury
(C)	Colored printing inks	(iii)	Arsenic
(D)	Fluorescent lamps	(iv)	Lead

Choose the correct answer from the options given below :

(1) (A)-(iii), (B)-(i), (C)-(ii), (D)-(iv) (2) (A)-(iii), (B)-(iv), (C)-(i), (D)-(ii)

(3) (A)-(iii), (B)-(ii), (C)-(iv), (D)-(i) (4) (A)-(iv), (B)-(ii), (C)-(iii), (D)-(i)

[Question ID = 4705][Question Description = Q70_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18283]
2. 2

   [Option ID = 18284]
3. 3

   [Option ID = 18285]
4. 4

   [Option ID = 18286]

65) Match List I with List II :

List I Wild Animal / Plant		List II Schedule of Wildlife Protection Act	
(A)	Musk Deer	(i)	III
(B)	Himalayan Black Bear	(ii)	VI
(C)	Pitcher Plant	(iii)	I
(D)	Bison (Gaur)	(iv)	II

Choose the correct answer from the options given below :

(1) (A)-(iii), (B)-(i), (C)-(ii), (D)-(iv) (2) (A)-(i), (B)-(ii), (C)-(iii), (D)-(iv)

(3) (A)-(iv), (B)-(iii), (C)-(ii), (D)-(i) (4) (A)-(ii), (B)-(iii), (C)-(iv), (D)-(i)

[Question ID = 4706][Question Description = Q71_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18287]
2. 2

   [Option ID = 18288]
3. 3

   [Option ID = 18289]
4. 4

   [Option ID = 18290]

66) Match List I with List II :

List I (Pollutant)		List II (Health Effects)	
(A)	Cadmium	(i)	Severe skin condition 'Chloracne'
(B)	Dioxin	(ii)	Cancer
(C)	Carbofuran	(iii)	Weakening of bones
(D)	Benzo (a) Pyrene	(iv)	Impeded neuro-transmission

Choose the correct answer from the options given below :

(1) (A)-(iv), (B)-(iii), (C)-(i), (D)-(ii) **(2) (A)-(iv), (B)-(i), (C)-(ii), (D)-(iii)**

(3) (A)-(iii), (B)-(iv), (C)-(i), (D)-(ii) **(4) (A)-(iii), (B)-(i), (C)-(iv), (D)-(ii)**

[Question ID = 4707][Question Description = Q72_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18291]
2. 2

   [Option ID = 18292]
3. 3

   [Option ID = 18293]
4. 4

   [Option ID = 18294]

67) Match List I with List II :

List I Method		List II Estimation of	
(A)	X-Ray Fluorescence meter	(i)	Functional groups
(B)	Quartz Crystal Microbalance	(ii)	Inorganic compounds
(C)	Fourier Transform Infrared Spectrometer	(iii)	Multi-element analysis
(D)	Laser Microprobe Mass Spectrometry	(iv)	Particulate matter

Choose the correct answer from the options given below :

(1) (A)-(i), (B)-(iii), (C)-(iv), (D)-(ii) **(2) (A)-(iii), (B)-(iv), (C)-(ii), (D)-(i)**

(3) (A)-(iii), (B)-(iv), (C)-(i), (D)-(ii) **(4) (A)-(i), (B)-(iii), (C)-(ii), (D)-(iv)**

[Question ID = 4708][Question Description = Q73_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18295]
2. 2

   [Option ID = 18296]
3. 3

   [Option ID = 18297]
4. 4

   [Option ID = 18298]

68) Match List I with List II :

List I		List II	
Hydropower projects		River	
(A)	Sardar Sarovar project	(i)	Bhagirathi River
(B)	Tehri Dam project	(ii)	Narmada River
(C)	Pong Dam	(iii)	Mahanadi River
(D)	Hirakund Dam	(iv)	Beas River

Choose the correct answer from the options given below :

(1) (A)-(i), (B)-(ii), (C)-(iv), (D)-(iii) **(2) (A)-(iv), (B)-(iii), (C)-(ii), (D)-(i)**

(3) (A)-(iii), (B)-(iv), (C)-(i), (D)-(ii) **(4) (A)-(ii), (B)-(i), (C)-(iv), (D)-(iii)**

[Question ID = 4709][Question Description = Q74_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18299]
2. 2

   [Option ID = 18300]
3. 3

   [Option ID = 18301]
4. 4

   [Option ID = 18302]

69) Identify the correct sequence of the following data products of Indian satellites according to their spatial resolutions :
(A) Cartosat - 2 PAN
(B) Oceansat - 2 OCM
(C) Resourcesat - 2 AWIFS
(D) IRS - ID LISS - 3
Choose the correct answer from the options given below :

(1) C > A > B > D **(2) B > D > C > A**
(3) C > B > D > A **(4) B > C > D > A**

[Question ID = 4710][Question Description = Q75_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18303]
2. 2 [Option ID = 18304]
3. 3 [Option ID = 18305]
4. 4 [Option ID = 18306]

70) Identify the correct sequence of natural surfaces according to their albedo :
(A) Ocean
(B) Fresh snow
(C) Grass
(D) Desert Sand
Choose the correct answer from the options given below :

(1) A < B < C < D **(2) C < A < D < B**
(3) C < A < B < D **(4) A < C < D < B**

[Question ID = 4711][Question Description = Q76_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18307]
2. 2

   [Option ID = 18308]
3. 3

   [Option ID = 18309]
4. 4

   [Option ID = 18310]

71) What is the correct order of abundance of following heavy metals in the earth's crust?
(A) Fe
(B) Mg
(C) Al
(D) Cu
Choose the correct answer from the options given below :

(1) A > C > B > D **(2) A > C > D > B**

(3) C > A > B > D (4) C > A > D > B

[Question ID = 4712][Question Description = Q77_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18311]
2. 2 [Option ID = 18312]
3. 3 [Option ID = 18313]
4. 4 [Option ID = 18314]

72) Identify the correct sequence in ascending order of the grade of metamorphism :

(A) Gneiss

(B) Slate

(C) Schist

(D) Shale

Choose the correct answer from the options given below :

(1) (A), (B), (C), (D) (2) (D), (C), (B), (A)

(3) (B), (D), (C), (A) (4) (D), (B), (C), (A)

[Question ID = 4713][Question Description = Q78_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18315]
2. 2 [Option ID = 18316]
3. 3 [Option ID = 18317]
4. 4 [Option ID = 18318]

73) In the context of urban environment, arrange the following in order of increasing residence time.

(A) Formaldehyde

(B) Carbon-mono-oxide

(C) Peroxyacetyl nitrate

(D) Hydroxyl radical

Choose the correct answer from the options given below :

(1) A < D < B < C (2) A < B < D < C

(3) D < A < C < B (4) B < C < A < D

[Question ID = 4714][Question Description = Q79_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18319]
2. 2

   [Option ID = 18320]
3. 3

   [Option ID = 18321]
4. 4

   [Option ID = 18322]

74) Identify the correct sequence of Life Time (years) of the green house gases in increasing order

: (A) CH_4 (Methane)

(B) N_2O (Nitrous Oxide)

(C) CFC-12

(D) O_3 (Tropospheric)

Choose the correct answer from the options given below :

(1) A, D, B, C (2) D, A, C, B

(3) B, A, D, C (4) B, D, A, C

[Question ID = 4715][Question Description = Q80_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18323]
2. 2

   [Option ID = 18324]
3. 3

   [Option ID = 18325]
4. 4

   [Option ID = 18326]

75) Identify the correct sequence of Net Heating Value (MJ/Kg) in increasing order for the following fuels.

(A) Charcoal

(B) Bituminous coal
(C) Regular gasoline
(D) Natural gas
(E) Oak wood
Choose the correct answer from the options given below :

(1) A, E, B, C, D (2) E, B, A, C, D
(3) B, A, E, D, C (4) E, A, B, C, D

[Question ID = 4716][Question Description = Q81_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

[Option ID = 18327]
2. 2

[Option ID = 18328]
3. 3

[Option ID = 18329]
4. 4

[Option ID = 18330]

76) Identify the correct sequence of conversion of a fertile nuclear material to a fissile material involving the following nuclei

(A) Np_{146}^{239}

(B) U_{147}^{239}

(C) Pu_{145}^{239}

(D) U_{146}^{238}

Choose the correct answer from the options given below :

(1) A, B, C, D (2) A, B, D, C
(3) B, D, A, C (4) D, B, A, C

[Question ID = 4717][Question Description = Q82_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18331]
2. 2 [Option ID = 18332]
3. 3 [Option ID = 18333]
4. 4 [Option ID = 18334]

77) Identify the correct sequence of moisture content (%) in ascending order in the following categories of wastes :
(A) Animal solids and organic waste
(B) Trash
(C) Rubbish
(D) Garbage
(E) Refuse
Choose the correct answer from the options given below :

(1) E, D, B, C, A (2) C, B, D, E, A
(3) A, B, C, E, D (4) B, C, E, D, A
[Question ID = 4719][Question Description = Q84_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18339]
2. 2 [Option ID = 18340]
3. 3 [Option ID = 18341]
4. 4 [Option ID = 18342]

78) According to the Solid Waste Management Rules 2016, arrange the following metals in decreasing order of their permissible concentration (mg/kg) in the prepared compost :
(A) Chromium
(B) Lead
(C) Cadmium
(D) Copper
Choose the correct answer from the options given below :

(1) A, B, C, D (2) B, D, A, C
(3) D, B, A, C (4) D, A, B, C
[Question ID = 4720][Question Description = Q85_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18343]

2. 2 [Option ID = 18344]
3. 3 [Option ID = 18345]
4. 4 [Option ID = 18346]

79) Given below are two statements :
Statement I : Mean deviation is a better measure of dispersion than the quartile deviation.
Statement II : Mean deviation is obtained by dividing the algebraic sum of deviations about mean by total number of observations.
In the light of the above statements, choose the correct answer from the options given below :

(1) Both Statement I and Statement II are true (2) Both Statement I and Statement II are false
(3) Statement I is true but Statement II is false (4) Statement I is false but Statement II is true
[Question ID = 4721][Question Description = Q86_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18347]
2. 2 [Option ID = 18348]
3. 3 [Option ID = 18349]
4. 4 [Option ID = 18350]

80) Given below are two statements :
Statement I : The log-normal distribution is positively skewed.
Statement II : A negatively skewed distribution has its long tail to the left
. In the light of the above statements, choose the correct answer from the options given below :

(1) Both Statement I and Statement II are true (2) Both Statement I and Statement II are false
(3) Statement I is true but Statement II is false (4) Statement I is false but Statement II is true
[Question ID = 4722][Question Description = Q87_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18351]
2. 2 [Option ID = 18352]
3. 3 [Option ID = 18353]
4. 4 [Option ID = 18354]

81) Given below are two statements : One is labelled as Assertion A and the other is labelled as Reason R.
Assertion A : In the hybrid car technology, cars run on both petrol and battery based electrical engines.
Reason R : Battery of the hybrid car is externally charged.
In the light of the above statements, choose the correct answer from the options given below :

(1) Both A and R are true and R is the correct explanation of A (2) Both A and R are true but R is NOT the correct explanation of A
(3) A is true but R is false (4) A is false but R is true

[Question ID = 4724][Question Description = Q89_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1

   [Option ID = 18359]
2. 2

   [Option ID = 18360]
3. 3

   [Option ID = 18361]
4. 4

   [Option ID = 18362]

82) Given below are two statements :
Statement I : Gasoline mixed with biofuels (ethanol) has generally more energy content than pure gasoline.
Statement II : Energy content per unit volume of ethanol is more than that of gasoline.
In the light of the above statements, choose the correct answer from the options given below :

(1) Both Statement I and Statement II are true (2) Both Statement I and Statement II are false
(3) Statement I is true but Statement II is false (4) Statement I is false but Statement II is true
[Question ID = 4725][Question Description = Q90_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18363]
2. 2 [Option ID = 18364]
3. 3 [Option ID = 18365]
4. 4 [Option ID = 18366]

83)

Which article in Indian constitution recognizes the "Directive Principle of State Policy" for the protection of environment and wildlife?

(1) Article 42 (2) Article 21

(3) Article 51A(g) (4) Article 48A

[Question ID = 4726][Question Description = Q34_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18367]
2. 2

   [Option ID = 18368]
3. 3

   [Option ID = 18369]
4. 4

   [Option ID = 18370]

84)

Which of the following are included in the list of hazardous wastes as per Hazardous Waste Rules, 2016?

(A) Flyash

(B) Empty barrels contaminated with hazardous waste

(C) Red mud

(D) Chemical-containing residue arising from decontamination

Choose the most appropriate answer from the options given below :

(1) (A), (B) and (C) Only (2) (B) and (D) Only

(3) (B) and (C) Only (4) (A), (B) and (D) Only

[Question ID = 4727][Question Description = Q60_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18371]
2. 2

   [Option ID = 18372]
3. 3

   [Option ID = 18373]
4. 4

   [Option ID = 18374]

85)

The Biological Diversity Act 2002 provides the following provisions :

(A) Regulation of access to biodiversity

(B) Does not allow local communities for using their biological resources

(C) Establishment of state biodiversity boards

(D) Equitable sharing of benefits of biological resources with local communities

Choose the correct answer from the options given below :

(1) (A), (B) and (C) Only (2) (B), (C) and (D) Only

(3) (A), (B) and (D) Only (4) (A), (C) and (D) Only

[Question ID = 4728][Question Description = Q61_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18375]
2. 2

   [Option ID = 18376]
3. 3

   [Option ID = 18377]
4. 4

   [Option ID = 18378]

86)

The Government of India has introduced a scheme of eco-labelling of consumer products as "Ecomark".

(A) This scheme was introduced in 1986

(B) This scheme was introduced in 1991

(C) 'ISI' was given the mark for this scheme

(D) An 'earthen pitcher' was made the symbol for this scheme

Choose the most appropriate answer from the options given below :

(1) (A) and (D) Only (2) (A) and (C) Only

(3) (B) and (D) Only (4) (C) and (D) Only

[Question ID = 4729][Question Description = Q62_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18379]

2. 2

[Option ID = 18380]

3. 3

[Option ID = 18381]

4. 4

[Option ID = 18382]

87)

Consider the following statements :

(A) Arithmetic Mean is greater than the geometric mean for two non-equal positive real numbers

(B) Correlation coefficient is a confirmatory tool to establish causal relationship between two variables

(C) Regression coefficient is independent of change of origin

Choose the correct answer from the options given below :

(1) (A) and (B) Only (2) (B) and (C) Only

(3) (A) and (C) Only (4) (A), (B) and (C)

[Question ID = 4730][Question Description = Q63_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18383]

2. 2

[Option ID = 18384]

3. 3

[Option ID = 18385]

4. 4

[Option ID = 18386]

88)

Which of the following are correct in the context of the Elephant Project?

(A) It was launched in February, 1992

(B) It was launched in April, 1973

(C) It is being implemented in 16 states

(D) Project is being executed in 50 reserves

(E) Project is being executed in 32 reserves

Choose the correct answer from the options given below :

(1) (B), (C) and (D) Only (2) (A), (C) and (D) Only

(3) (A), (C) and (E) Only (4) (B), (C), (D) and (E) Only

[Question ID = 4731][Question Description = Q64_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18387]

2. 2

[Option ID = 18388]

3. 3

[Option ID = 18389]

4. 4

[Option ID = 18390]

89)

Identify the correct sequence of the given soil texture classes in decreasing order of stability of wet clods :

(A) Loam

(B) Clay

(C) Sandy Loam

(D) Silt Loam

(E) Clay Loam

Choose the correct answer from the options given below :

(1) A, B, D, E, C (2) B, E, D, A, C

(3) B, D, A, C, E (4) B, E, A, C, D

[Question ID = 4732][Question Description = Q83_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18391]

2. 2

[Option ID = 18392]

3. 3

[Option ID = 18393]

4. 4

[Option ID = 18394]

90)

Given below are two statements :

Consider the following two statements with reference to Gaussian Plume Model.

Statement I : Turbulent diffusion causes mixing of pollutants at a rate faster than molecular diffusion in atmosphere.

Statement II : The distance from the stack, where maximum ground level concentration is observed, is relatively large when the atmosphere is more turbulent.

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 correct

(2) Both Statement I and Statement II are incorrect

(3) Statement I is correct but Statement II is incorrect

(4) Statement I is incorrect but Statement II is correct

[Question ID = 4733][Question Description = Q88_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

[Option ID = 18395]

2. 2

[Option ID = 18396]

3. 3

[Option ID = 18397]

4. 4

[Option ID = 18398]

Topic:- 89EVS_B

1) Read the passage given below. Based on it answer the question.

According to a study published recently in the journal Nature Climate Change, while black carbon has a large effect on snow darkening and resultant melting of snow, dust particles transported from as far as Saudi Arabia that get deposited in the Western Himalayan Region (WHR) have a large role to play in melting of snow, particularly at higher elevations. Dust transported as elevated, aerosol layers get deposited at 1 – 5 km elevations, black carbon emission is mostly a surface phenomenon and influences melting of snow from surface to about 3 km elevation.

Based on remote sensing data of spatial distribution of dust aerosol concentration over the Indian subcontinent and dust-induced snow albedo reduction over Himalayas during the period 2011-2016 and simulations, it has been inferred that the relative impacts of dust and black carbon vary with surface elevation of snow pack. This is in addition to snow-melt caused by warming due to climate change. Earlier studies have shown that the magnitude of snow mass decrease is about 1mm per year at 1 km elevation, about 5 mm per year at 4.5 km elevation and about 3 mm per year at 6 km elevation.

Though black carbon has a larger snow albedo darkening effect than dust due to a larger mass absorption efficiency, the study found that radiative effects of dust deposited on snow are comparable to black carbon in the WHR at higher elevations. This is mainly because the deposition of the dust by mass is 100-1000 times more than black carbon.

As the elevation increases, the influence of dust comes greater than black carbon and this coincides with maximum intensity of snow melt reduction seen at 3-5 km elevation. Between these two black carbon mainly contributes to snow melt at lower elevation while dust is the major contributor for snow melt at higher elevation.

Westerlies transport dust particles as elevated aerosol layers at maximum intensities mostly during the pre-monsoon period and this gets deposited at higher elevations in the WHR.

Due to global warming, snow cover at lower elevations in the Himalayas will occur less frequently or totally disappear compared with snow cover at higher elevations. The annual contribution of dust to snow melt will therefore likely increase in future as the black carbon effect at lower elevation weakness with dwindling snow pack.

Snow melt in Himalayas is on account of :

(A) Dust deposition
(B) Black carbon deposition
(C) Increase in albedo
(D) Climate change
(1) (A) and (B) only (2) (A), (B), (C) and (D)
(3) (A), (B) and (C) only (4) (A), (B) and (D) only
[Question ID = 4734][Question Description = Q91_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18399]
2. 2 [Option ID = 18400]
3. 3 [Option ID = 18401]
4. 4 [Option ID = 18402]

2) Read the passage given below. Based on it answer the question.

According to a study published recently in the journal Nature Climate Change, while black carbon has a large effect on snow darkening and resultant melting of snow, dust particles transported from as far as Saudi Arabia that get deposited in the Western Himalayan Region (WHR) have a large role to play in melting of snow, particularly at higher elevations. Dust transported as elevated, aerosol layers get deposited at 1 – 5 km elevations, black carbon emission is mostly a surface phenomenon and influences melting of snow from surface to about 3 km elevation.

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As the elevation increases, the influence of dust comes greater than black carbon and this coincides with maximum intensity of snow melt reduction seen at 3-5 km elevation. Between these two black carbon mainly contributes to snow melt at lower elevation while dust is the major contributor for snow melt at higher elevation.

Westerlies transport dust particles as elevated aerosol layers at maximum intensities mostly during the pre-monsoon period and this gets deposited at higher elevations in the WHR.

Due to global warming, snow cover at lower elevations in the Himalayas will occur less frequently or totally disappear compared with snow cover at higher elevations. The annual contribution of dust to snow melt will therefore likely increase in future as the black carbon effect at lower elevation weakness with dwindling snow pack.

Maximum rate of snow mass reduction per annum is at elevation of :

(1) 1 km (2) 3-5 km
(3) 6 km (4) 2 km

Maximum rate of snow mass reduction per annum is at elevation of :

(1) 1 km (2) 3-5 km

(3) 6 km (4) 2 km

[Question ID = 4735][Question Description = Q92_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18403]
2. 2 [Option ID = 18404]
3. 3 [Option ID = 18405]
4. 4 [Option ID = 18406]

3) Read the passage given below. Based on it answer the question.

According to a study published recently in the journal Nature Climate Change, while black carbon has a large effect on snow darkening and resultant melting of snow, dust particles transported from as far as Saudi Arabia that get deposited in the Western Himalayan Region (WHR) have a large role to play in melting of snow, particularly at higher elevations. Dust transported as elevated, aerosol layers get deposited at 1 – 5 km elevations, black carbon emission is mostly a surface phenomenon and influences melting of snow from surface to about 3 km elevation.

Based on remote sensing data of spatial distribution of dust aerosol concentration over the Indian subcontinent and dust-induced snow albedo reduction over Himalayas during the period 2011-2016 and simulations, it has been inferred that the relative impacts of dust and black carbon vary with surface elevation of snow pack. This is in addition to snow-melt caused by warming due to climate change. Earlier studies have shown that the magnitude of snow mass decrease is about 1mm per year at 1 km elevation, about 5 mm per year at 4.5 km elevation and about 3 mm per year at 6 km elevation.

Though black carbon has a larger snow albedo darkening effect than dust due to a larger mass absorption efficiency, the study found that radiative effects of dust deposited on snow are comparable to black carbon in the WHR at higher elevations. This is mainly because the deposition of the dust by mass is 100-1000 times more than black carbon.

As the elevation increases, the influence of dust comes greater than black carbon and this coincides with maximum intensity of snow melt reduction seen at 3-5 km elevation. Between these two black carbon mainly contributes to snow melt at lower elevation while dust is the major contributor for snow melt at higher elevation.

Westerlies transport dust particles as elevated aerosol layers at maximum intensities mostly during the pre-monsoon period and this gets deposited at higher elevations in the WHR.

Due to global warming, snow cover at lower elevations in the Himalayas will occur less frequently or totally disappear compared with snow cover at higher elevations. The annual contribution of dust to snow melt will therefore likely increase in future as the black carbon effect at lower elevation weakness with dwindling snow pack.

Given below are two statements : One is labelled as Assertion A and the other is labelled as Reason R :

Assertion A : Reduction in snow albedo is more in case of black carbon than dust

Reason R : Black carbon has higher mass absorption efficiency compared to dust.

In the light of the above statements, choose the correct answer from the options given below :

(1) Both A and R are true and R is the correct explanation of A (2) Both A and R are true but R is NOT the correct explanation of A

(3) A is true but R is false (4) A is false but R is true

[Question ID = 4736][Question Description = Q93_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18407]
2. 2 [Option ID = 18408]
3. 3 [Option ID = 18409]
4. 4 [Option ID = 18410]

4) Read the passage given below. Based on it answer the question.

According to a study published recently in the journal Nature Climate Change, while black carbon has a large effect on snow darkening and resultant melting of snow, dust particles transported from as far as Saudi Arabia that get deposited in the Western Himalayan Region (WHR) have a large role to play in melting of snow, particularly at higher elevations. Dust transported as elevated, aerosol layers get deposited at 1 – 5 km elevations, black carbon emission is mostly a surface phenomenon and influences melting of snow from surface to about 3 km elevation.

Based on remote sensing data of spatial distribution of dust aerosol concentration over the Indian subcontinent and dust-induced snow albedo reduction over Himalayas during the period 2011-2016 and simulations, it has been inferred that the relative impacts of dust and black carbon vary with surface elevation of snow pack. This is in addition to snow-melt caused by warming due to climate change. Earlier studies have shown that the magnitude of snow mass decrease is about 1mm per year at 1 km elevation, about 5 mm per year at 4.5 km elevation and about 3 mm per year at 6 km elevation.

Though black carbon has a larger snow albedo darkening effect than dust due to a larger mass absorption efficiency, the study found that radiative effects of dust deposited on snow are comparable to black carbon in the WHR at higher elevations. This is mainly because the deposition of the dust by mass is 100-1000 times more than black carbon.

As the elevation increases, the influence of dust comes greater than black carbon and this coincides with maximum intensity of snow melt reduction seen at 3-5 km elevation. Between these two black carbon mainly contributes to snow melt at lower elevation while dust is the major contributor for snow melt at higher elevation.

Westerlies transport dust particles as elevated aerosol layers at maximum intensities mostly during the pre-monsoon period and this gets deposited at higher elevations in the WHR.

Due to global warming, snow cover at lower elevations in the Himalayas will occur less frequently or totally disappear compared with snow cover at higher elevations. The annual contribution of dust to snow melt will therefore likely increase in future as the black carbon effect at lower elevation weakness with dwindling snow pack.

Given below are two statements : one is labelled as Assertion A and the other is labelled as Reason R :

Assertion A : Radiative effects of dust deposited on snow are comparable to black carbon in the WHR at higher elevations.

Reason R : Both black carbon and dust darken the snow cover.
In the light of the above statements, choose the correct answer from the options given below :

(1) Both A and R are true and R is the correct explanation of A (2) Both A and R are true but R is NOT the correct explanation of A
(3) A is true but R is false (4) A is false but R is true
[Question ID = 4737][Question Description = Q94_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18411]
2. 2 [Option ID = 18412]
3. 3 [Option ID = 18413]
4. 4 [Option ID = 18414]

5) Read the passage given below. Based on it answer the question.
According to a study published recently in the journal Nature Climate Change, while black carbon has a large effect on snow darkening and resultant melting of snow, dust particles transported from as far as Saudi Arabia that get deposited in the Western Himalayan Region (WHR) have a large role to play in melting of snow, particularly at higher elevations. Dust transported as elevated, aerosol layers get deposited at 1 – 5 km elevations, black carbon emission is mostly a surface phenomenon and influences melting of snow from surface to about 3 km elevation.
Based on remote sensing data of spatial distribution of dust aerosol concentration over the Indian subcontinent and dust-induced snow albedo reduction over Himalayas during the period 2011-2016 and simulations, it has been inferred that the relative impacts of dust and black carbon vary with surface elevation of snow pack. This is in addition to snow-melt caused by warming due to climate change. Earlier studies have shown that the magnitude of snow mass decrease is about 1mm per year at 1 km elevation, about 5 mm per year at 4.5 km elevation and about 3 mm per year at 6 km elevation.
Though black carbon has a larger snow albedo darkening effect than dust due to a larger mass absorption efficiency, the study found that radiative effects of dust deposited on snow are comparable to black carbon in the WHR at higher elevations. This is mainly because the deposition of the dust by mass is 100-1000 times more than black carbon.
As the elevation increases, the influence of dust comes greater than black carbon and this coincides with maximum intensity of snow melt reduction seen at 3-5 km elevation. Between these two black carbon mainly contributes to snow melt at lower elevation while dust is the major contributor for snow melt at higher elevation.
Westerlies transport dust particles as elevated aerosol layers at maximum intensities mostly during the pre-monsoon period and this gets deposited at higher elevations in the WHR.
Due to global warming, snow cover at lower elevations in the Himalayas will occur less frequently or totally disappear compared with snow cover at higher elevations. The annual contribution of dust to snow melt will therefore likely increase in future as the black carbon effect at lower elevation weakness with dwindling snow pack.
The passage clearly brings out the finding that :

(1) Black carbon causes global warming (2) Dust causes global warming
(3) Dust modifies the radiative properties of snow cover to the same extent as black carbon (4) Black carbon and dust are competing agents in melting of snow packs
[Question ID = 4738][Question Description = Q95_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18415]
2. 2 [Option ID = 18416]
3. 3 [Option ID = 18417]
4. 4 [Option ID = 18418]

Topic:- 89EVS_C

1) Read the following passage carefully and answer the question :
Ecologists and Economists have joined forces to estimate the value of the services that the World's ecosystems provide. There are many direct goods such as foods and indirect services, such as the assimilation of waste that ecological systems provide on a renewable basis. Many ecosystems provide more than one service. For example, swamps are important in flood control, water supply and waste treatment and as habitat. In turn, most services are provided by more than one ecosystem; for instance, many systems are involved in nutrient cycling. Robert Constanza and his colleagues estimated that the World's ecosystems provide atleast US $ 33 trillion worth of services annually. This staggering figure is more than the total gross national product, which is around US $ 19 trillion per year. The majority of the services are currently outside the market system and include atmospheric gas regulation, waste treatment and nutrient cycling, which at US $ 17 trillion, was by far the most expensive services performed, but even if we eliminate this, the total annual value would still be a whopping US $ 16 trillion. About 63 percent of the estimated value of natural ecosystems is contributed by marine system; with most of the value coming from coastal systems (US $ 10.6 trillion per year). About 37 percent of the estimated value cames from terrestrial systems, mainly forests (US $ 4.7 trillion) and wetlands (US $ 4.9 trillion). If ecosystem services were actually paid for, the global price system would be very different from what it is today. The price of commodities would skyrocket. However, because ecosystem services are largely outside the market, they are usually ignored or grossly undervalued.
Ecosystem services which have no market value are :
(A) Providing food
(B) Nutrient cycling
(C) Atmospheric gas regulation
(D) Water supply
Choose the most appropriate answer from the options given below :

(1) (A) and (B) only (2) (B) and (C) only
(3) (A) and (D) only (4) (C) and (D) only
[Question ID = 4739][Question Description = Q96_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18419]
2. 2 [Option ID = 18420]
3. 3 [Option ID = 18421]
4. 4 [Option ID = 18422]

2) Read the following passage carefully and answer the question :
Ecologists and Economists have joined forces to estimate the value of the services that the World's ecosystems provide. There are many direct goods such as foods and indirect services, such as the assimilation of waste that ecological systems provide on a renewable basis. Many ecosystems provide more than one service. For example, swamps are important in flood control, water supply and waste treatment and as habitat. In turn, most services are provided by more than one ecosystem; for instance, many systems are involved in nutrient cycling. Robert Constanza and his colleagues estimated that the World's ecosystems provide atleast US $ 33 trillion worth of services annually. This staggering figure is more than the total gross national product, which is around US $ 19 trillion per year. The majority of the services are currently outside the market system and include atmospheric gas regulation, waste treatment and nutrient cycling, which at US $ 17 trillion, was by far the most expensive services performed, but even if we eliminate this, the total annual value would still be a whopping US $ 16 trillion. About 63 percent of the estimated value of natural ecosystems is contributed by marine system; with most of the value coming from coastal systems (US $ 10.6 trillion per year). About 37 percent of the estimated value cames from terrestrial systems, mainly forests (US $ 4.7 trillion) and wetlands (US $ 4.9 trillion). If ecosystem services were actually paid for, the global price system would be very different from what it is today. The price of commodities would skyrocket. However, because ecosystem services are largely outside the market, they are usually ignored or grossly undervalued.
Which one of the following ecosystems provide maximum estimated value of ecosystem services?

(1) Forest ecosystem (2) Coastal ecosystem
(3) Grassland ecosystem (4) Desert ecosystem
[Question ID = 4740][Question Description = Q97_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18423]
2. 2 [Option ID = 18424]
3. 3 [Option ID = 18425]
4. 4 [Option ID = 18426]

3) Read the following passage carefully and answer the question :
Ecologists and Economists have joined forces to estimate the value of the services that the World's ecosystems provide. There are many direct goods such as foods and indirect services, such as the assimilation of waste that ecological systems provide on a renewable basis. Many ecosystems provide more than one service. For example, swamps are important in flood control, water supply and waste treatment and as habitat. In turn, most services are provided by more than one ecosystem; for instance, many systems are involved in nutrient cycling. Robert Constanza and his colleagues estimated that the World's ecosystems provide atleast US $ 33 trillion worth of services annually. This staggering figure is more than the total gross national product, which is around US $ 19 trillion per year. The majority of the services are currently outside the market system and include atmospheric gas regulation, waste treatment and nutrient cycling, which at US $ 17 trillion, was by far the most expensive services performed, but even if we eliminate this, the total annual value would still be a whopping US $ 16 trillion. About 63 percent of the estimated value of natural ecosystems is contributed by marine system; with most of the value coming from coastal systems (US $ 10.6 trillion per year). About 37 percent of the estimated value cames from terrestrial systems, mainly forests (US $ 4.7 trillion) and wetlands (US $ 4.9 trillion). If ecosystem services were actually paid for, the global price system would be very different from what it is today. The price of commodities would skyrocket. However, because ecosystem services are largely outside the market, they are usually ignored or grossly undervalued.
Swamp ecosystems provide the following ecosystem services.
(A) Assimilation of waste
(B) Provide habitat for organisms
(C) Terrestrial fruits
(D) Flood control
Choose the most appropriate answer from the options given below :

(1) (A) and (C) only (2) (B), (C) and (D) only
(3) (A), (B) and (D) only (4) (A), (B) and (C) only
[Question ID = 4741][Question Description = Q98_EVS_89_SHAAN_21NOV_S1_Shift2]
1. 1 [Option ID = 18427]
2. 2 [Option ID = 18428]
3. 3 [Option ID = 18429]
4. 4 [Option ID = 18430]

4) Read the following passage carefully and answer the question :
Ecologists and Economists have joined forces to estimate the value of the services that the World's ecosystems provide. There are many direct goods such as foods and indirect services, such as the assimilation of waste that ecological systems provide on a renewable basis. Many ecosystems provide more than one service. For example, swamps are important in flood control, water supply and waste treatment and as habitat. In turn, most services are provided by more than one ecosystem; for instance, many systems are involved in nutrient cycling. Robert Constanza and his colleagues estimated that the World's ecosystems provide atleast US $ 33 trillion worth of services annually. This staggering figure is more than the total gross

national product, which is around US $ 19 trillion per year. The majority of the services are currently outside the market system and include atmospheric gas regulation, waste treatment and nutrient cycling, which at US $ 17 trillion, was by far the most expensive services performed, but even if we eliminate this, the total annual value would still be a whopping US $ 16 trillion. About 63 percent of the estimated value of natural ecosystems is contributed by marine system; with most of the value coming from coastal systems (US $ 10.6 trillion per year). About 37 percent of the estimated value cames from terrestrial systems, mainly forests (US $ 4.7 trillion) and wetlands (US $ 4.9 trillion). If ecosystem services were actually paid for, the global price system would be very different from what it is today. The price of commodities would skyrocket. However, because ecosystem services are largely outside the market, they are usually ignored or grossly undervalued.

If the ecosystem services are paid for, the price of commodities will :

(1) Increase marginally (2) become very high

(3) remain unaffected (4) decrease marginally

[Question ID = 4742][Question Description = Q99_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1

   [Option ID = 18431]
2. 2

   [Option ID = 18432]
3. 3

   [Option ID = 18433]
4. 4

   [Option ID = 18434]

5) Read the following passage carefully and answer the question :

Ecologists and Economists have joined forces to estimate the value of the services that the World's ecosystems provide. There are many direct goods such as foods and indirect services, such as the assimilation of waste that ecological systems provide on a renewable basis. Many ecosystems provide more than one service. For example, swamps are important in flood control, water supply and waste treatment and as habitat. In turn, most services are provided by more than one ecosystem; for instance, many systems are involved in nutrient cycling. Robert Constanza and his colleagues estimated that the World's ecosystems provide atleast US $ 33 trillion worth of services annually. This staggering figure is more than the total gross national product, which is around US $ 19 trillion per year. The majority of the services are currently outside the market system and include atmospheric gas regulation, waste treatment and nutrient cycling, which at US $ 17 trillion, was by far the most expensive services performed, but even if we eliminate this, the total annual value would still be a whopping US $ 16 trillion. About 63 percent of the estimated value of natural ecosystems is contributed by marine system; with most of the value coming from coastal systems (US $ 10.6 trillion per year). About 37 percent of the estimated value cames from terrestrial systems, mainly forests (US $ 4.7 trillion) and wetlands (US $ 4.9 trillion). If ecosystem services were actually paid for, the global price system would be very different from what it is today. The price of commodities would skyrocket. However, because ecosystem services are largely outside the market, they are usually ignored or grossly undervalued.

What was the estimated value per year for the global ecosystem services outside the market system?

(1) US $ 19 trillion (2) US $ 33 trillion

(3) US $ 16 trillion (4) US $ 17 trillion

[Question ID = 4743][Question Description = Q100_EVS_89_SHAAN_21NOV_S1_Shift2]

1. 1 [Option ID = 18435]
2. 2 [Option ID = 18436]
3. 3 [Option ID = 18437]
4. 4 [Option ID = 18438]