



No. of Printed Pages: 80

No. of Questions: 150

OSSTET

2016

PAPER - I

Question Booklet No.

18372

SET: C

Full Marks: 150

Time: 2 Hours 30 Minutes

Roll No. (in figures) : 181104048

(in words): ONE EIGHT ONE ONE ZERO FOUR ZERO FOUR EIGHT

Date of Exam. : 17/12/2016

Centre Name: HARI HARA HIGH SCHOOL, ASKA

Centre Code : \_\_\_\_\_1104

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# TRUCTIONS PRINTED ON THE S BOOKLET

The candidates are required to answer all the Sections in the OMR Answer Sheets.

This Booklet is to be taken away by the candidates after examination is over and handed over the OMR Sheet to the invigilator(s) concerned.

Section	Subject	No. of Questions	Full Marks
A: Section - I	Odia(Compulsory for all streams)	1 - 20 = 20	20
A: Section - II	English(Compulsory for all streams)	21 - 40 = 20	20
B : Section – III	Optional (any one group / subject to be chosen) Arts: Odia + English + History & Political Science + Geography & Economics	41 – 100 = 60	60
	Science(PCM): Physics + Chemistry + Mathematics	41 – 100 = 60	60
40.00	Science(CBZ): Chemistry + Botany + Zoology	41 – 100 = 60	60
- P. Tai . S.	Classical Sanskrit	41 – 100 = 60	60
10-15-15	Classical Urdu	41 – 100 = 60	60
	Classical Telugu	41 - 100 = 60	60
	Hindi	41 - 100 = 60	60
C: Section - IV	Compulsory for all streams Child Development, Pedagogy, School Management & Evaluation	101 – 150 = 50	50

#### A-SECTION - I ODIA (COMPULSORY)

ଅନୁଚ୍ଛେଦଟି ପାଠକରି ପ୍ରଶ୍ (ନଂ 01 ରୁ 05 ପର୍ଯ୍ୟନ୍ତ)ଗୁଡ଼ିକର ଉଦ୍ଭର ବାଛ :

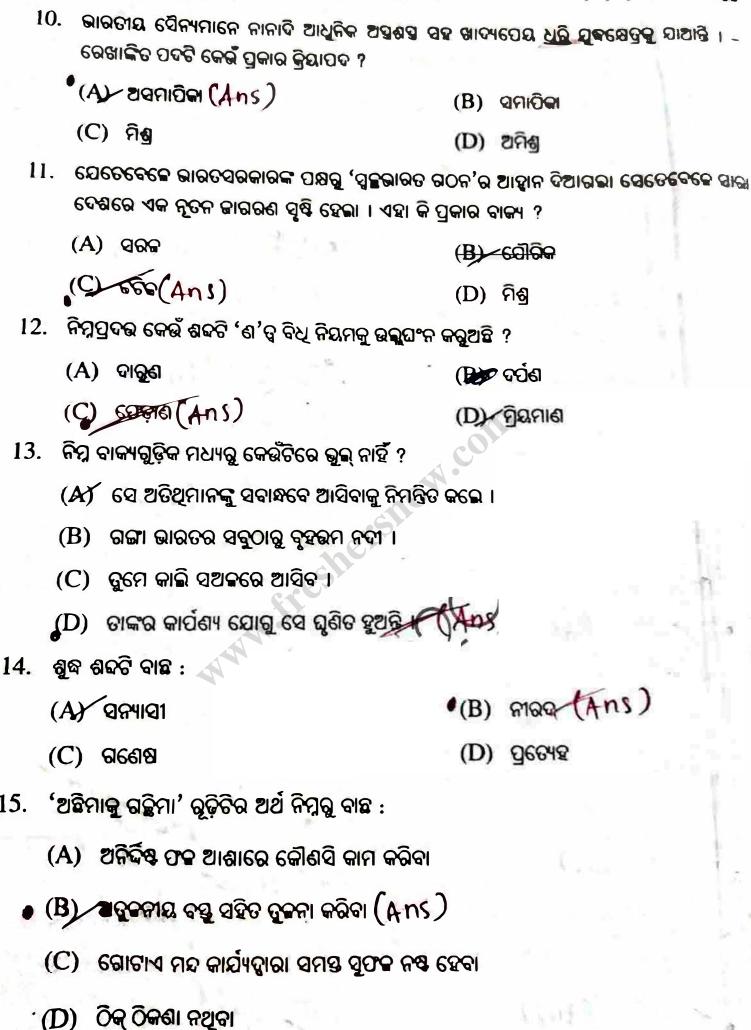
ଯେ ନୃଆ ଆସେ, ସେ ପୁରୁଣାଠାରୁ ଅଲଗା ହେବାକୁ ବାଧ୍ୟ । ସେ ଚେଷ୍ଟାକଲେ ମଧ୍ୟ ଅବିକଳ ପୁରୁଣା ପରି ହୋଇପାରିବ ନାହିଁ । ତଥାପି ପର୍ଣାକ ଅନ୍ନରଣ କରିବା ହାରା ତାକ ବଞ୍ଚେଇ ରଖବା ପାଇଁ କେତେ ଜଣ ରକ୍ଷଣଶୀଳ ପୁରୁଣା ପଛୀ ସବୁ ଯୁଗରେ ଥାଆନ୍ତି । ସେମାନଙ୍କର ଆତ୍ପାଣ ଚେଷ୍ଟା ସର୍କ୍ତେ ପୁରୁଣା ତା'ର ବୈଶିଷ୍ୟ ଅକ୍ଷଣ ରଖପାରେ ନାହିଁ । ନତନର ସଂଘାତରେ ତା'ର ଚାରିଆଡ କୋରିହୋଇ ଝଡିଯାଏ । ସେ ଅବଶ୍ୟ ଖସିଯିବ । ତାକୁ ଜବରଦସ୍ତି ଧରି ରଖିଲେ ସେଥିରେ ଅସ୍ତାଭାବିକତା ଆସିଯାଏ । ବିଂଶ ଶତାବ୍ଦୀର ଗୁରୁକୁଳାଶ୍ୱମ ପରି, ପେଷ୍ଟ କୋଟ୍ ଭିତରେ ଚିତାପରି । ବାପ ବଢାହୋଇ ମରିଗଲା ପରେ ଯେମିତି ସେ ମୃତଦେହକୁ ରଖିହୁଏ ନାହିଁ, ରଖିବା ଅସ୍ୱାଭାବିକ ଏବଂ ରଖିବା ନିଷ୍ପୟୋଜନ, ତାକୁ ଛାଡ଼ିବାକୁ ହେବ, ସେହିପରି ଯେକୌଣସି ସଂୟାରର ନିଷ୍କାଣ ଜଡ ପିଣ୍ଡକୁ ଜାବୃଡି ଧରିବା ବିଶେଷ ବିଜ୍ଞତାର ପରିଚାୟକ ନୁହେଁ । ଯେ ଯାଉଛି ତାକୁ ସମ୍ମାନର ସହିତ ଯିବାକୁ ଦିଅ । ଶବାଧାର ଚାଲିଗଲେ ତାକୁ ଅନେକ ମୁଣ୍ଡରୁ ଟୋପି କାଢ଼ି ନୀରବ ସଂଭ୍ରମରେ ବାଟ ଛାଡ଼ି ଦିଅନ୍ତି । ଚାଲିଗଲା ବୋଲି ଦୁଃଖ ନିଷ୍ଟୟ ଅଛି । ତାଙ୍କ ହାତଲେଖା ପୋଥି, ତାଙ୍କ ଜୋତା, ଛତା, ଘଡ଼ି ହୁଏତ ସ୍ଲୁଡି-ସୟଳ କରି ରଖିବୁ ; କିନ୍କୁ ତାଙ୍କୁ ଯିବାକୁ ଦେବୁ ନିଷୟ । ସେ ବଞ୍ଚିଥିଲେ ଆମେ ଖୁସି ହୋଇଥାନ୍ତୁ ନା ନାହିଁ, ବା କେତେଦିନ ଖୁସି ହୋଇଥାନ୍ତୁ ତା' କହିବା କଠିନ । କାରଣ ପୁରୁଣା ମଣିଷ ପୁରୁଣା ଅନୁଷାନ, ପୁରୁଣା ପୋ<mark>ଷାକ ପରି ଆଞ</mark>୍ଚେ ବେ<mark>ଦରକା</mark>ରୀ ହୋଇଯାଏ । ଜୀର୍ଣ୍ଣ <mark>ବ୍</mark>ୟ ପରିତ୍ୟାର <mark>କରି ନୃଆ ବଦଳ କରିନେବା ହେଲା, ଏକ ସାଭାବିକ ଧର୍ମ ।</mark> nersin

- କେଉଁମାନେ ରକ୍ଷଣଶୀଳ ?
  - (A) ଯେଉଁମାନେ ନୃଆକୁ ଆସିବାକୁ ଦିଅତି ।
  - (B) ଯେଉଁମାନେ ଦେଶଭକ୍ତ ।
  - (C) ଯେଉଁମାନେ ପୁରୁଣାକୁ ବଞ୍ଚାଇ ରଖିବାକୁ ଚାହାତି ।
  - (D) ଯେଉଁମାନେ ଯୁଗୀୟ ଆଦର୍ଶରେ ଅନୁପ୍ରାଣିତ ।
- ନୃତନର ସଂଘାତରେ କ'ଣ ହୁଏ ?
  - (A) ପୁରୁଣାର ବୈଶିଷ୍ୟ ଯୁଣ୍ଡ ହୁଏ ।
  - (B) ପୁରୁଣାର ମହତ୍ତ ବଢ଼େ ।
  - (C) ସମାଜ ଜୀବନରେ ଅସ୍ଥାଭାବିକତା ଆସେ ।
  - (D) ସମଞେ ନ୍ତନକୁ ଆଦରରେ ଗୁହଣ କରତି ।



		21.13
3. ଆଧୁନିକ ଯୁଗରେ ଗ୍ରୁକୁଳାଶ୍ରମ ଅସ୍ୱାଭାଟି		
(A) ଅତୀତର ପ୍ରାକୃତିକ ପରିବେଶ ନ ଥ	_	
(B) ଆଧୁନିକ ଶିକ୍ଷାଦାନ ବ୍ୟବସ୍ଥା ନଥ୍ବ	_	1
(C) ଅତୀତକାଳର ଗୁରୁଙ୍କ ପରି ଗୁରୁ ନ		
(р ଯୂଗ ଅନୁକୂଳ ହୋଇ ନଥିବାରୁ 🅻		
4.    ପୁରୁଣାକୁ କିପରି ତ୍ୟାଗ କରାଯିବା ଉଚିତ	?	
(A) ଘୃଣାର ସହିତ	(B) ସିଲାନର ସହିତ (Ans)	
(C) ହୁଃଖର ସହିତ	(D) ଆନନ୍ଦର ସହିତ	,
5.     ମୃତବ୍ୟକ୍ତିର ବ୍ୟବହାର୍ଯ୍ୟ ସାମଗ୍ରୀକୁ ସାଇତି	ରଖାଯାଏ କାହିଁକି ?	
(A) ଦରକାରୀ ହୋଇଥିବାରୂ	(B) ସ୍କୃତି ପାଇଁ (Ans)	
(C)  ମୂଲ୍ୟବାନ୍ ହୋଇଥିବାରୁ	(D) ଦୁଷ୍ତାପ୍ୟ ହୋଇଥିବାରୁ	à
6. 'ସୈନ୍ୟାବାସ' – କେଉଁ ସମାସର ଅନ୍ତର୍ଗଣ	3 9	
(A) କର୍ମଧାରୟ	®(B) ତତ୍ପୁରୁଷ (Ans)	
(C) ହିଗୁ	(D) ବହୁବ୍ରୀହି	
7. କେଉଁଟି <b>'ତ</b> ବ୍ଧିତ' ପଦ ?	10613	
•(A) ପ୍ରେପାୟନ (Ans)	(B) ଭଗୁର	
(C) ଛନ୍ଦଶି	(D) ଜୀଅତା	2
8. ''କ୍ୟାର ବୋହ, ଝାଟିକି ନ ଗଲେ ମାର୍ଚ୍ଚି	<u>'କି</u> ଯାଉ ।'' – ରେଖାଙ୍କିତ ପଦଟିରେ କେଉଁ	ବିଜ୍ୱି ଯ୍ଲ
ହୋଇଛି ?		10.2
(A) ଦ୍ୱିତୀୟ।	(B) ପ୍ରଥମା	
(C) ଚନୁର୍ଥୀ <b>(Ans)</b>	(D) ସପ୍ତମୀ	
).   ' <u>୍ଥରକୁ ଥର</u> ପଡ଼ି ଡଳେ । ଚାଲଇ ଅଭ୍ୟାସ	ଏର ବଳେ ।'' – ରେଖାଙ୍କିତ ପଦଟି କେଉଁ ପ୍ରକା	ାର ଅବ୍ୟୟ ?
(A) ଧ୍ୱନ୍ୟନୁକାରୀ	(B) ସୟାବନା ସୂଚକ	
(୧୯ ବାପ୍ସାର୍ଥର (४ ୩ ၄)	(D) ପଦବିକାର ମୁଳକ	
ET.C	[3]	(Turn ous)
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16.	ଦେଖିଲା ସୁନ୍ଦରୀ	ସନ୍କୁଖେ ଅପୂର୍ବ			
	ସୁନ୍ଦର ଯୁବକ ବ	ଂର,			
	ଅଙ୍ଗବନ୍ତ କି ସେ	ଅନଙ୍ଗ ଅଥବା			
	ନରରୂପୀ ସୁଧାର	ନର !			
į.	ଉଦ୍ଧୃତାଂଶଟିରେ କେଉଁ ଅ	ଳଂକାର ପ୍ରଯୁକ୍ତ ?			
	(A) ଉତ୍ପେଷା (A)	13)	(B)	ଉପମା	
	(C) ରୂପକ		(D)	ଶ୍ଳେଷ	
17.	'ଯୁବତୀ ଜାୟା ଯାହାର'	– ବିଗ୍ରହ ବାକ୍ୟଟିର ସମୟ ୧	ଦଟି କ'∉	ଣ ହେବ ?	
	(A) ଯୁବଜାୟା		(B)	ଯୁବଜାନୀ	
	(C) ଯୁବଜାନି (An	s).	DY	ଯୁବାଜାୟା	
18.	'ତିନି ତେର କରିବା' –	ଏହି ରୂଢ଼ିଟିର ଅର୍ଥ କେଉଁଟି ?		coll	21 19
	(A) ସର୍ବନାଶ ଘଟିବା		(B)	ମୂଲ୍ୟହୀନ କଥା	
	(C) ନିଜ କଥା କହି ବି	ବ୍ରତ କରିବା	<b>(</b> D)	୦କିହା (Ar	Ts)
19	. ପାଣିଗ୍ରହଣରୁ	ବୁଝିଅନ୍ତୁଁ କାଲି			
	ସ୍ୱଭାବେ ତୃୟେ	ଉଦାର,			
	ବାହୁଲ୍ୟେ ମାତର କ	ନ୍ଦୁ ଅଛୁଁ ଆୟେ			
	ମୁନିକନ୍ୟା ହେ	ଉଦାର ।			
	ଉଦ୍ଧୃତାଂଶଟିରେ କେଉଁ ଧ	ଅଳଂକାର ପ୍ରଯୁକ୍ତ ?			
	(A) ଉତ୍ପେକ୍ଷା		(B)	ଉପମା	
	(C) 6818 (An.)		(D)	ରୂପକ	
2	). 'ବାଢଣା' ଶଢଟି କେଉଁ	ପ୍ରତ୍ୟୟ ଯୋଗରେ ଗଠିତ ?	- ,		1

(A) ଶା

(B) ଜଣା

(C) ଆ

(D) 2181 (Ans)

SET-C

[5]

(Turn over)

## A-SECTION – II ENGLISH (COMPULSORY)

21. The stranger asked me	
(A) where is the post office	(B) where the post office is
(C) where was the post office	(D) where the post office was
22. Which of the following is grammati	cally acceptable?
(A) Rekha says I'm tired.	°(B) Rekha says, "I'm tired."
(C) Rekha says, I'm tired.	(D) Rekha says "i'm tired."
23. The criminal was granted b	y the appex court.
(A) bell	(B) bale
e(C) bail	(D) beil
24. Odisha is rich minerals.	10
•(A) in	(B) with
(C) at	(D) for
25. The word 'packet' is pronounced as .	
(A)   pəket	(B)   pekit
(C)   pækit	(D)  pæket
26. Which is the correct pronunciation of	f'is': (211A)
(A) tiz	(B)  eez
(C)  ij	(D)  ez

[6]

27.	Which letter in the word 'muscle' is silent in pronunciation?				
	(A) <i>l</i>	(B)	S		
	o(C) c	(D)	m		
28.	The boy <u>resembles</u> his father.				
	The word underlined can be replaced	by			
	(A) takes to	(B)	takes in		
	(C) takes after	(D)	takes off		
29.	If he listened more carefully, he	_ so n	nany mistakes.		
	(A) couldn't have made	(B)	wouldn't make		
	(C) won't have made	(D)	can't make		
30.	He wants to know how many people		to dinner.		
	(A) are coming	(B)	would have come		
	(C) were coming	(D)	had come		
	Read the passage carefully and answ to No. 35) that follow choosing the				
	Environmental scientists are worried ab	out th	ne green house effect, which		
	has been noticed throughout the world.	The g	reen house effect is actually,		
	a gradual warming up of the earth, which	ch car	n disturb its natural environ-		
	ment. The main cause of this effect is the	he lar	ge scale industrialization in		

Large scale felling of trees, has made the problem more acute.

almost all the countries of the world. The gases released by the factories

and power-driven vehicles, have made the Earth's protective cover weak.



(Continue

31.	Wha	t has made the Earth's protective co	ver weak?
	(A)	Deforestation	
	(B)	Wars	
	(C)	Cigarette smoking	
	(D)	Gases discharged by vehicles and	factories
32.	Defe	orestation has resulted in:	
	(A)	making less land available for build	ing
	(B)	supplying plenty of wood	
	o(C)	creating more problems in preservi	ng the environment
	(D)	increasing rain fall	
33.	The	green house effect could:	
	(A)	increase productivity on earth	(B) be useful to animal life
	(C)	be beneficial to rich nations	(D) upset the balance in nature
34.	Who	o, as described in the passage are most?	ore worried about the green house
	(A)	Politicians	(B) Physicians
	(C)	Chemists	(D) Environmentalists
35.	The	word 'felling' as used in the passag	se means :
	(A)	planting	(B) burning
	(C)	caring	(D) cutting
SET	<b>r-C</b>	ren.	



(Turn over)

Read the poem carefully and answer the questions (from No. 36 to No. 40) choosing the correct alternatives from the option given:

	Let others cheer the winning man,	
	There's one I hold worthwhile;	
	It is he who does the best he can,	
	Then loses with a smile.	
	Beaten he is, but not to stay,	
	Down with the rank and file;	
	That man will win some other day,	
	Who loses with a smile.	
36.	People often praise those who	
8	(A) win	(B) lose
	(C) smile	(D) stay down
37.	The poet says a person is worth the p	raise who
	(A) wins	(B) loses
	(C) smiles	(D) does his best
38.	The poet highlights a person's	
6	(A) optimistic spirit	(B) pleasure of winning
	(C) pain of losing	(D) praise by the people
39.	If the beaten man loses with a smile, he	
	(A) rank high	(B) never win
	(C) lose every time	(D) win some other day
40.	'I' in the first stanza refers to	
,	(A) the poet	(B) the losing man
	(C) the winning man	(D) the smiling man
SET	-C [9]	



B-SECTION – III
Arts Group
ODIA (OPTIONAL)

ଅନୁଚ୍ଛେଦଟି ପଢ଼ି ପଶ୍ଚ ନଂ ୪୧ର ଉତ୍ତର ଦିଅ :

ଆଧୁନିକ ଯୁଗରେ ପ୍ରତ୍ୟେକ ଦେଶରେ ବିଚାରଶକ୍ତି ପରିଚାଳିତ ବିଜ୍ଞାନପ୍ରସୂତ ଫଳାଫଳ ସହିତ ମନୃଷ୍ୟର ବିଶ୍ୱାସ ଅନେକ ସମୟରେ ଖାପ ଖାଉ ନାହିଁ । ଏଥିଲାଗି ଯେଉଁ ବ୍ୟର୍ଥତା ଓ ମାନସିକ ଦ୍ୱନ୍ଦ ଦେଖାଯାଉଛି ତାହା ବହୁ କ୍ଷତି କରୁଛି । ଆମ ଦେଶରେ ବିଜ୍ଞାନର ପ୍ରଭାବ ଯେଉଁମାନଙ୍କ ଉପରେ ପଡ଼ିଛି, ସେମାନେ ପ୍ରକୃତରେ ବିଜ୍ଞାନ ଓ ମନୁଷ୍ୟର ବିଚାରଶକ୍ତିର ପ୍ରଶଂସା କରୁଥିଲା ବେଳେ ଘରକୁ ଫେରିଲା ପରେ ହଜାର ହଜାର ବର୍ଷଧରି ଗଡ଼ି ଆସୁଥିବା ନାନାପ୍ରକାର ସଂକୀର୍ଷ କୁସଂୟାରରେ ଦୃଢ଼ ବିଶ୍ୱାସ ରଖି କାମ କରନ୍ତି । ତେଣୁ ପୋଥି ବାଇଗଣ ଓ ବାଡ଼ି ବାଇଗଣ ଭିତରେ ଯେଉଁ ପ୍ରଭେଦ, ତାହା ପ୍ରତିକ୍ଷେତ୍ରରେ ଆୟେମାନେ ଦେଖିବାକୁ ପାଉ ।

- 41. ଆୟେମାନେ ପୋଥି ବାଇଗଣ ଓ ବାଡ଼ି ବାଇଗଣ ମଧ୍ୟରେ ଥିବା ପ୍ରଭେଦ ପ୍ରତିକ୍ଷେତ୍ରରେ ଦେଖିବାର କାରଣ କ'ଣ ?
  - (A) ଅଞ୍ଚତା

(B) ବିଜ୍ଞାନର ପୂଭାବ

(C) ମାନସିକ ଦୃନ୍ଦ

(D) ଧର୍ମବିଶ୍ୱାସ

42. ''ଚିରଦିନ ଦୁଃଖ - ପ୍ରହାରେ ଜର୍କର,

ପଟ୍ଟଶିଷ୍ୟ ମୁହିଁ ଦୁଃଖ – ଗୁରୁଙ୍କର'' – ଏହା କେଉଁ ଛନ୍ଦରେ ରଚିତ ?

(A) ବଙ୍ଗଳାଶ୍ରୀ

(B) ଚୋଖ

(C) ନଟବାଣୀ

(D) ଗୁଜରୀ

43. ମହତ ଜନର ଦୟା ସବୁଠାରେ

ସମେ ହୁଏ ବିତରିତ,

କର୍ତ୍ତକ ମୟକୁ ନ କରଇ ତରୁ

ସ୍ୱଚ୍ଛାୟା ଅପସାରିତ ।

ପଦଟିରେ କେଉଁ ଅଳଂକାର ପ୍ରଯୁକ୍ତ ?

(A) ଉପମା

(B) ବୃପକ

(C) ଉତ୍ପ୍ରେକ୍ଷା

(D) ଅର୍ଥାନ୍ତରନ୍ୟାସ

SET-C



44.	'ଜିହୀର୍ଷା' ଏହାକୁ ବହୁପଦରେ ପ୍ରକାଶ କଲେ କ'ଣ ୧	ହେବ ?
	(A) ବଞ୍ଚି ରହିବାର ଇଚ୍ଛା	(B) ହରଣ କରିବାର ଇଚ୍ଛା
	(C) କହିବାର ଇଚ୍ଛା	(D) ବଧ କରିବାର ଇଚ୍ଛା
45.	ନିମ୍ନୋକ୍ତ ମଧ୍ୟରୁ କେଉଁଟି ଭୀମଭୋଇଙ୍କ ରଚନା ?	
	(A) ଚଣୀପୁରାଣ	(B) ଦୀକ୍ଷା ସନ୍ଧାଦ
	(C) ଶ୍ରୁଡିନିଷେଧ ଗୀତା	(D) ଚିତ୍ରକାବ୍ୟ ବନ୍ଧୋଦୟ
46.	କହିବା ସହଜ, <u>ଅଥଚ</u> କରିବା କଷ୍ଟ । – ରେଖାଙ୍କିତ ଅ	ଅଂଶଟି କେଉଁ ପଦ ?
	(A) ସଂଯୋଜକ ଅବ୍ୟୟ	(B) ବିଯୋଜକ ଅବ୍ୟୟ
	(C) ବୀପ୍ସାର୍ଥକ ଅବ୍ୟୟ	(D)  ନିଷେଧାର୍ଥକ ଅବ୍ୟୟ
47.	'ଷୋଭ' ଶବ୍ଦର ପ୍ରକୃତି ପ୍ରତ୍ୟୟି କ'ଶ ?	GILO
	(A) Ag (A) - 전 (A) -	(B) କ୍ଷୋଭ୍ + ଅ
	(C) 681 + 9	(D) କ୍ଷ + ଓଭ
48.	'ଆର୍ଜ୍ଜବ' ଶବ୍ଦରେ କେଉଁ ପ୍ରତ୍ୟୟ ପ୍ରଯୁକ୍ତ ?	
	(A) ଅବ	(B) ଜବ
	(C) ବ	(D) 웹
49.	''ଆମ ଦେଶବାସୀଙ୍କ ଦୀର୍ଘଦିନର ଅପେକ୍ଷା ଶେଷ ଦେ ଦାରିଦ୍ର୍ୟ ଦୂର ହେଲା ନାହିଁ'' – ଏହା କେଉଁ ପ୍ରକାର ବା	ହେଲା, ଦେଶ ଇଂରେଜ ଶାସନରୁ ମୁକ୍ତ ହେଲା କିନ୍ତୁ ନାକ୍ୟ ?
	(A) ସରଳ	(B) ଯୌଗିକ
	(C) ଜଟିଳ	(D) ମିଶ୍ର
SET	-C [11]	(Turn over)



			*	
50	. ନିର୍	ମୋକ୍ତ ମଧ୍ୟରୁ କେଉଁଟି ଶୂଦ୍ଧ ଶବ୍ଦ ?		
	(A	u) ଦୁର୍ବିସହ	(B)	ବୁର୍ଦ୍ଦିଷ
	(C	) ତଦୁର୍ଦ୍ଧ	(D)	ତ୍ୟାକ୍ୟପୁତ୍ର
51	. 'ପ	ବନ' ଶବ୍ଦର ସନ୍ଧିବିଚ୍ଛେଦ କଲେ କ'ଶ ହେବ ?		
	(A	) ପବ୍ + ଅନ	(B)	ପବ + ନ
	(C	) ପୋ + ଅନ	(D)	ପ + ଅନ
52.	<u>ବିପ</u>	<u>ଦେ</u> ନ ଦିଅନ୍ତି ଦେଖା । ରେଖାଙ୍କିତ ଅଂଶଟି କେଉଁ କ	ାରକ ?	,
	(A	) ଅଧିକରଣ	(B)	କରଣ
	(C)	) କର୍ମ	(D)	କର୍ଭା
53.	ସେ	<u>ବୟସରେ</u> ମୋ'ଠାରୁ ବଡ଼ । ରେଖାଙ୍କିତ ପଦଟିରେ ।	କେଉଁ ବି	ଭିଜି ଯୁକ୍ତ ହୋଇଛି ?
	(A)	ିହିତୀୟା	(B)	ତୃତୀୟା
	(C)	ี่ บ <b>ซ</b> กา	(D)	ସପ୍ତମୀ
54.	'ଅଛି	ର ପଣ୍ଟାତ୍' ସମୟ ପଦଟି କ'ଣ ହେବ ?		
	(A)	ପ୍ରତିପକ୍ଷ	(B)	ବିପକ୍ଷ
	(C)	ପ୍ରତ୍ୟକ୍ଷ	(D)	ଅନୁକ୍ଷ
55.	'ଅଇ	ଘରାକୁ ବାଇଗଣ ଫିଙ୍ଗିବା' – ରୂଢ଼ିଟିର ଅର୍ଥ କ'ଣ ସ	,	
	(A)	ବାରୟାର କହିବା		
	(B)	ଅନୁମାନ କରି କହିବା		
	(C)	ଆଳ ବାହାର କରିବା		
	(D)	ଅନିର୍ଦ୍ଦିଷ୍ଟ ଫଳ ଆଶାରେ କୌଣସି କାମ କରିବା		

[12]



# B-SECTION – III Arts Group ENGLISH (OPTIONAL)

56.	Does	s the headmaster live	the school	campus?	
	(A)	on	(B)	at	
	(C)	in	(D)	with	
57.	Don	't disturb, please.			
	The	poultry fed.			
	(A)	is	(B)	are	
	(C)	is being	(D)	are being	
58.	Whi	ch letter is silent in the word:	'paradigm'	, ?co	
	(A)	p	(B)	r	
	(C)	d	(D)	g	
59.	Whi	ich is not a feature of learner-	centred clas	ssroom?	
	(A)	Learners play active role			
	(B)	There is a lot of intraction ar	nong learne	ers	ь
	(C)	Learners learn on their own	and from po	eers	
	(D)	Everything is taught through	teacher-tall	k or lecture	
60.	Gra	mmar should be taught			
-	(A)		(B)	through rules	
	(C)	in isolation	(D)	in context	



61.	When a test is conducted to find out son	ne deficiency, it is called
	(A) achievement test	(B) diagnostic test
	(C) performance test	(D) prognostic test
62.	She since 4 O'clock.	
	(A) had slept	(B) is sleeping
	(C) slept	(D) has been sleeping
63.	Make sure your words are clearly	_ in your speech.
	(A) pronounced	(B) pronunced
	(C) pronuoced	(D) prunounced
		5

Read the passage below and answer the questions (from No. 64 to No. 67) that follow choosing the correct alternatives given:

Books are by far, the most lasting product of human effort. Temples crumble into ruin, pictures and statues decay, but books survive. Time does not destroy the great thoughts which are as fresh today as when they first passed through their author's mind. These thoughts speak to us through the printed page. The only effect of time has been to throw out of currency the bad products. Nothing in literature which is not good can live for long. Good books have always helped man in various spheres of life. No wonder that the world keeps its books with great care.



64.	64. Of the products of human effort, books are the most					
	(A)	permanent	(B)	important		
	(C)	enjoyable	(D)	useful		
65.	Tin	ne does not destroy books because	they (	contain		
	(A)	useful materials	(B)	subject-matter of education		
	(C)	high life style	(D)	great ideas		
66.	"To	throw out of currency" means				
	(A)	destroy	(B)	put out of use		
	(C)	extinguish	(D)	forget		
67.	The	world keeps its books with great ca	ire be	cause		
	(A)	they bring high social status				
ď	(B)	they elevate our political life		and the second second		
	(C)	they grow our economy				
	(D)	they help us in various spheres of l	ife			
	Read No.	d the poem carefully and answer 68 to No. 70) choosing the corre	the ct alt	following questions (from ernatives given :		
	Our	world is always changing,				
	Constantly rearranging.					
	Fron	n ocean depths to mountain peaks,				
	Mot	her nature moves and speaks.		The second second second		
	Whi	le telling stories of our past,				



She tries to teach us how to last.

Mankind, so smart, sometimes blind

Leaves common sense far behind.

We're moving fast and living large,

Forgetting she's the one in charge.

Amazed when she rings our bell,

Sending us to living hell.

She can twist our steel, shake any city,

If her wrath you feel, we shall pity,

Treat her with distinction,

Or surely face extinction!

	Or surely face extinction!		
68.		means:	
	(A) pleasure	(B) tolerance	
	(C) anger	(D) suffering	
69.	69. When she 'rings our bell', it is nature's way of		
	(A) expressing her discontentment		
	(B) warning mankind against his action	on .	
	(C) showing her generosity		
	(D) seeking compensation from huma	ans	
70.	The poetic device used in the line		

(A) personification

'Mother nature moves and speaks', is:

(B) hyperbole

(D) analogy



# B-SECTION - III Arts Group HISTORY & POLITICAL SCIENCE

#### OSSTET-P-I/16

- 71. Who does transfer a judge from one High Court to another?
  - (A) Chief Justice of Supreme Court
  - (B) President
  - (C) Prime Minister
  - (D) Law Minister
- 72. Which agreement was signed between India and Pakistan in 1972?
  - (A) Simla Agreement
  - (B) Tashkent Agreement
  - (C) Lahore Declaration
  - (D) Delhi Declaration
- 73. Which organ of the United Nations did adopt the Declaration of Human Rights on December 10, 1948?
  - (A) General Assembly
  - (B) Security Council
  - (C) International Court of Justice
  - (D) Economic and Social Council
- 74. Who was in charge of Public welfare activities in Asoka's administration?
  - (A) Prativedaka
  - (B) Brajabhumika
  - (C) Yukta
  - (D) Karanaka

- 75. Whom did Kharavela defeat in Magadha and brought back the image of Kalinga Jina?
  - (A) Vidyadhara
  - (B) Brihaspati Mitra
  - (C) Demetrius
  - (D) Satakarni
- 76. Where is the Dasavatara Temple situated?
  - (A) Tigwa
  - (B) Bhumra
  - (C) Sanchi
  - (D) Deogarh
- 77. Which was a religious taxcollected only from Muslims during the period of Delhi Sultanate?
  - (A) Zakat
  - (B) Kharaz
  - (C) Ushr
  - (D) Kham
- 78. Which fort does contain "Panch Mahal"?
  - (A) Agra Fort
  - (B) Fatepur Sikri Fort
  - (C) Red fort at Delhi
  - (D) Lahore Fort



- 79. Who was the first ruler to accept the Subsidiary Alliance of Lord Wellesley?
  - (A) Nawab of Oudh
  - (B) Nizam of Hyderabad
  - (C) King of Mysore
  - (D) Raja of Tanjore
- 80. Who did shout 'Hail Deliver' on the sea-shore of Dandi on 6th April, 1930?
  - (A) Guljarilal Nanda
  - (B) Sarojini Naidu
  - (C) Rabindranath Tagore
  - (D) Acharya Kripalini
- 81. Where did Rash Behari Bose declare Subhas Chandra Bose as the President of Indian Independent League?
  - (A) Bangkok
  - (B) Tokyo
  - (C) Singapore
  - (D) Berlin
- 82. Who was the Czar of Russia at the time of October Revolution of 1917?
  - (A) Nicholas I
  - (B) Nicholas II
  - (C) Alexandar I
  - (D) Alexandar II

- 83. Who did warn the Japanese "If they do not now accept our terms, they may expect a rain of ruin from the air, the like of which has never been seen on this earth"?
  - (A) Churchill
  - (B) Truman
  - (C) Stalin
  - (D) Atlee
- 84. Which words were added to the preamble of the Indian Constitution by 42nd Amendment Act?
  - (A) Socialist, Secular, Integrity
  - (B) Sovereign, Secular, Integrity
  - (C) Republic, Unity, Integrity
  - (D) Democratic, Socialist, Secular
- 85. Who do constitute the Parliament of India?
  - (A) President, Vice-President, Loksabha, Rajyasabha
  - (B) Loksabha, Rajyasabha
  - (C) President, Loksabha, Rajyasabha
  - (D) Vice-President, Loksabha, Rajyasabha

#### B-SECTION - III

#### Arts Group

#### GEOGRAPHY AND ECONOMICS

- 86. Which of the following indicators are considered by the United Nations Development Programme to measure the 'Human Development Index'?
  - (a) Life Expectancy
  - (b) Literacy Rate
  - (c) National Income
  - (d) Per-Capita Income
  - (A) (a), (b) & (c)
  - (B) (a), (b) & (d)
  - (C) (a), (c) & (d)
  - (D) (b), (c) & (d)
- 87. Which bank of India does squeeze the money circulation at the time of price rise?
  - (A) State Bank of India
  - (B) Reserve Bank of India
  - (C) Indian Overseas Bank
  - (D) Union Bank of India
- 88. What happens when there is development along with economic growth?
  - (A) Inflation
  - (B) Deflation
  - (C) Price stability
  - (D) Social welfare
- 89. Which of the following orders of mountain ranges are correctly arranged sequentially from north to south?
  - (A) The Aravallis, The Vindhyas, The Satpura, The Mahadeo
  - (B) The Vindhyas, The Aravallis, The Satpura, The Mahadeo
  - (C) The Satpura, The Vindhyas, The Mahadeo, The Aravallis
  - (D) The Vindhyas, The Mahadeo, The Aravallis, The Satpura

- 90. Three of the following are tributary streams, while the other one is a main stream. Identify the main stream
  - (A) The Indravati
  - (B) The Tungabhadra
  - (C) The Saravati
  - (D) The Wainganga
- 91. During which period does an Easterly Jet Stream blow over the Peninsular India?
  - (A) The Winter Monsoon
  - (B) The South-West Monsoon
  - (C) The Pre-Monsoon
  - (D) The Retreating Monsoon
- 92. Which is the most dominant forest type of India in terms of its spatial coverage?
  - (A) Subtropical Moist Pine
  - (B) Tropical Moist Deciduous
  - (C) Tropical Dry Deciduous
  - (D) Tropical Wet Evergreen
- 93. In which of the following river valleys in India is the deposit of coal the largest?
  - (A) The Damodar
  - (B) The Mahanadi
  - (C) The Godavari
  - (D) The Son

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- 94. By which erosional agent is the "Cirque" land form created?
  - (A) River
  - (B) Wind
  - (C) Glacier
  - (D) Wave
- 95. Which type of cloud is generally formed due to rising parcel of air?
  - (A) Cirrus
  - (B) Cumulus
  - (C) Nimbus
  - (D) Stratus
- 96. Which current of the South Atlantic ocean is similar to the Peruvian current of the South Pacific Ocean?
  - (A) Falkland
  - (B) Canaries
  - (C) California
  - (D) Benguela
- 97. When a convex slope is shown with the help of contours how will the contours be drawn?
  - (A) Wide apart at the top and closer at the bottom
  - (B) Closely spaced at the top and wide apart at the bottom
  - (C) Wide apart at both the top and the bottom
  - (D) Closely spaced both at the top and the bottom

98. Select the correct set of answers by matching the places (with meridians within brackets) in Column-A with the standard time corresponding to the Indian Standard Time of 9.00 P.M given in Column-B.

Column-A			Column-B		
(a)	Honolulu (150°W)			(i) 00	.30AM
(b)	Moscow (45°E)			(ii) 03	.30 AM
(c)	New York (75°W)			(iii) 05	.30 AM
(d)	Tokyo (135°E)			(iv) 10	.30 AM
				(v) 06	.30 PM
		(a)	(b)	(c)	(d)
	(A)	(ii)	(v)	(iv)	(i)
	(B)	(iii)	(v)	(iv)	(ii)
	(C)	(iii)	(ii)	(v)	(i)
	(D)	(iii)	(v)	(iv)	(i)
٥٥	TT 71 :	1			705

- 99. Which of the following years is called 'Great Dividing Year' of India's population?
  - (A) 1901
  - (B) 1911
  - (C) 1921
  - (D) 1941
- 100. If the price consecutively increases each year by 10 percent over the previous year, after the base year, then what will be the price index in the third year?
  - (A) 110
  - (B) 120
  - (C) 121
  - (D) 125

B-SECTION - III Science (PCM) PHYSICS

- The young's double slit interference experiment the separation between the slits is halved and the distance between the slits and the screen is doubled. The fringe width of new pattern in comparison with the original one is:
  - (A) unchanged
  - (B) halved
  - (C) doubled
  - (D) quadrupled
- A mass of 100 gm is made to move in a horizontal circle of radius 1 m with a speed of 1 m/s. The work done on the mass for an angular displacement of 60° is:

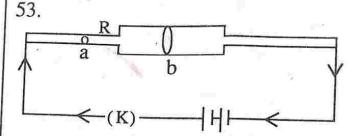
  - (A) 1 J (B)  $\frac{\pi}{6}$  J
  - (C) 0.05 J (D) zero
- A body, initially at rest, undergoes one dimensional motion with constant acceleration. The power delivered to the body at time t is proportional to:
  - (A)  $\sqrt{t}$
- (C)  $t^{3/2}$  (D)  $t^2$
- 44. If h and d denote respectively the attitude and depth from the surface of the earth, then the acceleration due to gravity
  - (A) increases with the decrease of both h and d
  - (B) decreases with the increase of h and decrease of d
  - (C) increases with the increase of h and decrease of d
  - (D) decreases with the decrease of both h and d

- 45. A rectangular boat of length 4m and breadth 1.5m floats on a lake of normal water. It sinks by 1.2 cm when a man gets on it. The mass of the man is:
  - 48 kg (A)
- (B) 60 kg
- $^{\circ}$ (C) 72 kg (D) 84 kg
- With increase of pressure the 46. velocity of sound in a gas
  - (A) increases
  - (B) decreases
  - (C) increases or decreases depending on the nature of the gas
  - (D) does not vary
- A force of 2.5 N is experienced 47. by a point charge 5×10<sup>-6</sup> C at a point in an electric field. The potential gradient at that point in S.I system is
  - $^{\circ}$ (A)  $-5 \times 10^{5} \,\mathrm{Nc}^{-1}$ 
    - (B)  $-5 \times 10^{-5} \,\mathrm{Nc}^{-1}$
    - $(C) 5 \times 10^5 \,\mathrm{Vm}^{-1}$
    - (D)  $5 \times 10^{-5} \text{ Vm}^{-1}$
- The refractive index of the 48. material of an equilateral glass prism is 1.414 for monochromatic yellow light, when the prism is placed in air. The angle of minimum deviation of a ray of this light when refracted through this prism is
  - (A)  $60^{\circ}$
- (B) 45°
- (C) 39°



- 49. Two thin and long parallel wires separated by a distance s in vacuum carry current I ampere each. The magnitude of the force exerted by one wire on the other per unit length is:
  - (A)  $\frac{\mu_0 I}{2\pi s}$
  - (B)  $\frac{\mu_0 I^2}{2\pi s}$ 
    - (C)  $\frac{\mu_o I}{2\pi s^2}$
  - $(D) \quad \frac{\mu_0 I^2}{2\pi s^2}$
- 50. An ideal transformer is used to step down the voltage of transmission from 13.2 kV to 220V. If the supply of the secondary current is 30 A, the primary current is:
  - (A) 30A
  - (B) 5A
  - (C) 2A
  - (D) 0.5A
- 51. The equivalent capacitance of two capacitors when joined in series is 3μF and when joined in parallel is 16μF. The capacities of the two capacitors are
  - (A) 8 µF each
  - (B) 4 μF and 12 μF
    - (C) 6 μF and 10 μF
    - (D) 2 μF and 14 μF

- 52. A 220 V, 100W bulb is connected to a source of 180V. The power consumed by the bulbs is nearly
  - (A) 100W
  - (B) 82W
  - (C) 75W
  - (D) 67W



The cross sectional areas of the conductor R at a and b in the given circuit are in the ratio 1:2. If the circuit current is 0.5A, the ratio of the number of electrons flowing through the sections at a and b per second is:

- (A) 1:1
  - (B) 1:2
  - (C) 1:4
  - (D) 1:16
- 54. An a.c in ampere given by the equation  $i = 0.3 \sin 100t$  is maintained through an inductance 0.2 H. The inductive reactance of the circuit in ohm is
  - (A) 0.06
  - (B) 20
    - (C) 30
    - (D) 33.3

- 55. The image of an extended object formed by a lens is found to be virtual, erect and magnified and is formed at a distance **f** from the lens where **f** is the focal length of the lens. Then
  - (A) The object distance is  $\frac{f}{2}$ from the lens which is concave
  - (B) The object distance is  $\frac{f}{2}$  from the lens which is convex
  - (C) The object distance is  $\frac{3f}{2}$  from the lens which is concave
  - (D) The object distance is  $\frac{3f}{2}$  from the lens which is convex
- 56. Two sound waves are represented by equations :

 $y_1 = a \sin (24 \pi t - 0.033x)$ 

 $y_2 = a \sin (16 \pi t - 0.022x)$ 

When the two waves meet the beats produced by them per second will be

- (A) 11
- (B) 8
- (C) 6
- (D) 4

- 57. An ideal gas in a container is at absolute temperature T. The r.m.s. speed of the gas molecules is proportional to:
  - (A)  $T^2$
- (B)  $T^{3/2}$
- (C) T
- (D) 7412
- 58. To masses of m<sub>1</sub> = 1g and m<sub>2</sub> = 9g are moving with equal kinetic energies. The ratio of the magnitudes of their respective linear momenta ie, p<sub>1</sub>: p<sub>2</sub> is
  - (A) 9:1
- (B) 3:1
- △(CX 1:3
- (D) 1:9
- 59. A particle of mass m is going round a circle of radius R under the action of gravitational attraction of heavy mass M at the centre of the circle. The speed of the particle is:
  - (A)  $R^{-3/2}\sqrt{GM}$
  - (B)  $R^{-1/2}\sqrt{GM}$ 
    - $(C) R^{1/2} \sqrt{GM}$
    - (D)  $R^{3/2}\sqrt{GM}$
- 60. When an elastic material with Young's modulus Y is subjected to a stretching stress S the energy stored per unit volume of the material is:
  - **(**A)
- $\frac{S^2}{2y}$
- (B)  $\frac{S}{2y}$
- (C)  $\frac{2}{5}$
- (D) 2S<sup>2</sup>y

B-SECTION - III

Science (PCM)

CHEMISTRY

61. Which set of quantum numbers is **not** correct?

<u>n l m s</u>

- (A) 2 1 0  $+\frac{1}{2}$
- (B) 2 2 -1  $+\frac{1}{2}$
- (C)  $\frac{1}{2}$  1 +1  $-\frac{1}{2}$
- (D) 3 2 0  $-\frac{1}{2}$
- 62. In the modern periodic table, the four nearest digonal neighbours of the element with atomic number 14 are:
  - (A) Al, Ge, Zn, N
  - (B) N, As, Ga, B
    - (C) C, O, Ge, Se
    - (D) P, Al, C, Ge
- 63. The ionic radii of  $O^{2-}$ ,  $F^{-}$ ,  $Na^{+}$ ,  $Mg^{2+}$  and  $Al^{3+}$  show:
  - (A) a significant decrease from O<sup>2-</sup> to Al<sup>3+</sup>
    - (B) an increase from O<sup>2-</sup> to F<sup>-</sup> and then decrease from Na<sup>+</sup> to Al<sup>3+</sup>
    - (C) a decrease from O<sup>2-</sup> to F<sup>-</sup> and then increase from Na<sup>+</sup> and Al<sup>3+</sup>
    - (D) a significant increase from O<sup>2-</sup> to Al<sup>3+</sup>

- 64. Considering the nature of over lap of atomic orbitals to for the molecule, which one of the following molecules is different from others?
  - (A) Hydrogen
    - (B) Nitrogen
    - (C) Oxygen
    - (D) Fluorine
- 65. The correct order of the size of sp, sp<sup>2</sup> and sp<sup>3</sup> hybrid orbitals of carbon atom is
  - $(A) \quad sp > sp^2 > sp^3$
  - (B)  $sp > sp^3 > sp^2$
  - (C)  $\operatorname{sp} < \operatorname{sp}^2 < \operatorname{sp}^3$
  - (D)  $sp^3 > sp > sp^2$
- 66. Which ore does not undergo self reduction?
  - (A) HgS
- (B)  $Ag_2S_2$
- (C)  $Cu_2S$
- (D) PbS
- 67. IUPAC name of glycerol is:
  - (A) 1, 2 ethane diol
  - ◆(B) 1, 2, 3 propane triol
    - (C) 1, 1, 2 trihydroxy propan
    - (D) 1, 2 dihydroxy ethane
- 68. (I) (CH<sub>3</sub>)<sub>3</sub>C<sup>Θ</sup>
  - (II) (CH<sub>3</sub>)<sub>2</sub>CH<sup>Θ</sup>
  - (III) CH<sub>3</sub> CH<sub>2</sub><sup>©</sup>
  - (IV)  $C_6H_5 CH_2^{\Theta}$

The order of decreasing stabilit of carboanions is:

- (A) I > II > III > IV
- ►(B) IV > III > II > I
  - (C) IV > I > II > III
  - (D) I > II > IV > III



- 69. The position of double bond in alkenes can be located by:
  - (A) hydrogenation
  - (B) ozonolysis
  - (C) photolysis
  - (D) hydration
- 70. (I) aniline
  - (II) benzene
  - (III) nitro-benzene

The correct order of reactivity towards the electrophilic substitution of compounds is:

- (A) II > III > I
- (B) I < II > III
- (C) I > II > III
  - (D) III > II > I
- 71. Which one of the following pairs will have the same number of molecules?
  - (A) 1g. of hydrogen and 44g. of carbon dioxide
  - (B) 2g. of hydrogen and 44.8 litres of carbon dioxide at NTP
  - (C) 2g. of hydrogen and 2g. of carbon dioxide
  - (D) 1g. of hydrogen and 11.2 litres of carbon dioxide at NTP

- 72. Equal masses of Zinc (atomic mass 65) and Iodine (atomic mass 127) were allowed to react till completion of the reaction to form Zinc iodide. Which substance is left unreacted and to what fraction of its original mass?
  - (A) I; 0.744
  - (B) Zn; 0.744.
    - (C) I; 1.488
    - (D) Zn; 1.488
- 73. For a given mass of gas, if its pressure is reduced to one half and the absolute temperature is doubled, then its volume will be:

  (where v is the initial volume)
  - (A)  $\frac{V}{4}$  (B) 2V
  - (C) 4V
- (D) unaltered
- 74. Read the statements given below:
  - (i) When a liquid is taken in a closed vessel, evaporation and condensation take place simultaneously.
  - (ii) Rate of condensation decreases as the number of molecules in the vapour phase increases.
  - (iii) When the rate of condensation and rate of evaporation / are equal, the pressure exerted by the vapours of the liquid is called vapour pressure.

    Out of the above
  - (A) Both (i) and (ii) are wrong
  - (B) Both (i) and (iii) are wrong
  - (C) Both (i) and (ii) are correct
  - (D) Both (i) and (iii) are correct



75. If E<sub>1</sub>, E<sub>2</sub>, E<sub>3</sub> ...... E<sub>n</sub> represent the energy of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>,.... n<sup>th</sup> shell respectively, then

(A) 
$$E_2 - E_1 > E_3 - E_2 > ... > E_n - E_{n-1}$$

(B) 
$$E_2 - E_1 < E_3 - E_2 < \dots < E_n - E_{n-1}$$

(C) 
$$E_2$$
  $E_1$   $E_3$   $E_2$   $=$  ....=  $E_n$   $E_{n-1}$ 

- (D) None of the above is correct
- 76. The oxidation number of nitrogen in its compounds can lie between:

(A) 
$$-3$$
 to  $+7$ 

(B) 
$$+3$$
 to  $+5$ 

(C) 
$$0$$
 to  $+5$ 

- 77. 25 ml of aqueous solution of Hydrochloric acid containing 7.3 gms of the acid per litre neutrallised 30 ml of aqueous solution of caustic soda. What is the normality of the alkali solution?
  - (A)  $\frac{N}{2}$
  - (B)  $\frac{N}{4}$

$$(C)$$
  $\frac{N}{6}$ 

(D) 
$$\frac{N}{8}$$

78. The pH of 10<sup>-8</sup>M solution of HC*l* in water is:

(B) 
$$-8.0$$

- (C) between 7 and 8
- (D) between 6 and 7

79. Given:

$$C + \frac{1}{2}O_2 \rightarrow CO$$
,  $K_C = 4$ 

$$CO + \frac{1}{2}O_2 \rightarrow CO_2$$
,  $K_C = 2$ 

Then for the reaction,

$$C+ O_2 \rightarrow CO_2$$

the value of K<sub>C</sub> will be:

- (A)  $\frac{1}{2}$
- (B) 2
- (C) 6
- (D) 8

80. The most abundant metal and non-metal in earth's crust are:

- (A) iron and carbon
- (B) iron and oxygen
- (C) aluminium and oxygen
  - (D) copper and sulphur

## B-SECTION - III

Science (PCM)

## MATHEMATICS

- 81. If G be a group and a, b ∈ G then what is (ab)<sup>-1</sup>?
  - $(A)' \frac{1}{ab}$
  - (B)  $\frac{1}{a^{-1}b^{-1}}$
  - (C)  $a^{-1}b^{-1}$
  - (D) b<sup>-1</sup>a<sup>-1</sup> ∕
- 82. If  $y = \cos^3 x$ , then what is the derivative of y with respect to x?
  - (A)  $3 \cos^2 x \cdot \sin x$
  - (B)  $3 \cos x \cdot \sin^2 x$
  - - $(D) -3 \cos x \sin x$
- 83 What is the value of  $\lim_{x\to 0} \frac{\sin 5x}{x}$ ?
  - (A)\( 0
  - (B) ∞
  - (C)  $\frac{1}{5}$
  - •(D) 5
- 84. What is the sum of all natural numbers lying between 100 and 1000 which are multiples of 5?
  - (A) 98450
    - (B) 94850
    - (C) 98540
    - (D) 95840





- 85. If pth, qth and rth terms of a G.P. are x, y, z respectively, then what is  $x^{q-r} y^{r-p} z^{p-q}$ ?
  - (A) 1
    - (B) 2
    - (C) 3
    - (D) 4
- 86. If x + y = 4, xy = 1, then what is the value of  $tan^{-1}x + tan^{-1}y$ ?
  - (A)  $\frac{\pi}{6}$
  - (B)  $\frac{3\pi}{4}$
  - (C)  $\frac{\pi}{4}$
  - (D)  $\frac{\pi}{2}$
- 87. If  $\frac{\sin(x+y)}{\sin(x-y)} = \frac{a+b}{a-b}$ , then what is

$$\frac{\tan x}{\tan y}$$
?

- $(A) \frac{b}{a}$
- $\bullet$  (B)  $\frac{a}{b}$ 
  - (C) a+b
  - (D) ab



88. How many iron rods, each of length 7m and diameter 2cm can be made from 0.88 cubic metre of iron by melting and recasting?

$$\left(\pi = \frac{22}{7}\right)$$

- (A) 100
- (B) 200
- (C) 300
- (D) 400
- 89. The diameter of a circle is 21cm and the arc related to a sector of the circle is of degree measure 240°. What is the area in square

cm of the said sector  $?\left(\pi = \frac{22}{7}\right)$ 

- (A) 321
- (B) 312
- Q(C) 231
- (D) 213

90/ What is the integral value of x if

$$\begin{vmatrix} x & x & 1 \\ 0 & 2 & 1 \\ 3 & 1 & 4 \end{vmatrix} = 4 ?$$

- **⋄**(A) 1
  - (B) 2
  - (C) 3
  - (D) 4

91. If a set A has 4 elements, then what is the number of elements in the power set of A?

- (A) 8
- (B) 12
- (C) 16
  - (D) 20

92 If  $f: R \rightarrow R$ ,  $g: R \rightarrow [-1, 1]$  and  $f(x) = x^2$ ,  $g(x) = \sin x$ , then what is the function g[f(x)]?

- (A) sinx<sup>2</sup>
  - (B)  $\sin^2 x$
  - (C) x sinx
  - (D) x<sup>2</sup>sinx

93. What is the range of the function  $y = \sqrt{9-x^2}$ ?

- (A)  $\{y: y \in R \text{ and } O \le y \le 3\}$ 
  - (B)  $\{y : y \in R \text{ and } O < y \le 3\}$
  - (C)  $\{y: y \in R \text{ and } -3 \le y \le 3\}$
  - (D)  $\{y : y \in R \text{ and } -3 \le y < 3\}$

94. What will be the result obtained on rationalising the denominator

of 
$$\frac{\sqrt{2}-1}{\sqrt{2}+1}$$
?

- (A)  $3-2\sqrt{2}$ 
  - (B)  $3+2\sqrt{2}$
  - (C)  $2-3\sqrt{2}$
  - (D)  $2+3\sqrt{2}$



- 95. Which of the following statements is true in respect of the roots of the equation  $4x^2 + 16x + 15 = 0$ ?
  - (A) Both are positive
  - (B) Both are negative
    - (C) One is positive, other one is negative
    - (D) One is real, other one is not real
- 96. D, E and F are respectively the mid points of BC, CA and AB of ABC. Y co-ordinate of the point which divides AD in the ratio 2:1 is 6. X-co-ordinate of the point which divides BE in the ratio 2:1 is -9. What are the co-ordinates of the point which divides CF in the ratio 2:1?
  - (A) (-9, 6)
    - (B) (-3, 2)
    - (9)(2, -3)
    - (D) (9, -6)
- What is the perpendicular distance of the point (3, 2) from the line 5x - 12y + 35 = 0?
  - (A) 1
  - (B) 2
    - (CX 3
    - (D) 4



What is the diameter of the sphere 98.

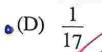
$$x^{2} + y^{2} + z^{2} - 16x + 12y - 2\sqrt{d}z$$
  
+ d = 0 ?

- (A) 5
- (B) 10



- (D) 40
- Two cards are drawn from a pack 99. of 52 cards. What is the probability that both are spades?





- 100. What is the mean deviation of 30, 40, 85, 75, 45?
  - (A) 10
  - (B) 20

  - (D) 40



[29]

(Turn over)

B-SECTION – III Science (CBZ) CHEMISTRY

41. Which set of quantum numbers is **not** correct?

<u>n l m</u> <u>s</u>

- (A) 2 1 0  $+\frac{1}{2}$
- (B) 2 2 -1  $+\frac{1}{2}$
- (C) 2 1 +1  $-\frac{1}{2}$
- (D) 3 2 0  $-\frac{1}{2}$
- 42. In the modern periodic table, the four nearest digonal neighbours of the element with atomic number 14 are:
  - (A) Al, Ge, Zn, N
  - (B) N, As, Ga, B
  - (C) C, O, Ge, Se
  - (D) P, Al, C, Ge
- 43. The ionic radii of O<sup>2-</sup>, F<sup>-</sup>, Na<sup>+</sup>, Mg<sup>2+</sup> and Al<sup>3+</sup> show:
  - (A) a significant decrease from O<sup>2-</sup> to Al<sup>3+</sup>
  - (B) an increase from O<sup>2-</sup> to F<sup>-</sup> and then decrease from Na<sup>+</sup> to Al<sup>3+</sup>
  - (C) a decrease from O<sup>2-</sup> to F<sup>-</sup> and then increase from Na<sup>+</sup> and Al<sup>3+</sup>
  - (D) a significant increase from O<sup>2-</sup> to Al<sup>3+</sup>

- 44. Considering the nature of overlap of atomic orbitals to form the molecule, which one of the following molecules is different from others?
  - (A) Hydrogen
  - (B) Nitrogen
  - (C) Oxygen
  - (D) Fluorine
- 45. The correct order of the size of sp, sp<sup>2</sup> and sp<sup>3</sup> hybrid orbitals of carbon atom is
  - $(A) \quad sp > sp^2 > sp^3$
  - (B)  $sp > sp^3 > sp^2$
  - (C)  $sp < sp^2 < sp^3$
  - (D)  $\operatorname{sp}^3 > \operatorname{sp} > \operatorname{sp}^2$
- 46. Which ore does not undergo self-reduction?
  - (A) HgS
- (B) Ag<sub>2</sub>S
- (C) Cu<sub>2</sub>S
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- 47. IUPAC name of glycerol is:
  - (A) 1, 2 ethane diol
  - (B) 1, 2, 3 propane triol
  - (C) 1, 1, 2 trihydroxy propane
  - (D) 1, 2 dihydroxy ethane
- 48. (I)  $(CH_3)_3 C^{\Theta}$ 
  - (II) (CH<sub>3</sub>)<sub>2</sub>CH<sup>Θ</sup>
  - (III) CH<sub>3</sub> CH<sub>2</sub><sup>©</sup>
  - (IV) C<sub>6</sub>H<sub>5</sub> CH<sub>2</sub><sup>©</sup>

The order of decreasing stability of carboanions is:

- (A) I > II > III > IV
- (B) IV > III > II > I
- (C) IV > I > II > III
- III < VI < II < I (D)



- 49. The position of double bond in alkenes can be located by:
  - (A) hydrogenation
  - (B) ozonolysis
  - (C) photolysis.
  - (D) hydration
- 50. (I) aniline
  - (II) benzene
  - (III) nitro-benzene

The correct order of reactivity towards the electrophilic substitution of compounds is:

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- (B) I < II > III
- (C) I > II > III
- (D) III > II > I
- 51. Which one of the following pairs will have the same number of molecules?
  - (A) 1g. of hydrogen and 44g. of carbon dioxide
  - (B) 2g. of hydrogen and 44.8 litres of carbon dioxide at NTP
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  - (B) Zn; 0.744
  - (C) I; 1.488
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- 54. Read the statements given below:
  - (i) When a liquid is taken in a closed vessel, evaporation and condensation take place simultaneously.
  - (ii) Rate of condensation decreases as the number of molecules in the vapour phase increases.
  - (iii) When the rate of condensation and rate of evaporation are equal, the pressure exerted by the vapours of the liquid is called vapour pressure.

    Out of the above
  - (A) Both (i) and (ii) are wrong
  - (B) Both (i) and (iii) are wrong
  - (C) Both (i) and (ii) are correct
  - (D) Both (i) and (iii) are correct



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  - (A)  $E_2 E_1 > E_3 E_2 > \dots > E_n E_{n-1}$
  - (B)  $E_2-E_1<E_3-E_2<....<E_n-E_{n-1}$
  - (C)  $E_2 E_1 = E_3 E_2 = \dots = E_n E_{n-1}$
  - (D) None of the above is correct
- 56. The oxidation number of nitrogen in its compounds can lie between:
  - (A) -3 to +7
  - (B) +3 to +5
  - (C) 0 to +5
  - (D) -3 to +5
- 57. 25 ml of aqueous solution of Hydrochloric acid containing 7.3 gms of the acid per litre neutrallised 30 ml of aqueous solution of caustic soda. What is the normality of the alkali solution?
  - (A)  $\frac{N}{2}$
  - (B)  $\frac{N}{4}$
  - (C)  $\frac{N}{6}$
  - (D)  $\frac{N}{8}$

- 58. The pH of 10<sup>-8</sup>M solution of HC*l* in water is:
  - (A) 8.0
  - (B) -8.0
  - (C) between 7 and 8
  - (D) between 6 and 7
- 59. Given:

$$C + \frac{1}{2}O_2 \rightarrow CO$$
,  $K_C = 4$ 

$$CO + \frac{1}{2}O_2 \rightarrow CO_2$$
,  $K_C = 2$ 

Then for the reaction,

$$C+O_2 \rightarrow CO_2$$

the value of K<sub>C</sub> will be:

- (A)  $\frac{1}{2}$
- (B) 2
- (C) 6
- (D) 8
- 60. The most abundant metal and non-metal in earth's crust are:
  - (A) iron and carbon
  - (B) iron and oxygen
  - (C) aluminium and oxygen
  - (D) copper and sulphur

B-SECTION - III

Science (CBZ)

BOTANY

- Which is unrelated pair? 61.
  - (A) Sclerenchyma Nucleated
  - (B) Parenchyma Intercellular spaces
  - (C) Collenchyma Living
  - (D) Epidermis - Guard cells
- What is the identifying feature of 62. roots?
  - (A) Vascular bundles scattered
  - Vascular bundles collateral
  - (C) Vascular bundles siphonostelic
  - (D) Vascular bundles radial
- The primary acceptor of electron 63. from the photosystem - II reaction centre, P680, is:
  - (A) Plastoquinone
  - (B) Pheophytin
  - (C) Cytochrome
  - (D) Ferredoxin
- The first reaction of photosynthesis is:
  - (A) Photolysis of water
  - (B) NADPH formation
  - (C) ATP formation
  - (D) Excitation of chlorophyll

- In C-4 plants, the first stable 65. product of CO2 fixation in bundle sheath cells is:
  - (A) 3-Phosphoglyceric acid
  - Phosphoenolpyruvate (B)
  - (C)Dihydroxyacetone phosphate
  - (D) Oxaloacetate
- Process of development of fruits without fertilization is called:
  - (A) Parthenogenesis
  - (B) Abiogenesis
  - (C) Spermatogenesis
  - (D) Organogenesis
- What will be the genotypic ratio 67. obtained in F<sub>1</sub> generation from a cross of AaBB × aaBB?
  - (A) 1 AaBB: 3aaBB
  - (B) 3 AaBB: laaBB
  - (C) 2 AaBB: laaBB
  - (D) 1 AaBB: 1aaBB



- 68. Which one is the example of test cross?
  - (A)  $Tt \times TT$
  - (B) TT × TT
  - (C) tt × tt
  - (D) Tt × tt
- 69. Which class of fungi does cause rust disease of wheat?
  - (A) Phycomycetes
  - (B) Ascomycetes
  - (C) Basidiomycetes
  - (D) Deuteromycetes
- 70. Which is not a preventive measure of plant disease control?
  - (A) Crop rotation
  - (B) Spraying of fungicide
  - (C) Mixed cropping
  - (D) Spacing

- Unicellular eukaryotic organisms are grouped under:
  - (A) Monera
  - (B) Protista
  - (C) Fungi
  - (D) Animalia
- Read the statements and mark the organism for which the statements are applicable:
  - (i) Fresh water, very few marine and autotrophic
  - (ii) Thallus tubular and coenocytic
  - (iii) Asexual reproduction by multicellular zoospores
  - (iv) Sexual reproduction oogamous
  - (A) Spirogyra
  - (B) Oedogonium
    - (C) Vaucheria
    - (D) Chara
- 73. Which one is a living fossil?
  - (A) Riccia
  - (B) Selaginella
  - (C) Ginkgo
  - (D) Pinus



- done?
  - (A) National park
  - (B) Botanical garden
  - (C) Biosphere reserve
  - (D) Sanctuary
- 75. Casparian thickenings are present in radial walls of:
  - (A) Pith cells
  - (B) Epidermis
  - (C) Pericycle
  - (D) Endodermis
- 76. Which is the hormone secreted from the aleurone layer of maize seed during germination?
  - (A) Ethylene
  - (B) Abscisic acid
  - (C) Gibberellic acid
  - (D) Cytokinin

- 74. Where can ex situ conservation be | 77. Which is the hormone present in the maximal amount in apical region of shoot?
  - (A) Ethylene
  - (B) Abscisic acid
  - (C) Florigen
  - (D) Auxin
  - Which one is different from other 78. three in chromosome number?
    - (A) Zygote
    - (B) Embryo
    - (C) Endosperm
    - (D) Seed coat
  - The plant part used as an 79. inoculum for tissue culture is called:
    - (A) Stem cell
    - (B) Callus
    - (C) Explant
    - (D) Somatic embryo
  - 80. Which is unrelated pair?
    - Budding (A) Yeast
    - (B) Bacteria Fission
    - (C) Chrysanthemum Seeds
    - (D) Banana Sucker

B-SECTION-III

Science (CBZ)

ZOOLOGY

- 81. From which country was the phenomenon of industrial melanism first reported?
  - (A) United Kingdom
  - (B) USA
  - (C) China
  - (D) India
- 82. Which type of example is Mule?
  - (A) Habitat isolation
  - (B) Mechanical isolation
  - (C) Hybrid sterility
  - (D) Hybrid breakdown
- 83. What does cause increase in skin cancer and high mutation rate?
  - (A) Ozone layer depletion
  - (B) Acid rain
  - (C) Photochemical smog
  - (D) Carbon dioxide pollution
- 84. Which of the following was the cause of Bhopal gas tragedy?
  - (A) Hydrogen cyanide
  - (B) Potassium cyanide
  - (C) Carbon monoxide
  - (D) Methyl isocyanate

- 85. Which enzyme does cause the curdling of milk in herbivorous mammals?
  - (A) Maltase
  - (B) Renin
  - (C) Trypsin
  - (D) Lactase
- 86. Which hormone does increase the permeability of DCT to water?
  - (A) TSH
  - (B) FSH
  - (C) Oxytocin
  - (D) ADH
- 87. Read the statements and indicate the correct one:
  - Cerebellum is present on the posterior part of hind brain.
  - (ii) Cerebellum is the second largest part of the brain.
  - (iii) Cerebellum helps to maintain the equilibrium and balance of the body.
  - (A) (i) and (iii) right but (ii) wrong
  - (B) (i) and (ii) right but (iii) wrong
  - (C) (ii) and (iii) right but (i) wrong
  - (D) (i), (ii) and (iii) all are right



- 88. Which hormone is produced in human females, if pregnancy has occurred?
  - (A) Estrogen
  - (B) Progesterone
  - (C) Leuteinizing hormone
  - (D) Chorionic gonadotropin
- 89. In which part of the sperm is actual genetic material present?
  - (A) Tail
  - (B) Head
  - (C) Middle piece
  - (D) Neck
- 90. The testes descend into scrotal sacs outside the abdomen because sperm formation requires:
  - (A) High temperature
  - (B) Low temperature
  - (C) More space
  - (D) Less space

- 91. Who did propose the scheme for five kingdom classification?
  - (A) John Ray
  - (B) Whittaker
  - (C) Haeckel
  - (D) Mayr
- 92. In which type of cell is nuclear membrane absent?
  - (A) Plant
  - (B) Human
  - (C) Prokaryotic
  - (D) Eukaryotic
- 93. Which is the longest phase of mitosis?
  - (A) Metaphase
  - (B) Telophase
  - (C) Anaphase
  - (D) Prophase



- 94. Read the statements and indicate the correct one:
  - Birds of female and male have ZW and ZZ sex chromosomes respectively.
  - (ii) The method of preparing linkage maps of a species is called chromosome mapping.
  - (iii) 10% crossover or recombination is 1 contimorgan (cM)
  - (A) (i) and (ii) right but (iii) wrong
  - (B) (i) and (iii) right but (ii) wrong
  - (C) (ii) and (iii) right but (i) wrong
  - (D) (i), (ii) and (iii) are all right
- 95. Who did proposed the 'Genic balance theory' of sex determination?
  - (A) Bridge
  - · (B) Johannsen
    - (C) Karl Correns
    - (D) Murray Barr
- 96. At the end of glycolysis, each molecule of glucose produces how many molecules of pyruvate?
  - (A) 2
  - (B) 4
  - (C) 36
  - (D) 38

- 97. The high energy compound which enters into mitochondria to start Krebs cycle is called:
  - (A) Lactic acid
  - (B) Acetyl CoA
  - (C) Fatty acid
  - (D) Amino acid
- 98. Which vitamin is necessary for formation of RBC?
  - (A)  $B_{12}$
  - (B) D
  - (C)  $B_6$
  - (D) A
- 99. Which chamber of heart is functionally most efficient?
  - (A) Left auricle
  - (B) Left ventricle
  - (C) Right auricle
  - (D) Right ventricle
- 100. The type of nephron which becomes functional during acute shortage of water is called:
  - (A) Glomerular nephron
  - (B) Macula densa
  - (C) Cortical nephron
  - (D) Juxtamedullary nephrón

#### C-SECTION-IV

# CHILD DEVELOPMENT, PEDAGOGY, SCHOOL MANAGEMENT & EVALUATION

- 101. In which of the following the mental operation is the least?
  - <sup>9</sup>(A) Imitation
  - (B) Imagination
  - (C) Inquiry
  - (D) Intuition
- 102. What is the best way to handle with the undesirable emotions of the adolescents?
  - (A) Punishing the adolescents
  - (B) Advising them not to behave in that way
  - **(**C) Process of sublimation
  - (D) Bringing it to the notice of the parents
- 103. Who propounded the group factor theory of intelligence?
  - (A) Guilford
  - (B) Terman
  - (C) Spearman
  - (D) Thurstone
- 104. Language development of the child is not associated with:
  - (A) Cognitive domain
  - (B) Conative domain
  - (C) Affective domain
  - (D) Intellectual domain
- 105. The doing aspect of behaviour is associated with:
  - (A) Cognitive domain
  - (B) Intellectual domain
  - (C) Affective domain
  - (D) Conative domain
- 106. A creative learner one who is good at:
  - (A) Mathematics
  - (B) Literature
  - (C) Central thinking
  - (D)-Lateral thinking

- 107. Which of the following affects the development of self-concept of the adolescents?
  - (A) Success
  - (B) Failure
  - (C) Acceptance
  - (D) Achievement
- 108. According to Guildford any intellectual activity of the human being can be described in terms of three component such as:
  - (A) Operation, content, product
  - (B) Operation, content, analysis
  - (C) Operation, product, analysis
  - (D) Content, product, analysis
- 109. Who propounded the 'Two-factor Theory' of intelligence?
  - (A) Spearman
    - (B) Guildford
    - (C) Thurstone
    - (D) Watson
- 110. The self concept means:
  - (A) What one judges of his achievement
  - (B) What one thinks of himself
  - (C) What one discriminates between right and wrong
  - (D) What one learns during teaching
- 111. Which of the following can not be considered as a characteristic of learning?
  - (A) It takes place only in formal institutions
    - (B) It is goal directed
    - (C) It is a comprehensive process
    - (D) It is the result of practice and experience



- 112. A candidate is working hard to qualify the OSSTET. The candidate is said to have been motivated:
  - •(A) Intrinsically
  - (B) Extrinsically
  - (C) Individually
  - (D) Experientially
- 113. When previous learning makes no difference at all to the performance of the learner, it is called:
  - (A) Zero transfer of learning.
    - (B) Absolute transfer of learning
    - (C) Positive transfer of learning
    - (D) Negative transfer of learning
- 114. Which of the following pair is **not** correct?
  - (A) Watson Operant conditioning
  - (B) Kohler Insight theory
  - (C) Thorndike Trial and Error Theory
  - (D) Pavlov Classical conditioning
- 115. The critical Pedagogy aims at:
  - (A) to rationalize the banking system of education
  - (B) to do away with the banking system of education
  - (C) to strengthen the banking system of education
  - (D) to monitor to banking system of education
- 116. Repetition strengthens the connection between S & R. What law of learning is its based upon 2
  - (A) Readiness
  - (B) Practice
    - (C) Effect
    - (D) Use

- 117. Who is more active in critical pedagogy?
  - (A) Teacher
  - (B) Learner
    - (C) Educational planner
    - (D) Parents
- 118. Who is a critical pedagogic educator?
  - (A) Martin Luther King
  - (B) Thomas Jefferson
  - (C) Dalton
  - (D) Ira Shor
- 119. The uses of TLM is not associated with:
  - (A) to make teaching-learning pleasurable
  - (B) to cover the course content in time
    - (C) to create motivation for learning
    - (D) to teach concrete concepts
- 120. A learner with special needs is:
  - (A) different form others in cognitive behaviour
  - (B) different form others in affective behaviour
  - (C) different form others in teaching-learning béhaviour
  - (D) All of these
- 121. Which of the following is **not** a component of educational management?
  - (A) Educational guidance
    - (B) Educational planning
    - (C) Educational administration
    - (D) Educational supervision

- be:
  - (A) Democratic
    - (B) Bureaucratic
    - (C) Autocratic
    - (D) Idealistic
- 123. Which is not a factor of democratic management?
  - (A) Co-operation
  - (B) Co-ordination
  - (C) Integration
  - (D) Imposition
- 124. Which one is not associated with the role of a teacher?
  - (A) facilitator
  - (B) philosopher
  - (C) friend
  - (D) administrator
- 125. Which one is considered as the core of schooling for holistic development?
  - (A) Curriculum.
  - (B) Syllabi
  - (C) Courses of studies
  - (D) Text-Books
- 126. Difficulty value and discriminating power of the test items are determined at the stage of:
  - (A) Planning
  - (B) Preparation
  - (C) Try out
    - (D) Administration

- 122. The school administration should | 127. Continuous and comprehensive evaluation mainly aims at:
  - (A) Holistic development
    - (B) Scholastic development
    - (C) Cognitive development
    - (D) Conative development
  - 128. What type of grading system has been introduced by the B.S.E, Odisha for HSC Examination?
    - (A) Absolute
      - (B)—Relative
      - (C) Direct
      - (D) Indirect
  - 129. What is **not** there in a Blue-print?
    - (A) Relative weightage to the content
    - (B) Relative weightage to the difficulty level
    - (C) Relative weightage to the type of questions
    - (D) Relative weightage to the instructional objectives
  - 130. What type of evaluation is the OSSTET?
    - (A) Formative
    - (B) Summative
    - (C) Placement
    - (D) Diagnostic
  - 131. At what stage of development a child usually appears at the H.S.C. examination?
    - (A) Childhood
    - (B) Late childhood
    - (C) Adolescence
      - (D) Adulthood



- 132. Four distinct stages of child's intellectual development are indentified by:
  - (A) Guilford
  - •(B) Piaget=
  - (C) Skinner
  - (D) Kohlberg
- 133. Which of the following indicates the development of a child?
  - (A) Increase in height
  - (B) Increase in weight
  - (C) Increase in size of limbs
  - (D) Increase in function of limbs
- 134. At what stage of development the child is egocentric?
  - (A) Sensory motor
  - (B) Pre-operational
    - (C) Concrete operational
    - (D) Formal operational
- 135. Which of the following is a negative emotion?
  - (A) jealousy
  - (B) Curiosity
  - (C) Pleasure
  - (D) Affection
- 136. Which statement is not correct?
  - (A) Development is both quantitative and qualitative
  - (B) Development takes place at a uniform rate
  - (C) Development is a continuous process
  - (D) Development proceeds from general to specific

- 137. Which of the following is the best for growth of infants?
  - (A) Normal diet
  - (B) Milk diet
  - (C) Food juice
  - (D) Milk and other nutritive diet
- 138. Development starts from the stage of:
  - (A) Pre-natal
    - (B) Post natal
    - (C) Infancy
    - (D) Early childhood
- 139. What is the first social group with which a child comes in contact with?
  - (A) Family
    - (B) Neighbourhood
    - (C) School
  - (D) Community
- 140. Which one is not a social need of the adolescents?
  - (A) Status
  - (B) Independence
  - •(C) Achievement-
    - (D) Affection
- 141. Pedagogy is the science of:
  - (A) Teaching
    - (B) Learning
    - (C) Planning
    - (D) Testing
- 142. Who propounded the instrumental conditioning theory of learning?
  - (A) Pavlov
  - (B) Skinner
    - (C) Erikson
    - (D) Kohlberg



# 143. According to humanistic approach to learning, the human needs are arranged in a hierarchial order. What need is placed at the top?

hier	archial order. What need is placed at the top ?			
(A)	Self esteem			
(B)	Self status			
(C)	Self safety			
(D)	Self actualization			
144.	The experimental learning propounded by roger refers to:			
(A)	Content centred			
(B)	Teacher centred			
(C)	Learner centred			
(D)	Programme centred			
145.'When any conduction unit is ready to conduct ,for it to do so is satisfying' – This statement refers to which law of learning?				
(A)	Readiness			
(B)	statement refers to which law of learning?  Readiness  Effect  Use  Disuse			
(C)	Use			
(D)	Disuse			
146.	Which of the following is not teacher-centred learning?			
(A)	Learning by doing			
(B)	Explaining			
(C)	Discussing			
(D)	Demonstrating			
147.	What is the function of motivation in teaching learning process?			
(A)	It identifies the objectives of learning			
(B)	It identifies the methods of teaching			
(C)	It re-inforces the learner's behaviour			
(D)	It identifies the learner's weakness			

#### 148. The inductive approach to formation of concepts according to Bruner comprises four steps such as :

- (I) Analysis
- (II) Presentation of examples
- (III) Testing
- (IV) Generalization

#### What is the correct order of the steps ?

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

# M. com 149. Constructivism as a theory of learning focuses on :

- (A) the role of the learner in imitation
- (B) the role of the learner in memorisation
- (C) the role of the learner in imagination
- (D) the role of the learner in creating new knowledge out of own experience

#### 150. Social constructivism according to Vygotsky is :

- (A) acquiring new knowledge basing on the learner's experience and co-operation with others
- (B) acquiring new knowledge during class-room transaction
- (C) acquiring new knowledge basing on the learner's previous knowledge
- (D) acquiring new knowledge reading supplementary books