

Odisha Board Class 10 General Science Part 2  
Sample Paper 2014

**SAMPLE**

[No. of Questions : 05 ] [No. of Printed Pages : 13 ]	Secretary	<b>PART -II</b> <b>GSC- GENERAL SCIENCE</b>																			
Roll No. of the Candidate	(Verified and found correct)	Time : 1½ Hours] [Full Marks : 50																			
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<b>ପରୀକ୍ଷାର୍ଥୀଙ୍କ ନିମନ୍ତେ ସୂଚନା :</b>																					
କ. ପ୍ରଶ୍ନପତ୍ର ଫାଇଲ୍ ଉତ୍ତର ଖାତାଟି ପାଇବା ପରେ ଏହା ଉପରେ ପ୍ରତ୍ରିତ ଥିବା ପ୍ରଶ୍ନ ଫାଖ୍ୟା ଓ ପୃଷ୍ଠା ଫାଖ୍ୟା ପ୍ରଶ୍ନପତ୍ର ଫାଇଲ୍ ଉତ୍ତର ଖାତାର ପ୍ରତ୍ୟେକପୃଷ୍ଠାରେ ପ୍ରଶ୍ନ ଫାଖ୍ୟା ଓ ପୃଷ୍ଠା ଫାଖ୍ୟା ସହିତ ମିଳାଇ ନିଅ । ଏଥିରେ ସେଇ ଫାକେତ ପ୍ରତି ପୃଷ୍ଠାରେ ଠିକ ଭାବରେ ଲେଖା ହୋଇଛି ନା ନାହିଁ ମଧ୍ୟ ମିଳାଇ ନିଅ । ଖ. ଯଦି କିଛି ତ୍ରୁଟି ପରିଲକ୍ଷିତ ହୁଏ, ତେବେ ତ୍ରୁଟିପୁକ୍ତ ପ୍ରଶ୍ନପତ୍ର ଫାଇଲ୍ ଉତ୍ତର ଖାତାଟି ପରୀକ୍ଷା ଗୃହ ଦାୟିତ୍ୱରେ ଥିବା ନିରୀକ୍ଷକଙ୍କୁ ଫେରାଇ ଆଇ ଗୋଟିଏ ଠିକ୍ ପ୍ରଶ୍ନପତ୍ର ମାଗିନିଅ । ଗ. ପ୍ରତ୍ୟେକ ପ୍ରଶ୍ନର ତଳେ ଦିଆଯାଇଥିବା ନିର୍ଦ୍ଧାରିତ ସ୍ଥାନରେ ଉତ୍ତର ଲେଖିବାକୁ ହେବ । ଘ. ଆବଶ୍ୟକ ସ୍ଥଳେ ଶେଷରେ ଦିଆଯାଇଥିବା ଅତିରିକ୍ତ ପୃଷ୍ଠାରେ ଉତ୍ତର ଲେଖିବେ । ଶେଷରେ ଦିଆଯାଇଥିବା (ରଫ୍ କରିବା) ସ୍ଥାନରେ ରଫ୍ କରିବେ ।																					
<b>FOR USE AT THE EVALUATION CENTRE</b>																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Q. No.</th> <th style="width: 15%;">Marks awarded</th> <th style="width: 25%;">Signature of Examiner</th> </tr> </thead> <tbody> <tr> <td>PS-1</td> <td></td> <td>Regd. No.</td> </tr> <tr> <td>PS-2</td> <td></td> <td rowspan="2">Regd. No.</td> </tr> <tr> <td>PS-3(a)</td> <td></td> </tr> <tr> <td>LS-3(b)</td> <td></td> <td rowspan="2">Regd. No.</td> </tr> <tr> <td>LS-4</td> <td></td> </tr> <tr> <td>LS-5</td> <td></td> <td>Regd. No.</td> </tr> </tbody> </table>	Q. No.	Marks awarded	Signature of Examiner	PS-1		Regd. No.	PS-2		Regd. No.	PS-3(a)		LS-3(b)		Regd. No.	LS-4		LS-5		Regd. No.	Signature of the Scrutiniser Regd. No.  Sign. of the Dy. Chief Examiner Regd. No.  Sign. of the Chief Examiner Regd. No.	
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Roll No.– \_\_\_\_\_

## GENERAL SCIENCE (REGULAR) (PART–II)

### SAMPLE QUESTION PAPER FOR HSC EXAMINATION, 2014

Time : 1½ Hrs

Total Marks – 50

#### **INSTRUCTIONS :**

- A. There are Five Questions in this part of the question paper.
- B. All the questions are compulsory and all are having internal options.
- C. Draw figures where ever required.
- D. The numbers at right hand side represent the marks of the question.

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1. (a) ନାମାଙ୍କିତ ଚିତ୍ର ସହ ବାୟୁରେ ଥିବା ଏକ ଆୟତାକାର କାଚର ଆଲୋକ ପ୍ରତିସରଣ ବୁଝାଅ । ଫାର୍ଣ୍ଟ ବିସ୍ଥାପନ କାହାକୁ କୁହାଯାଏ ? 5

Explain with the labelled diagram the light refraction through a glass cube in the air ? What is lateral displacement ?

**OR – କିମ୍ବା**

କାଚ ପ୍ରିଜମ୍‌ରେ ପ୍ରକାଶ୍ଚରଣ କିପରି ହୁଏ, ଏକ ପରୀକ୍ଷଣ ସାହାଯ୍ୟରେ ବର୍ଣ୍ଣନା କର । ବର୍ଣ୍ଣାଳୀ କାହିଁକି ସୃଷ୍ଟି ହୁଏ ?

Describe with an experiment how the dispersion is occurred in a glass prism.

Why the rainbow is formed ?

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(b) ଫ୍ଲେମିଙ୍ଗ୍ସ ଦକ୍ଷିଣହସ୍ତ ନିୟମ ଓ ଫ୍ଲେମିଙ୍ଗ୍ସ ବାମହସ୍ତ ନିୟମ ଲେଖ । ③

Write Flemings Right Hand and Flemings Left Hand Rule ?

**OR – କିମ୍ବା**

ଓମ୍ ନିୟମ ଲେଖ ଏବଂ ଗାଣିତିକ ବ୍ୟାଖ୍ୟା କରି ବିଦ୍ୟୁତ୍ ପ୍ରତିରୋଧର ସଂଜ୍ଞା ଓ ଏକକ ଲେଖ ?

Write Ohm's Law and with mathematical derivation, define resistance and write its unit ?

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- (c) ସାଧାରଣ ଚକ୍ଷୁରେ 25 cm ରୁ କମ୍ ଦୂରତାରେ କୌଣସି ବସ୍ତୁ ରହିଲେ ଚକ୍ଷୁ ବସ୍ତୁଟିକୁ କାହିଁକି ସ୍ପଷ୍ଟ ଦେଖିପାରେ ନାହିଁ ? ②

Why the eye is not able to see properly. If the object will be the distance less than 25 cm ?

**OR – କିମ୍ବା**

ପରିପଥରେ 5A ଫ୍ୟୁଜ୍ ଲାଗିଥିଲେ, କେତୋଟି 100W ବଲ୍‌ବ୍ ନିରାପଦରେ ବ୍ୟବହୃତ ହୋଇପାରିବ ?

In electric circuit, if 5A fuse where it is used. How many electric bulb is used ?

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2. (a) ପ୍ରଥମ ପୃଷ୍ଠ ହାଇଡ୍ରୋକାର୍ବନର ଯୌଗିକର ନାମ କ'ଣ ? ଏହାର ଗଠନ ଇଲେକ୍ଟ୍ରନ୍ ଡଟ୍ ସଂରଚନା ମାଧ୍ୟମରେ ବୁଝାଅ ? ⑤

Write the name of first compound of saturated hydrocarbon ? Explain its configuration by electron dot.

**OR – କିମ୍ବା**

ସହ ସଂଯୋଜ୍ୟ ବନ୍ଧ କ'ଣ ? କାର୍ବନ କାହିଁକି ବିଦ୍ୟୁତ୍ ସଂଯୋଜ୍ୟ ଯୌଗିକ ସୃଷ୍ଟି ନକରି, ସହ ସଂଯୋଜ୍ୟ ଯୌଗିକ ସୃଷ୍ଟି କରେ ?

What is covalent bond ? Why carbon is not forming electrovalent compounds ?

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(b) ଲୁହାରେ କଳଙ୍କି କ'ଣ ? କାହିଁକି ଏହି କଳଙ୍କି ଲାଗେ ? ଏହାକୁ କିପରି ପ୍ରତିରୋଧ କରିହେବ ? ③

What is rusting in iron ? Why it is formed ? How rusting is protected ?

**OR – କିମ୍ବା**

ସମତୁଲ ରାସାୟନିକ ସମୀକରଣ କ'ଣ ? ଉଦାହରଣ ଦିଅ ? ରାସାୟନିକ ସମୀକରଣକୁ କାହିଁକି ସମତୁଲ କରାଯାଏ ? ଜାରକ ପଦାର୍ଥ କ'ଣ ?

What is balanced chemical equation with an example ? Why it is balanced ?

What is oxidants ?

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(c) ବିଛୁଆଡ଼ି ପତ୍ର ଦେହରେ ଫୋଡ଼ି ହୋଇଗଲେ ଯନ୍ତ୍ରଣା କାହିଁକି ହୁଏ ?

②

Why the pain is felt if the leaf of Bichuati penetrated in the body ?

**OR – କିମ୍ବା**

ଏଲୁମିନିୟମ୍ ଏକ ଉଚ୍ଚ ପ୍ରତିକ୍ରିୟାଶୀଳ ମୌଳିକ, ତଥାପି ରନ୍ଧନ ପାଇଁ ବାସନ କୁସନ ତିଆରିରେ ଏହା କାହିଁକି ବ୍ୟବହାର ହୁଏ ?

Why aluminium is used for utensils, inspite of it is a highly reactive element ?

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3. (a) ଏକ ଯୁନିଟ୍ ବିଦ୍ୟୁତ୍ କାର୍ଯ୍ୟକୁ କୁହନ୍ତୁ ? ଯଦି ଗୋଟିଏ 400W ରେଫ୍ରିଜିରେଟର ଦିନକୁ 8 ଘଣ୍ଟା ଚାଲେ, ତେବେ 30 ଦିନରେ ଯୁନିଟ୍ ପିଛା 4 ଟଙ୍କାରେ କେତେ ଶୁଳ୍କ ଦେବାକୁ ପଡ଼ିବ ? ③

What is a unit of electricity ? If the refrigerator with 400W, run for 8 hours per day, how much electric charge we will pay for 30 days at the rate of 04 rupees per unit ?

**OR – କିମ୍ବା**

ନିମ୍ନୋକ୍ତ ପରିପଥରେ ୨ ଓମ୍ ପ୍ରତିରୋଧୀରେ ବ୍ୟବହାର ହେଉଥିବା ପାଞ୍ଜରକୁ ତୁଳନା କର :

(କ) ୧ ଓମ୍ ଓ ୨ ଓମ୍ ପ୍ରତିରୋଧୀ ସହ 6V ବ୍ୟାଟେରୀ ଫଳ୍ପି ସଂଯୋଗରେ

(ଖ) ୧୨ ଓମ୍ ଓ ୨ ଓମ୍ ପ୍ରତିରୋଧୀ ସହ 4V ବ୍ୟାଟେରୀ ସମାନ୍ତରାଳ ସଂଯୋଗରେ

In a circuit of 20hm resistance, compare the power ?

(i) One ohm and 2 ohm resistance with 6V battery in series connection.

(ii) 12 ohm and 2 ohm resistance with 4V battery in parallel connection.

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(b) ଚକ୍ରିୟ କାର୍ବନ ଯୌଗିକ ଦୁଇଟିର ସଂରଚନା ଚିତ୍ର କର ? ②

Draw the configuration of two cyclic carbon compound ?

**OR – କିମ୍ବା**

ଅମ୍ଳୀୟ ପ୍ରକୃତି ଓ କ୍ଷାରୀୟ ପ୍ରକୃତିର ବୃଦ୍ଧି ଅନୁସାରେ pH ସ୍କେଲର ଚିତ୍ର କର ?

Draw pH scale according to increase acidic and basic characteristics ?

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(c) ଉଦ୍ଭିଦର ଗର୍ଭାଶୟର ନାମାଙ୍କିତ ଚିତ୍ର କର ?

③

Draw a labelled diagram of ovary of a plant.

**OR – କିମ୍ବା**

ମାନବ ହୃତପିଣ୍ଡର ବାହ୍ୟଗଠନର ନାମାଙ୍କିତ ଚିତ୍ର କର ?

Draw a labelled diagram of external feature of human heart.

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(d) ଜୀବାଶ୍ମ ଇନ୍ଦନର ଦୁଇଟି ଅପକାରିତା ଲେଖ ?

②

Write two bad effects of fossil fuel ?

**OR – କିମ୍ବା**

ପରିସଂସ୍ଥାରେ ଅପଘଟକର ଭୂମିକା ଲେଖ ?

Write role of decomposers in ecosystem ?

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4. (a) ଆଲୋକଶ୍ଳେଷଣ ପ୍ରକ୍ରିୟା କ'ଣ ? ଆଲୋକ ପ୍ରକ୍ରିୟା ବୁଝାଅ ? ⑤

What is photosynthesis ? Explain light reaction ?

**OR – କିମ୍ବା**

ସମବିଭାଜନ କ'ଣ ? ଏହାର ବିଭିନ୍ନ ଅବସ୍ଥା ଗୁଡ଼ିକ କ'ଣ ବର୍ଣ୍ଣନା କର ?

What is mitosis ? Write what are different stages of mitosis ?

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(b) ପରିସଂସ୍ଥାରେ ଗାଠନିକ ଉତ୍ପାଦନ ଗୁଡ଼ିକର ବିବରଣୀ ଦିଅ ? ⑤

Give notes on structural components of ecosystem ?

**OR – କିମ୍ବା**

ଗୋବର ଗ୍ୟାସ୍ ପ୍ଲାଣ୍ଟର ଗଠନର ଅଂଶ ଗୁଡ଼ିକ ବର୍ଣ୍ଣନା କର ?

Describe the different parts of a Gobar Gas Plant ?

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5. (a) “ଜୈବିକ ଜାରଣ” ବୁଝାଅ ? ③

Explain biological oxidation ?

**OR – କିମ୍ବା**

“ଜଳଛାୟା ପରିଚାଳନା” ବୁଝାଅ ?

Explain watershed management ?

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(b) ସ୍ନାୟୁ କୋଷର ଗଠନ ଓ କାର୍ଯ୍ୟ ଲେଖ ? ③

Write the structure and function of nerve cell ?

**OR – କିମ୍ବା**

ରେଚନ ବ୍ୟତୀତ ବୃକ୍କର ଅନ୍ୟ କାର୍ଯ୍ୟ ବର୍ଣ୍ଣନା କର ?

Describe the function of Kidney other than excretion ?

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(c) ଗୋଟିଏ ଉଦାହରଣ ସହ ଲୁପ୍ତପ୍ରାୟଜାତି ବୁଝାଅ ? ②

Explain the endangered species with an example ?

**OR – କିମ୍ବା**

କିଣ୍ଟନର ପ୍ରକାର ଭେଦ ଲେଖ ?

Write the types of fermentation ?

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(d) ପରିବାର ନିୟୋଜନ ପଦ୍ଧତିର ଦୁଇଟି ନାମ ଲେଖ ? ②

Write the two methods of family planning ?

**OR – କିମ୍ବା**

ଉଦାହରଣ ସହ ସମଜାତ ଓ ଅନୁରୂପୀ ଅଙ୍ଗ କ'ଣ ଲେଖ ?

With an example, write what are homologous organ and analogous organ ?

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ADDITIONAL PAGES



